



17th EPA Section Meeting 2014

Epidemiology and Social Psychiatry

Disease Burden and Service Delivery



ABSTRACTS

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17th EPA Section Epidemiology and Social Psychiatry Meeting

Disease Burden and Service Delivery

Date and location: May 21-24, 2014 | Ulm | Germany

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Dear friends and colleagues,

It is a pleasure to host over 200 researchers from across Europe and other countries for the 17th meeting of our epidemiology and social psychiatry section. Following the meetings at Bergen and Maastricht University it is now Ulm University's turn to host the meeting. It is an honour for our department to host this conference, and it is our pleasure that a large number of high-quality scientific contributions have been submitted around the conference theme of „Disease Burden and Service Delivery“. Preconference courses open the scientific agenda on Wednesday, and they will cover themes such as writing, publishing, reviewing and reading a clinical scientific paper, quantitative methods in mental health service research and methods of cost-assessment and economic evaluation in mental health care. There will also be a young researcher symposium on „How can medical students be an asset in psychiatric research?“ During the two-and-a-half day conference plenary lectures will discuss themes such as the EPA Guidance programme, challenges for epidemiology and social psychiatry, the future of academic psychiatry perhaps being social, challenges of dementia research including risk factors, epidemiological needs assessment to understand dementia, work environments and mental health, interactions between epidemiology and health services research, the individual and societal burden of mental disorders, research issues around mild cognitive impairment, pregnancy outcomes in women with psychosis, and community care interventions. There will be lectures on user-led research in mental health care practice, and service quality and service effectiveness will be covered. A revised classification for mental disorders in general medical settings – the ICD11-PHC will be the theme of the closing lecture. There will be a total of 47 parallel research and poster sessions. We welcome all participants for the welcome reception at the conference venue and the conference gala dinner at the Stadthaus Ulm on Friday night. We thank Ulm University Medical Faculty, colleagues at the department, the Bezirkskliniken Schwaben, our hospital trust and the Deutsche Forschungsgemeinschaft for their support of the conference. We look forward to scientific exchange and debate in the course of the

17th meeting of the Section of Epidemiology and Social Psychiatry of the European Psychiatric Association, and we wish all participants an agreeable and stimulating stay in Ulm.



Thomas Becker
(Local host)

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OL EPA Guidance and the future of European Psychiatry

Wolfgang Gaebel

President Elect of the EPA

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Introduction: The European Psychiatric Association (EPA) aims to improve the quality of mental health care in Europe. The European Guidance project of the EPA provides a series of guidance documents on topics related to the quality of mental healthcare service structures and the prevention of mental disorders, for which evidence- and consensus-based guidelines are currently lacking. It aims to improve mental health care in Europe and is part of a wide effort to address the challenges of contemporary mental health care in Europe.

Methods: Review of the Guidance project and the future challenges for European psychiatry.

Results: A first series of Guidance documents was published in 2012. For this presentation, the focus will be on the Guidance on the quality of mental health services, which also provided quality indicators for assessment studies. A new series of Guidance documents on selected topics has been developed in 2013 following revised and standardized methodological approaches. Among these, as an example, the “EPA Guidance on Building Trust in Mental Health Services” focuses on the advancement of mental health care use by providing recommendations to increase trust of the general public and patients. Challenges identified during the Guidance development processes are the need to harmonize the quality of mental health care across Europe and to address the needs for culturally sensitive national or regional adaptations of the Guidance with a view to advance country-specific approaches to implementation and evaluation.

Conclusions: Main topics for the future of European psychiatry are enhancing the standard of psychiatric education and training, promoting excellence in psychiatric research and clinical practice, encouraging progress in psychiatric clinical practice, supporting the development of public health policies relevant to mental health, disseminating information about psychiatric research and practice, contributing to initiatives

improving ethical standards of psychiatric care, encouraging professional interchange/exchange between European psychiatrists and improving the voice of European psychiatrists in the EU legislative procedures. The EPA is well positioned to address these challenges with the aim to optimize mental health care for all European citizens.

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K01 Challenges for epidemiology and social psychiatry

Norman Sartorius

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The description of the functions of epidemiology and social psychiatry formulated in the middle of the 20th century remains valid and many objectives which were set then have been partially or fully reached. The new century brings with it new tasks and challenges for epidemiology and for social psychiatry. These include the need for a focused effort to understand the impact of new communication technology on mental health and illness; the consequences of the longer life expectancy of people with chronic mental illness for those ill and for society; the impact of significant changes of the concept of family and inter-human responsibilities on social capital; the interactions between the growing emphasis on human rights of the mentally ill, waning influences of cultures and the changes of the nature of mental illness; and numerous others.



K02 The future of academic psychiatry may be social

Stefan Priebe

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The past 30 years have seen progress of psychiatric care with more investment in services, but hardly any discovery of new and more effective forms of treatment through research. There are various potential reasons for this lack of achievement. One reason may be the rules regulating research and academic success that may actually stifle innovation. Another potential reason is the dominance of a neurobiological paradigm.

The presentation will argue that all mental disorders are first and foremost social phenomena as they are defined in social interactions, occur in social interactions, and are diagnosed and treated in social interactions. Using a social paradigm might open up new possibilities for the role of academic psychiatrists in society, for concepts and methods of research, and also for the attraction of the profession. These possibilities will be briefly outlined and presented as a chance for a future of academic psychiatry.



K03 The Individual and Societal Burden of Mental Disorders: Consequences for a Public Health Research Agenda

Hans-Ulrich Wittchen

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Based on a reanalysis and reviews of a range of fairly consistent epidemiological findings in countries of the European Union (EU) it is estimated that each year 38.2% of the EU population suffer from a mental disorder. Adjusted for age and comorbidity, this corresponds to 164.8 million persons affected. Compared to 2005 (27.4%) this higher estimate is entirely due to the inclusion of 14 new disorders also covering childhood/adolescence as well as the elderly. The estimated higher number of persons affected (2011: 165 m vs. 2005: 82 m) is due to coverage of childhood and old age populations, new disorders and of new EU membership states. The most frequent disorders are anxiety disorders (14.0%), insomnia (7.0%), major depression (6.9%), somatoform (6.3%), alcohol and drug dependence (N 4%), ADHD (5%) in the young, and dementia (1–30%, depending on age). Except for substance use disorders and mental retardation, there were no substantial cultural or country variations. Although many sources, including national health insurance programs, reveal increases in sick leave, early retirement and treatment rates due to mental disorders, rates in the community have not increased with a few exceptions (i.e. dementia). There were also no consistent indications of improvements with regard to low treatment rates, delayed treatment provision and grossly inadequate treatment.

Disability: Disorders of the brain and mental disorders in particular, contribute 26.6% of the total all cause burden, thus a greater proportion as compared to other regions of the world. The rank order of the most disabling diseases differs markedly by gender and age group; overall, the four most disabling single conditions were: depression, dementias, alcohol use disorders and stroke. Regarding total health care and societal costs, mental

disorders were found to be associated with tremendous costs, less so in terms of direct expenditures for diagnosis, treatment and care, but mostly in terms of indirect costs (disability, sick leave etc). In fact the ratio between low direct and high indirect cost was found to be a unique characteristic of mental disorders, not seen for the neurological, cardiac or diabetes disease spectrum.

It is concluded that the true size and burden of disorders of the brain in the EU was significantly underestimated in the past. Mental disorders are the largest contributor to the all cause morbidity burden as measured by YLD or DALY in the EU. Concerted priority action is needed at all levels, including substantially increased funding for basic, clinical and public health research in order to identify better strategies for improved prevention and treatment for disorders of the brain as the core health challenge of the 21st century. The EU consensus regarding the priorities (see ROAMER) for future action is summarized and the need for early targeted treatments is highlighted in particular.

References:

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K04 Work environments and mental health: from observation to intervention

Stephen A. Stansfeld

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Many studies have shown that poor psychosocial work environments, with high job strain, high job demands, low control, effort-reward imbalance and low social support from managers and colleagues are associated with higher rates of common mental disorders and sickness absence. Many non-work factors, early life exposures, and genetic influences are also associated with common mental disorders in working age populations. However, the workplace provides a relatively structured environment in which to attempt to prevent the onset of common mental disorders. The next step in this work-related research is to see whether interventions to improve working conditions might also improve mental health and well-being. There have been relatively few primary preventive interventions in the workplace, most focussing on increasing physical activity or modified programmes of cognitive behavioural therapy. Interventions to improve working conditions introduced at the organisational level are potentially cost effective for improving employee well-being and reducing sickness absence. Studies of interventions to improve control, communication and support in the workplace have demonstrated reductions in short term sickness absence and improved well-being. Preliminary results will be presented from the 'Guided e-learning for Managers' (GEM Study) which is piloting an e-learning intervention for managers aimed at increasing managers' skills in recognising and dealing with poor psychosocial working conditions. The intervention is being piloted in managers and their employees in three intervention clusters with one control cluster in an English NHS Trust. We have recruited 350 employees and 38 managers. Outcomes being measured include employee well-being and sickness absence as well as, secondarily, change in working conditions and employee health service use. The quantitative pilot study is accompanied by a qualitative investigation and preliminary cost-effectiveness analyses. Funding: UK NIHR



K05 How do epidemiology and health services research interact

Mirella Ruggeri

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No abstract.



K06 Dementia and mild cognitive impairment – a challenge for aging societies – occurrence, risk factors and consequences

Steffi G. Riedel-Heller

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Although most recent research indicates that the age-specific incidence of dementia is declining, dementia is still the most challenging health condition of aging societies. Epidemiology provides key knowledge to explore and to tackle this major public health issue. Governments focus on prevention by reducing risks (primary prevention), detecting early states, and intervening in such early states (secondary prevention) as well as on improving care for individuals with dementia.

The presentation outlines recent results on the occurrence of dementia and mild cognitive impairment in the population. Challenges in defining mild cognitive impairment and in analyzing conversion rates to dementia will be discussed.

Results from the population-based Leipzig Longitudinal Study of the Aged (LEILA75+) and the longitudinal German study on Ageing, Cognition and Dementia in Primary Care Patients (AgeCoDe)- both covering individuals aged 75 years or older – will be shown. Moreover, protective lifestyle factors and their interaction with genetic risks as well as so far neglected areas such as the working life and their effect on cognitive abilities will be explored. Previous findings based on animal models have de-

monstrated that so called enriched environments can protect against neurodegenerative diseases. The presentation provides findings on the question whether an enriched environment at work might also have an impact on later dementia in humans.

Last but not least, the consequences of dementia and mild cognitive impairment for individuals, caring relatives, and the society in terms of costs are burdensome and many questions are to be answered: Do individuals want to be early diagnosed? Are physicians able to (early) diagnose? What keeps individuals suffering from dementia in the community? Is community care really cheaper than institutionalized care? Some of these questions will be discussed. This highlights the potential of epidemiological work to make valuable contributions to the health service research agendas.



K07 Epidemiological Needs Assessment for Dementia: Evidence and Gaps

Carol Brayne

Institute of Public Health, University of Cambridge, Cambridge, UK

Dementia and ageing of global society pose considerable challenges for current and future generations worldwide, as well as opportunities. This talk aims to provide a narrative on the way in which public health approaches can contribute to thinking about current and future health and social care provision for dementia and associated conditions. It will describe methods that emerged over the last decades within health care systems responsible for whole geographies. This approach draws together epidemiological research evidence and assessments of service options, along with further evidence of coverage and effectiveness. This provides an overarching integrated synthesis for specific populations. Epidemiologically based needs assessment is a public health methodology that therefore supports a rational approach to the provision of health and social care efforts for a given population, taking into account competing areas and variability in the evidence base. Well known structures that have been generated as products of this approach include the UK's National Institute of Clinical and Health Excellence and the National Screening Committee. Both seek to review the evidence on specific areas with a population oriented approach. Research gaps are inevitably highlighted by such exercise as they involve rigorous searches, systematic extraction and assessment of the results and then comprehensive synthesis of the identified literature into knowledge, with both grey and peer reviewed literature included. This presentation will describe the approach, the types of evidence required and to what extent these are available for dementia. I will illustrate with examples of strengths and weaknesses in this evidence base. Society, and the research community within it, wishes to promote optimal and equitable services for whole populations in which substantial numbers of people are in the older age groups. If this is to be achieved in a transparent manner the evidence base must be robust with the potential for societal debate on sensitive areas such as early detection, optimal treatment, movement from 'heroic' medical

care to palliative and end of life. In societies dealing with economic challenges these approaches are particularly important, and should provide a major plank for policy decisions. The weaknesses of the research base need to be addressed in a systematic way across nations and cultures to provide better evidence on the shape and potential impact of new policies across cultures and countries.



K08 Mild cognitive impairment: The importance of definitions

Mary Ganguli

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Graduate School of Public Health,
Pittsburgh, USA*

Mild cognitive impairment (MCI) is a state intermediate between normal cognition and dementia. It has been operationally defined in different ways, and the definition has profound implications not just for prevalence and incidence but for outcomes as well. Further, the outcomes of MCI depend on the setting and population, with a greater likelihood of progression to dementia in clinical settings than in population settings. Epidemiology has much to teach clinicians and clinical researchers about the diagnosis of MCI.



K09 Pregnancy Outcome in women with psychosis

Louise Howard

*Section of Women's Mental Health, Institute of
Psychiatry, King's College London, UK*

The fertility of women with psychotic disorders has increased over recent years in the context of changes in treatment but pregnancy in women with psychosis is associated with an increased risk of adverse outcomes for both mother and infant. I will explore reasons for this and discuss the current evidence on interventions that could improve outcomes for the future.



K10 Crisis care in England: evidence and implementation

Sonia Johnson

*Mental Health Sciences Unit, University
College London, UK*

England has since 2001 been the location of a distinctive experiment, following a policy requirement to introduce a particular configuration nationwide. This national experience and the lessons learnt will be discussed in this talk. The introduction of crisis resolution and home treatment teams was driven by a perceived crisis in inpatient care in England. They were driven through despite a dearth of evidence, but subsequently some experimental evidence, including from a randomised trial, has been acquired for their cost effectiveness. Despite this, considerable difficulties have been encountered in their national implementation. This talk will describe these and outline a national re-

search programme that is aimed at improving implementation and quality, the CORE programme funded by the National Institute for Health Research (Programme Grants for Applied Research).



K11 User-led research and mental health care practice

Diana Rose

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The presentation will focus on the development of user-led research in England and the effect it has had on mental health practice. Two examples will be provided. First, the impact of a systematic review of consumers' perspective on ECT on new NICE guidelines on this treatment. Second, I will describe a NICE Guideline Development Group which was co-chaired by a service user and a mental health provider and where the membership was evenly split between service users and professionals. This was a completely new configuration for NICE and its consequences will be described.



K12 Quality and effectiveness of services for people with complex mental health needs

Helen Killaspy

Mental Health Sciences Unit, University College London, UK

Mental health rehabilitation services focus on people with longer term and complex needs. The majority of this group have a diagnosis of schizophrenia with severe negative symptoms and other problems that have complicated their recovery, such as treatment refractory symptoms, cognitive impairment and comorbidities such as substance misuse. These problems often impact on day to day function and necessitate lengthy admissions to hospital. Highly supported community facilities are often required on discharge to support individuals, through a graduated care pathway of supported accommodation, to achieve their maximum level of independence in the community. For these reasons, this relatively small group absorb a large proportion of mental health and social care resources but, until recently there was little research into the aspects of care that were most beneficial for them and little evidence to guide practitioners and service planners.

This presentation will describe progress and results from the major programmes of research in the UK and elsewhere that focus on mental health rehabilitation and supported accommodation services. These studies have three main aims:

- 1) To describe the content and quality of care delivered by mental health rehabilitation and supported accommodation services for people with complex mental health needs.
- 2) To provide evidence for the effectiveness of these services.
- 3) To identify the components of care that are delivered by these services that are most effective in helping people with severe and complex mental health problems to achieve and sustain successful community living.



CL A revised classification for mental disorders in general medical settings – the ICD11-PHC

Sir David Goldberg

Institute of Psychiatry, King's College, London, UK

In 1996 the WHO released an earlier version of this classification, the ICD10-PHC, consisting of only 26 disorders, which has been used in general medical and primary care settings in many low-income countries, as well as in UK prison settings. The ICD11-PHC gives us an opportunity to incorporate recent research findings into a revised classification, as well as incorporating the views of primary care physicians who themselves have conducted research into common disorders. The new features that have to be incorporated are:

1) the fact that many common mental disorders have a common component of symptoms of anxiety-distress

2) the fact that most workers in these settings have difficulty remembering the 9 symptoms of depression, yet a much shorter set performs just as well.

3) the fact that “major depression” exists in two different forms, with, and without, anxiety.

4) new advances that have been made in what were previously called “medically unexplained somatic symptoms”, and these need to be incorporated in a revised classification.

The new classification is being Field Tested in 7 different countries, prior to the modification and release of ICD11.

Symposia

(in order of appearance in the program)

S01 - Mental Health in Old Age

Steffi G. Riedel-Heller

Institute of Social Medicine, Occupational Health and Public Health, University of Leipzig, Germany

The world's population is ageing rapidly. Between 2000 and 2050, the proportion of the world's older adults is estimated to double. Older people face special physical and mental health challenges which need to be recognized. The most common neuropsychiatric disorders in this age group are dementia and depression. Around a quarter of deaths from self-harm are among elderly individuals. Mental health is a key issue of aging societies. The proposed symposium addresses the most relevant common conditions, such as dementia and depression in old age. Furthermore data on suicidal behaviour and specific phobia will be shown. In addition to offering basic epidemiological data, the symposium will outline economic consequences. Risk factor analysis will point to preventive actions.

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S01 – 1 Epidemiology and Health Economics of Depressive Symptoms in Old Age – Results of the Leipzig Longitudinal Study of the Aged (LEILA 75+) and the German Study on Ageing, Cognition and Dementia in Primary Care Patients (AgeCoDe)

Melanie Luppa¹, Claudia Sikorski¹, Steffi G. Riedel-Heller¹, Siegfried Weyerer², Hans-Helmut König³

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Background/Objectives: Depressive symptoms are common in old age and associated with substantial economic consequences. In order to assess future needs of the health care system for prevention and treatment, information on occurrence of and costs associated with depressive symptoms among the highest age groups is required. **Methods:** A population-based sample and a primary care sample aged 75 years and older were investigated face-to-face regarding depressive symptoms (Center of Epidemiologic Studies Depression Scale and Geriatric Depression Scale), risk factors, resource utilisation and costs (cost diary). Resource utilisation was monetarily valued using 2004/2005 prices. **Results:** Incidence rates were 34 and 43 per 1,000 person-years, 95% confidence interval 31-37 and 38-48). Depressive symptoms were significantly associated with marital and educational status, functional impairment and mild cognitive impairment. The mean annual direct costs per patient were € 5,241 for depressive and € 3,648 for non-depressive individuals at baseline, and € 6,491 for depressive and € 4,537 for non-depressive at follow-up. Mean annual total costs at baseline were highest for individuals with chronic depressive symptoms followed by individuals with remittent, no and incident depressive symptoms (see figure 2). At follow-up, mean annual direct costs were also highest for individuals with chronic depressive symptoms, prior to individuals with remittent, no and incident depressive symptoms. Significant differences were found between individuals with no and with chronic depressive symptoms at baseline. **Discussion/Conclusions:** Since depressive symptoms are common in oldest age, associated with broad categories of risk factors, and with a significant increase in direct costs, late-life depression represents an important public health issue. Employment of comprehensive geriatric assessment to ascertain depressive symptoms and its concomitants could help to improve treatment effective-

ness. **Funding:** This work is part of German Research Network on Dementia (KND) and the German Research Network on Degenerative Dementia (KNDD) and was funded by the German Federal Ministry of Education and Research (AgeCoDe study, grant: 01GI431 and 01GI0714) and by the Interdisciplinary Centre for Clinical Research Leipzig (Project C07). **Keywords:** Depression, depressive symptoms, health economics, old age.

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S01 – 2 Early life factors and suicidal behavior: A prospective population-based study of women

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Background/Objectives: Non-fatal suicidal acts are far more common in women compared to men. In light of this, surprisingly little is known about the natural history of suicidal behavior in women. The aim was to examine age of onset of suicidal behavior in women followed into late life, and to study the influence of early-life stressors on the development of suicidal thoughts and attempts. **Methods:** Data were derived from The Prospective Population Study on Women in Gothenburg (PPSW), which is a multidisciplinary study on a representative population sample of women. Women born 1914, 1918, 1922 and 1930 were first examined in 1968-69 (n=796), and were re-examined in 1974-75 (n=677), 1992-93 (n=574), 2000-2002 (n=449), 2005-2006 (n=334) and 2009-2010 (n=182). In 1968, detailed history of mental health problems was taken by a psychiatrist. Number of early life stressors (poverty, quarrels between parents, unhappy childhood, physical abuse, strict upbringing, poor emotional contact with parents, misunderstood as a child, alcoholism in father, broken home) was recorded at baseline. Suicidal behavior was examined at all six examination waves. The Paykel questions about suicidal feelings and the Montgomery-Åsberg Depression Rating Scale suicide item were employed. Medical and psychiatric case records were reviewed for evidence of suicidal behavior. Cox regression models were used to examine the association between early life stressors and suicidal thoughts and attempts. **Results:** More than half of the women (55 %) reported that they had at some point had ideas that life was not worth living. One fourth of the women had experienced suicidal thoughts and 8 % had made at least one suicide attempt. Onset of suicidal behavior occurred after the age of 40 in half of the women. Associations between early-life stressors and suicidal thoughts as well as attempts were observed. Women who reported having five or more early-life stressors were significantly younger when they had their first-episode of suicidal thoughts compared to their counterparts. A similar trend was observed for attempted suicide, but the difference did not reach significance. **Discussion/Conclusions:** This unique sample provides an opportunity to examine suicidality in a life course perspective in women. One limitation is that data regarding early life stressors and suicidal behavior in youth and young adulthood were retrospectively collected. **Funding:** The work is supported by the Swedish Research Council 2013-2699 and the Swedish Research Council for Health, Working life and Welfare 2012-1138. **Keywords:** Suicide, suicidal thoughts, life course, women.

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S01 – 3 The relevance of specific phobia in old age

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Background/Objectives: Specific phobia (SP) is a common diagnosis in population studies of both younger and older adults, although it seems to become less common with age. It is generally considered to be of little clinical significance and previous studies show ambiguous results regarding its contribution to functional impairment. SP is considered a chronic anxiety disorder, but recent population studies have shown that the majority of older people diagnosed with SP do not meet diagnostic criteria at follow-up. However, these studies have a limited follow-up period and do not report on remaining sub-clinical symptoms. Furthermore, SP has been considered a marker for other psychopathology, but longitudinal studies give ambiguous results on the status of SP as a risk factor for depression. Very few studies have examined this topic among older people. Given the high prevalence of both SP and depression in older people, the association between them is of interest from a public health perspective. We report findings on the prevalence, comorbidity, and influence on global functioning of SP in older people, as well as its prognosis and longitudinal association with depression.

Methods: A psychiatric examination was conducted in a population based sample of 558 70-year olds born in 1930 (response rate 70.0%), of which 415 were followed up at age 75 and 303 at both age 75 and 79. At each examination, those diagnosed with dementia according to the DSM-III-R were excluded from the study. Examinations were conducted by clinically experienced health professionals using the Comprehensive Psychopathological Rating Scale (CPRS). The assessment of phobic fears allowed for detection of fears not meeting diagnostic criteria, classification of fears and grading of social consequences of the fears. SP and other psychiatric disorders were diagnosed according to the DSM-IV. Functional impairment was assessed with the Global Assessment of Functioning (GAF). Results: Prevalence of SP was 10.0% at age 70 (women 13.5%, men 4.5%, $p < 0.001$). Of those with SP, 35.7% had another DSM-IV anxiety or depressive disorder, compared to 8.5% of those reporting no fear (OR 4.5, 95% CI 2.1–9.5). SP was related to lower global functioning, but less so than other anxiety disorders and depression. In the part of the sample followed for nine years (N=303), prevalence of SP decreased from 9.9% at age 70 to 4.0% at age 79 and the odds for any individual in the sample to have SP decreased (OR per year 0.90, 95% CI 0.85 – 0.96). Of those with SP at age 70, 16.6% had SP at both age 75 and 79, 60.0% did not have SP at age 75 or 79, and 6.7% had no fears at all at age 75 and 79. The cumulative prevalence of SP over nine years was 14.5%, but only 1.7% received the diagnosis at all three examinations. A diagnosis of SP at age 70 increased the risk of depression at age 75 (OR 2.8, 95% CI 1.3 – 6.2), but SP at age 70 or 75 did not increase the risk for depression at age 79.

Conclusions: Specific phobia is common in older people, especially among women, the prevalence declines markedly between age 70 and 79. It is often present in older people with other mental disorders, but seems to have a mild influence on functioning in itself. Most individuals retain their fears at follow-up, but don't meet diagnostic criteria for SP, which may have several explanations, including reduced exposure to phobic stimuli. SP at age 70 increased the risk for depression at age 75 but not at age 79, possibly due to a shift in risk factors for depression with increasing age.

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S01 – 4 Apolipoprotein E epsilon 4 genotype and a physically active lifestyle in late life: Analysis of gene–environment interaction for the risk of dementia and Alzheimer's disease dementia

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Background/Objectives: As physical activity may modify the effect of the APOE $\epsilon 4$ allele on dementia and Alzheimer's disease dementia (AD) risk, we tested for such a gene–environment interaction in a general practice patients sample aged 75+. **Methods:** Data were derived from the longitudinal German Study on Ageing, Cognition and Dementia in Primary Care Patients. Multivariable Cox regression assessed individual association of APOE $\epsilon 4$ status and physical activity with dementia and AD risk controlled for covariates. We tested for gene–environment interaction by calculating relative excess risk and attributable proportion due to interaction, and synergy index. Kaplan-Meier survival method estimated dementia- and AD-free survival times. **Results:** Among 2,492 non-demented patients, 278 developed dementia (184 AD) over a follow-up interval of 4.5 years. Presence of the APOE $\epsilon 4$ allele significantly increased, higher physical activity significantly decreased dementia and AD risk. Co-presence of APOE $\epsilon 4$ with low physical activity was associated with higher dementia and AD risk and shorter dementia- and AD-free survival than presence of APOE $\epsilon 4$ or low physical activity alone. Indices of interaction indicated additivity of the individual effects of low number of physical activities and APOE $\epsilon 4$ allele for general dementia risk and an additive interaction for AD risk. **Discussion/Conclusions:** Physical activity even in late-life may be effective to reduce conversion to dementia and AD or to delay onset of clinical manifestation and engaging in such activities can be recommended independently of genetic susceptibility. APOE $\epsilon 4$ carriers may particularly benefit from increasing physical activity with regard to their AD risk. **Funding:** This study is part of the German Research Network on Dementia (KND) and the German Research Network on Degenerative Dementia (KNDD) and was funded by the German Federal Ministry of Education and Research (grants KND 01GI0102, 01GI0420, 01GI0422, 01GI0423, 01GI0429, 01GI0431, 01GI0433 and 01GI0434; and grants KNDD 01GI0710, 01GI0711, 01GI0712, 01GI0713, 01GI0714, 01GI0715, 01GI0716 and 01ET1006B). **Keywords:** Gene–environment interaction, apolipoprotein E epsilon 4, dementia, physical activity.

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S01 – 5 Salivary Cortisol Levels in Healthy and Depressed Older Persons

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Background/Objectives: Since the 1960s, the hypothalamic-pituitary-adrenal axis (HPA-axis) has been associated with depression, but findings have been inconsistent. In addition, among elderly, both hyperactivity and hypo-activity of the HPA axis in depressed older persons has been demonstrated. Although it is widely accepted that hypercortisolemia is associated with more severe depression, most studies to date were based on population studies – generally including relatively mild depressive disorders. In addition, functioning of the HPA-axis has generally been reduced to single cortisol measures only, such as total urinary cortisol. The aim of the current study is to provide insight into functioning of the HPA-axis in depressed older adults and healthy controls. Various cortisol measures - reflecting diurnal cortisol rhythm - will be used and analyses will be corrected for essential covariates. **Methods:** Data were derived from the baseline assessment (April 2007 to September 2010) of the Netherlands Study of Depression in Older Persons (NESDO). Healthy subjects without a lifetime diagnosis of Major Depressive Disorder (MDD), or lifetime diagnosis of any anxiety disorder (Panic Disorder +/- Agoraphobia, Agoraphobia, Social Phobia or Generalized Anxiety Disorder) and a total score on the IDS-SR lower than 14 (n=117) were compared with subjects with a 6-month diagnosis of MDD (n=359). To examine differences in cortisol measures between depressed elderly and healthy controls, ANCOVA analyses were performed, adjusted for putative confounders. Next, random coefficient analysis of the four morning cortisol data points were performed using Linear Mixed Models (LMM) to examine differences in cortisol awakening response (CAR) across groups. Finally, linear and logistic regression analyses on the AUC_i, AUC_g, evening cortisol, diurnal slope, and dexamethasone suppression ratio were conducted to explore the association between cortisol and depression characteristics (depression severity, age of depression onset, depression chronicity, comorbid anxiety, anxiety severity, use of SSRIs, TCAs and other antidepressants). **Results:** Some small, but significant differences between salivary cortisol levels among depressed elderly and healthy controls were found: Depressed older persons showed higher morning cortisol levels and a blunted CAR - although effect sizes were small - but they did not differ from healthy older persons with respect to evening cortisol, diurnal slope, and cortisol suppression after dexamethasone ingestion. Next, depression severity was associated with higher AUCs and evening cortisol levels; later age of onset of depression was associated with higher AUC_g and anxiety was associated with higher AUC_i and smaller diurnal slope. **Discussion/Conclusions:** Although late-life depression seems associated with a blunted diurnal slope, effect sizes were small. In addition, depression severity and comorbid anxiety seem to impact on HPA-axis functioning. **Funding:** The infrastructure for NESDO is funded through the Fonds NutsOhra, Stichting tot Steun VCVGZ, NARSAD The Brain and Behaviour Research Fund, and the participating universities and mental health care organizations (VU University Medical Center, Leiden University Medical Center, University Medical Center Groningen, Radboud University Nijmegen Medical Center, and GGZ inGeest, GG-Net, GGZ Nijmegen, GGZ Rivierduinen, Lentis, and Parnassia). **Keywords:** Cortisol, elderly, depression, cohort study.

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S01 – 6 Mid-life vascular risk factors and late-life hippocampal volume: the Southall and Brent revisited (SABRE) prospective study

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Background/Objectives: Smaller hippocampal volume is a strong predictor of cognitive impairment and dementia. Cardiovascular risk factors in mid-life are associated with increased risk of later dementia but associations with late-life hippocampal volume remain controversial. We investigated the association between mid-life vascular risk factors and late-life hippocampal volume. **Methods:** In the Southall And Brent Revisited (SABRE) cohort, a tri-ethnic, community based sample from north and west London, vascular risk factors were ascertained in 1110 participants aged 40-69 in 1988-91 whose re-examinations in 2008-2011 included magnetic resonance imaging estimation of hippocampal volume. Multivariable linear regression analyses were used to investigate mid-life demographic, and vascular risk status as predictors of hippocampal volume (cm³). **Results:** Baseline increased age, female sex, ethnicity and fewer years of education were associated with smaller hippocampal volume at follow-up. Mid-life diabetes (B-coefficient -0.31; 95% CI -0.50,-0.11) fasting insulin (-0.08 per SD increase; -0.14,-0.02) and fasting glucose (-0.10; -0.16,-0.05) were the principal predictors of hippocampal volume adjusted for age, gender, ethnicity and cardiovascular risk factors, whereas no significant associations were found with measures of hypertensive status, obesity or dyslipidemia in mid-life. Associations with fasting insulin and glucose persisted when participants with diabetes were excluded. Severe white matter hyperintensities and lower total brain volume at follow-up were also associated with lower hippocampal volume. **Conclusion:** Of a range of cardiovascular risk factors examined in mid-life, diabetes, fasting insulin, and fasting glucose were the principal predictors of late-life hippocampal volume. **Funding:** The SABRE study was funded jointly by the Wellcome Trust and the British Heart Foundation, and the SABRE Cognitive Function study was funded by the Wellcome Trust. The baseline Southall study was funded by the UK Medical Research Council, the British Diabetic Association (now Diabetes UK), the Wellcome Trust and the British Heart Foundation. The baseline Brent study was funded by the UK Medical Research Council. RS and GP are part-funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Biomedical Research Unit at South London and Maudsley NHS Foundation Trust and King's College London. **Keywords:** Hippocampal volume, diabetes, fasting insulin and glucose, cardiovascular risk factors.

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S02 - Does coercion work? The Oxford Community Treatment Order Evaluation Trial (OCTET)

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Background/Objectives: Following widespread deinstitutionalisation of psychiatric services, Community Treatment Orders (CTOs) have been introduced in many Western jurisdictions to authorise extended periods of compulsory community care. A CTO requires the patient to adhere to outpatient treatment. The aim is to help patients achieve stability, to control risk and to provide less restrictive alternatives to (repeated) involuntary hospitalisation. The main mechanism of enforcement is swift recall to hospital for treatment when required. Despite their wide-spread use, the evidence base for CTO effectiveness is weak. A number of case-control studies show discrepant results regarding hospitalisation outcomes and community tenure. Two RCTs in the US showed no difference in these outcomes when comparing CTO and voluntary care.

Methods: When CTOs were introduced in England and Wales in 2008, the OCTET research programme was designed to test their effectiveness. This consisted of an RCT and qualitative sub-studies. An extension to OCTET is investigating longer term effects.

Results/Discussion: The largest and most comprehensive research program on CTO internationally to date, this symposium will discuss the effectiveness of CTOs in light of the OCTET findings. Tom Burns will present the OCTET RCT and its findings regarding clinical outcomes, with particular focus on generalisability. Jorun Rugkåsa will then present the qualitative part of OCTET, using personal experiences of psychiatrists, patient and family carers to investigate the process of implementation of this new legislation. Service user organisations have raised concern that community compulsion may drive patients away from services in the longer term. The second phase of OCTET will focus on the effect of compulsion on continuity of care and Stephen Puntis will present this part of the study. Finally, given the concern among stakeholders that treatment should enhance social outcomes as well as clinical ones, Francis Vergunst will focus on the relationship between coercion and patient rated outcomes such as engagement in social relationship and quality of life.

Funding: Funded by a Programme Grant for Applied Research from the National Institute of Health Research UK (RP-PG-0606-1006).

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S02 – 1 Strengths and Weaknesses of the OCTET trial

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Background/Objectives: Community Treatment Orders (CTOs) have been introduced widely over the last 30 years. In the last 15 years opposition to them has centred mainly on the absence of convincing evidence of their effectiveness. Published controlled studies have been mainly before and after studies and, until OCTET, only two USA RCTs conducted 15 years ago. CBA study results are mixed and both RCTs failed to find an effect for CTOs. This absence of effect was confirmed by OCTET. There is controversy about the merit of the RCTs and whether methodological refinements in some of the CBAs may confer greater weight to them, reversing the usual hierarchy of evidence.

Methods: An RCT of 333 patients randomised to discharge from involuntary hospitalisation to CTO or to voluntary status via Section 17 Leave of Absence. The primary outcome of readmission to hospital and the secondary outcomes of time to readmission and duration of readmission was measured over a 12 month follow-up period.

Results: There was no difference between the groups in any of the primary or secondary outcomes. There was a significant difference in time under compulsion.

OCTET has four identified limitations:

- 1) Patient selection is not epidemiologically based and it cannot be certain how representative the sample is
- 2) The control condition (section 17 leave) is confusing for those not familiar with UK practice.
- 3) There were >20% of protocol violators in both arms of the study
- 4) Hospitalisation as outcome is questioned

Several CBA studies have been recently published, mainly from Victoria Australia and New York USA. It has been suggested that their sample size and the use of propensity analysis in the NY study confer greater conviction. Discussion and conclusion: The four limitations will be addressed and the issue of propensity analysis examined. It is proposed that the OCTET trial limitations are important but not unusual in pragmatic clinical effectiveness trials. Propensity analysis does, undoubtedly, improve the confidence of CBA studies. Its effect is to increase the precision of the demonstrated association. However it will be argued that this remains a test of association not causation and that RCTs still provide more convincing answers to whether CTOs affect outcomes. Funding: Funded by a Programme Grant for Applied Research from the National Institute of Health Research UK (RP-PG-0606-1006)

Keywords: OCTET RCT, community treatment orders.

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S02 – 2 A Qualitative Study of Patient, Psychiatrist and Family Carer Experiences of Community Treatment Orders in England

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Background/Objectives: Community Treatment Orders (CTOs) were introduced to English mental health services in 2008 despite a lack of convincing evidence. One factor in how new legislation is implemented on the ground is how it is understood, perceived and experienced by those involved. Current literature on personal experiences of Community Treatment Orders is limited. This presentation reports on a qualitative interview study of patients, psychiatrists and family carers in England conducted as part of the OCTET research programme.

Methods: Qualitative in-depth interviews with 26 patients, 25 psychiatrists and 24 family carers. Thematic analysis.

Results: Three main issues will be discussed. First, all three groups perceived the chief purpose of CTOs to be the enforcement of medication. The focus on medication - to the exclusion of additional support or service provision - was viewed by carers as a major flaw that impeded full recovery. In contrast, psychiatrists often emphasised that CTO patients were not treated preferentially, echoing concerns that arose prior the CTO's introduction about creating perverse incentives for their use. Second, understanding of how the inbuilt mechanisms of the CTO (should) work varied considerably. Patients, carers and psychiatrists alike expressed considerable uncertainty regarding the enforceability of CTO conditions and the criteria for recall. The effectiveness of the CTO was seen as related not only to how they were interpreted and applied in practice by psychiatrists, but also how patients responded to them, and how carers were involved. Third, we identified a wide range of experiences and views within each group indicating that there is no single, definitive experience or view of CTOs amongst any of these groups.

Conclusion: Current uncertainty of their mechanisms and effectiveness may have consequences for how CTOs are used and experienced, but also for patient and carer involvement.

Funding: Funded by a Programme Grant for Applied Research from the National Institute of Health Research UK (RP-PG-0606-1006)

Keywords: OCTET RCT, community treatment orders, qualitative methods.

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S02 – 3 Is the duration of legal compulsion associated with differences in continuity of care?

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Background/Objectives: Despite a lack of evidence for their effectiveness, Community Treatment Orders (CTOs) were introduced in English Mental Health Services in 2008 allowing for patients to receive compulsory treatment in the community. The Oxford Community Treatment Order Trial (OCTET) found that there was no difference between hospital readmission rates between patients randomised to CTO or voluntary status. Proponents of CTOs argue that CTOs will foster engagement with services by improving medication adherence and regular appointments with community mental health teams. However critics argue that over time, coercive practices such as CTOs may drive patients away from mental health services by fostering mistrust and poor relationships with the care team due to an imbalance of power and the paternalistic nature of forced treatment. OCTET has been granted an extension to investigate the impact of CTOs on long-term engagement with services. A way of conceptualising engagement and the impact of CTOs on providing services is through exploring its relationship with continuity of care (CoC). Continuity of Care (CoC) is a multi-dimensional construct that can broadly be defined as the long-term delivery of care that is coordinated between services and is appropriate to a patient's current needs. This presentation will report on a study investigating the association between length of outpatient compulsion and continuity of care in the 333 patients involved in the OCTET trial. **Methods:** This study has a prospective observational design. Data from clinical records will be collected at a 36-month follow-up for the 333 patients with a diagnosis of schizophrenia and related disorders who participated in the OCTET trial. Duration of outpatient compulsion, measured as number of days under a CTO, will be measured against operationalized components of continuity of care. Regression models will be used to investigate the relationship between time under compulsion and CoC in the analysis. Two-sided significance tests will be used throughout, taking $p=0.05$ as significant, with 95% confidence intervals presented where appropriate. **Results and Discussion:** Participants on the OCTET trial were recruited between November 2008 – February 2011. As data for this study will be collected at participants' 36-month follow-up, data collection will continue until February 2014. Therefore, preliminary results will be able to be reported at the conference. **Funding:** Funded by a Programme Grant for Applied Research from the National Institute of Health Research UK (RP-PG-0606-1006) **Keywords:** OCTET RCT, community treatment orders, continuity of care.

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S02 – 4 Does coercion affect social outcomes for patients with psychosis?

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Background/Objectives: Psychotic illnesses carry a substantial personal and societal burden in terms of disability, suffering and cost. These illnesses are characterised by deficits in social functioning and poor social outcomes. Coercive treatment in hospital and community settings is common in the management of psychosis patients. The use of formal coercion rests on the assumption that such treatment will lead to clinical and social benefits for the patient, even if the patient does not recognise this at the time. This line of reasoning underpins the ethical justification for involuntary detention, but there is little empirical data to support this view. The Oxford Community Treatment Order Evaluation Trial (OCTET) study

is part of an on-going programme of research on legal and informal coercion experienced by psychosis patients in England. This study extends work begun in OCTET to explore associations between the duration of preceding compulsion (hospital and community) and three broad social outcomes: social networks, social inclusion and capabilities/quality of life. **Methods:** The study has a prospective observational design. A subsample ($n=120$) from OCTET are being followed up 48-months after entering the trial to test whether the duration of preceding coercive treatment (hospital and community) affects long-term social outcomes. Regression is being used to explore whether coercion is predictive of more or less favourable social outcomes while controlling for baseline characteristics (illness severity, perceived coercion). A between-groups analysis of social outcomes based on original randomisation is also being explored. **Results:** To date 52 patients have completed their 48-month follow-up interview. Time under compulsion (hospital and community) was weakly negatively associated with total number of social contacts (-0.22), social inclusion (satisfaction opportunities: -0.19 and perceived opportunities: -0.06), patient capabilities (-0.082) and objective social outcomes (-0.25). The regression analysis revealed that the duration of compulsion did not significantly predict better social outcomes. No significant between-group differences in social outcomes at 48-months have been found. **Discussion/Conclusion:** The relationship between the duration of compulsion and social outcomes appears weak and patients' potential to benefit socially from such treatment may be modest. Results are preliminary and data should be interpreted with caution due to the current small sample size. **Funding:** The study is supported by a grant from the National Institute for Health Research (Grant reference: RP-PG-0606-1006) **Keywords:** OCTET RCT, community treatment orders, social outcomes.

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S03 - TürkSch: A Longitudinal Epidemiological Study for Gene-Environment Interaction in Psychosis and Other Mental Disorders

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Background/Objectives: This symposium covers the objectives, design and results of a multistage longitudinal study being conducted in Izmir, Turkey. The meeting will showcase the range of research perspectives that are included in the study. It provides a detailed methodology and primary findings as well. The symposium is of relevance to anyone with a professional, educational or research interest in psychosis and other mental disorders. **Methods:** The Izmir Mental Health Survey for Gene-Environment Interaction in Psychosis (TürkSch) is a longitudinal, multi-staged study of mental disorders ($n:4011$) with two measurements over a 5-year period. Risk factors, persistence of experiences-symptoms, and clinical outcome were analyzed for groups with other relevant mental disorders including major depressive disorder, and alcohol and substance abuse related disorders. Also the study includes blood-sampling for assessing gene-environment interactions in psychosis. **Results:** The symposium will cover the general outline of the study with results on the gene-environment interaction (stage III), depressive disorder and alcohol-substance abuse (stage I). Although there are several epidemiological studies on mental health disorders in Turkey, studies with a special focus on psychotic disorders are rare. Such studies would be of major interest, given the fact that immigrants from Turkey in Western European countries form a notable exception to the well-replicated observation that immigrants to these countries have much higher rates of psychotic disorder. **Conclusion:** The TürkSch has a unique study design and yields data suitable for international comparison. The aims, objectives, design and major outcomes of the TürkSch can be pursued in the framework of a unique design yielding high-quality data allowing a broad comparison with the published literature. **Funding:** This work is part of the TürkSch project and is funded by the Scientific and Technological Council of Turkey 1001 programme, project no: 107S053 and 112S476.

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S03 – 1 Objectives, Design and Methodology of the TürkSch

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Background/Objectives: To describe the objectives and design of a multistage longitudinal study on the prevalence, incidence, and risk and persistence factors of mental health problems, in particular psychotic disorders and psychotic symptoms, by assessing a probabilistic sample of household residents in the Izmir Metropolitan Area, aged 15-64 years. **Methods:** The objectives of the general population-based Izmir Mental Health Survey for Gene-Environment Interaction in Psychoses (TürkSch) Study are described along with a detailed account of the overall design, special design features, sample characteristics and instruments used. The study included four different observation frames with cross-sectional and prospective-longitudinal design. In the first stage, the primary screening instrument was the Composite International Diagnostic Interview (CIDI) 2.1, which assessed lifetime and/or last one year occurrence of several DSM-IV disorders. Second, a parallel survey of social capital of administrative wards was conducted in the same neighborhoods. Third, a nested-case control study was performed to study effects of genetic and environmental risk factors on wide psychosis phenotype. The prospective-longitudinal arm of the study assesses emergence and persistence of psychopathology in dimensions of depression, mania, psychosis, alcohol and substance abuse. **Results:** A total of 4011 males and females were contacted through a multistage clustered area probability sample of administrative neighborhoods and households, covering 9 districts and 302 neighborhoods. The response rate for the first stage was 76.5% in 5242 eligible households. Respondents were interviewed at home in 2008 for the screening of included mental health problems. The screened disorders were mood disorders (last 1 year), schizophrenia and other non-affective psychotic disorders (lifetime), and dependence and abuse of psychoactive substances (lifetime). After the baseline investigation, all respondents of stage I (n: 4011) are being re-interviewed for psychopathology with CIDI 2.1 covering an overall period of 5 years. **Discussion/Conclusions:** Multistage, and both cross-sectional and longitudinal in nature, the TürkSch has a unique study design and yields data of high quality. This enables study of the prevalence, incidence, protective and risk factors, the factors of persistence and higher-order interactions underlying ill-health in the Turkish population, with a specific focus on psychosis. **Funding:** This work is part of the TürkSch project and is funded by the Scientific and Technological Council of Turkey 1001 programme, project no: 107S053 and 112S476. **Keywords:** Epidemiology, psychoses, longitudinal, methodology.

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S03 – 2 Familial liability, the BDNF-Val66Met polymorphism and psychotic-like experiences

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Background/Objectives: Familial liability to both severe and common mental disorder predicts psychotic disorder, psychotic symptoms and psychotic-like experiences (PLE). However, the relation between familial liability and psychosis outcome may be associated with genetic variation. We investigated the influence of familial liability on PLE in a non-psychotic, general population based group, and the potential moderating effect of the BDNF-Val66Met polymorphism. **Methods:** PLE and familial liability were assessed in 313 individuals (mean age 38.6±13.3; gender: 43% males). Familial liability was obtained using the questions from Family Interview for Genetic Studies and dichotomized to none or at least one mental disorder in the first degree relatives (parents and siblings). PLE (visual and auditory hallucinations) were assessed through relevant questions in CIDI 2.1 G section on psychotic disorders. The sample underwent clinical re-interview with the Structured Clinical Interview for DSM-IV. BDNF val66met (rs6265) was genotyped using standardized procedures. **Results:** Familial liability was associated with PLE (OR= 1.8; CI: 1.1-3.0; p: 0.012). The association between familial liability and PLE was significant in individuals with Val/Val allele (OR= 2.2; CI: 1.2-4.1; p: 0.009), whereas there was no evidence for an association between familial liability and PLE in Met carrier individuals. **Conclusion:** Individuals with a familial liability for mental disorders are more likely to report PLE. Val/Val genotype reported more PLE when exposed to familial liability than did individuals carrying Met allele. Therefore, the observed gene-environment interaction effect may be partially responsible for individual variation in response to familial liability. **Funding:** This work is part of the TürkSch project and is funded by the Scientific and Technological Council of Turkey 1001 programme, project no: 107S053 and 112S476. **Keywords:** Egene environment.

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S03 – 3 Epidemiology of Major Depressive Disorder in Izmir, Turkey: Prevalence, Burden and Service Usage

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Background/Objectives: The aim of the study was to estimate one year prevalence and correlates of DSM-IV-TR major depressive disorder (MDD) in the general population of Izmir-Turkey, with further estimates on severity and admission to mental health services. **Methods:** Addresses were contacted in a multistage clustered area probability sampling frame of administrative neighborhoods and households, covering 9 districts and 302 neighborhoods in the Izmir metropolitan area between November 2007 and October 2008. One household member aged between 15 and 64 years and available to complete the interview was randomly selected using a within-household sampling method. 4011 (female: 57.3%) respondents were successfully interviewed with a response rate of 75.8%. The primary screening instrument was the Composite International Diagnostic Interview (CIDI) 2.1. The prevalence of MDD was based on responses to

systematic screening questions of the relevant questions (CIDI 2.1, E1- E26) with applying hierarchical DSM-IV criteria including number of symptoms (at least five), time frame (at least two weeks, almost every day and all day long), impairment (significant loss of functioning) and differential features (mixed episodes, medical illness, substance use, and not accompanied by grief). Severity of symptoms and impairment was assessed with SF-36. A self-report questionnaire was used to evaluate admissions to mental health services in the same time frame. A sub-group of the sample underwent clinical re-interview with the Structured Clinical Interview for DSM-IV. **Results:** The 12-month prevalence of CIDI MDD was 8.2% (95% confidence interval [CI], 7.3-9.1). Main associations were female gender, low socio-economic status, poverty and unemployment. CIDI MDD was strongly associated with admission to any mental health service (OR: 6.5; CI: 5.1-8.3; $p < 0.001$). However, there was a prominent treatment gap where only 43.3% of individuals with MDD used services in the same period. Impairment as measured by SF-36 was substantial as indicated by 43.3% of 12-month cases with severe or very severe role impairment. **Conclusion:** The clinical significance of the extent of depressive disorders is very high and leads to impairment in functioning. One in every 12 people in the general population in the last year was suffering from major depressive disorder, thus making it a prominent treatment gap. **Funding:** This work is part of the TürkSch project and is funded by the Scientific and Technological Council of Turkey 1001 programme, project no: 107S053. **Keywords:** Epidemiology, psychoses, major depression, treatment gap.

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S03– 4 Low in prevalence, high in burden: Alcohol and substance abuse in Izmir, Turkey

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Background/Objectives: Former prevalence estimates of alcohol and/or substance abuse in Turkey reported lower rates than European countries. However there is no report on disease burden associated with alcohol and/or substance abuse. The aim of the study was to estimate one year prevalence and correlates of alcohol and substance abuse in the general population of Izmir-Turkey, with further estimates on severity and admission to mental health services. **Methods:** Addresses were contacted in a multistage clustered area probability sampling frame of administrative neighborhoods and households, covering 9 districts and 302 neighborhoods in the Izmir metropolitan area between November 2007 and October 2008. One household member aged between 15 and 64 years and available to complete the interview was randomly selected using a within-household sampling method. 4011 (female: 57.3%) respondents were successfully interviewed with a response rate of 75.8%. The primary screening instrument was the Composite International Diagnostic Interview (CIDI) 2.1. The prevalence estimates were based on responses to systematic screening questions of the relevant questions (CIDI 2.1 sections J and L) applying hierarchical DSM-IV criteria. Severity of symptoms and impairment was assessed with the SF-36. A self-report questionnaire was used to evaluate admissions to mental health services in the same time frame. **Results:** Lifetime prevalence estimates of abuse or dependence of any substance, alcohol, and any illicit substance were 5.0% (95% confidence interval [CI]: 4.3-5.6), 3.8% (CI: 3.2-4.6), and 1.8% (CI: 1.4-2.2), respectively. Although any illicit substance abuse was associated with admission to any mental health service (OR: 2.9; CI: 1.7-4.7; $p < 0.001$), alcohol abuse was not associated with admission. However, there was a prominent treatment gap where only 13.4% of individuals with alcohol abuse were admitted to services in the same period. Service usage in the any illicit substance abuse group was 28.9%. **Conclusion:** Although the prevalence of alcohol and substance abuse in Izmir are lower than estimates of Western countries, alcohol and substance abu-

se constitute a major cause of disability, with prominent treatment gap. **Funding:** This work is part of the TürkSch project and is funded by the Scientific and Technological Council of Turkey 1001 programme, project no: 107S053. **Keywords:** Epidemiology, psychoses, alcohol and substance, treatment gap.

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S04 - Models of Case Management for Psychiatric Disorders in the Swiss Context

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Background/Objectives: Switzerland is a federal state consisting of 26 cantons. There are four national languages. Despite a total population of only 8 million inhabitants, each canton has its own department of health. Regional culture and resources, institutional philosophy, and strong local personalities among care providers are all factors that influence mental health services in each canton. The aims of this symposium are to present the development of three models of transitional case management following psychiatric hospital discharge, one in the German-speaking part (canton Zürich) and two in the French-speaking part (canton Vaud) and to discuss their particular features according to the local context. **Methods:** In both Zürich and Vaud, transitional case management interventions have been developed to improve engagement with care, promote integration with post-discharge networks, coordinate outpatient care and prevent relapse and readmission after psychiatric discharge for people returning home. In addition, a case management intervention for people living in supportive housing after a psychiatric hospitalisation has been implemented in canton Vaud. The objectives of this intervention are to help inpatient teams to find a place to live for their patients, to improve the transition between institutions and to coordinate care during this period. **Results:** Currently, these models of transitional case management have shown effectiveness, but they need further assessment. There is an increased satisfaction among patients, relatives and professionals with these interventions. **Discussion/Conclusions:** In Switzerland, there is weak national governance due to the federal system. The differences between cantons in terms of legal provisions, organisation of care and the small size of population are limiting factors for the development of national research. However, the cantonal organisation of the mental health services gives care providers the opportunity to develop interventions that will meet local needs. **Funding:** None declared.

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S04 – 1 Elements of Integrated Care: Post-Discharge Network Coordination Program (PDNC-P)

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Background/Objectives: The aim of the Post-Discharge Network Coordination Program (Zurich University of Applied Science, Department of Applied Psychology, ZHAW and The Zurich program for sustainable development of mental health services, ZInEP) is to improve discharge planning and continuity of care for patients with low utilization of inpatient services at IPW (Integrated Psychiatric Clinic of Winterthur and Zurich Unterland). Each patient in the treatment group is assigned to a social worker. In collaboration, they agree on the coordination of the patient's social support network, a crisis plan and the terms of program termination. They also identify a network representative, who is chosen to mediate between the patient and

the social support network. In order to do so, they build a map of the patient's network at the beginning and the end of the treatment. The program concludes a maximum of three months after discharge from inpatient care.

Methods: The study is conducted as a randomized controlled trial. The patients in both the treatment and control groups are assessed at discharge, 3 months and 12 months after discharge. The aim of this study is to investigate if the Post-Discharge Network Coordination Program at IPW has a demonstrably significant impact on the frequency and duration of patient re-hospitalization. Further outcome variables include: social support, change in psychiatric symptoms, quality of life, and independence in daily functioning. The inclusion criteria for this study are: no more than three inpatient treatments within the past three years; a GAF score less than or equal to 60; the ability to provide written informed consent; and being between 18 and 64 years old. Exclusion criteria are insufficient German language skills; support by a case manager; and living in a form of supportive housing. The target enrollment is 160 patients.

Results: In the first step of the evaluation, the patient network maps are the primary focus. Additionally, initial outcomes regarding the differences between pre- and post-measures will be discussed.

Discussion/Conclusions: The first weeks following inpatient treatment are very stressful for psychiatric patients and associated with a higher suicide risk, therefore systematically planning discharge is very important. Hence the re-integration of patients in their quotidian environment and into their social networks, in addition to adjusting outpatient care and addressing daily life, is a matter of importance. While there is existing research on the population of high-frequency service users, the focus on the low-frequency service users is a gap in the research and therefore a strength of this study.

Funding: This project is part of ZInEP and is being funded by a generous bequest from a foundation. **Keywords:** Discharge planning, case management, discharge planning, care coordination.

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S04 – 2 Efficacy of transitional case management following psychiatric hospital discharge: a randomized control trial

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Background/Objectives: Over the last several decades, deinstitutionalisation has transformed psychiatric care provision in most Western Countries. The number of psychiatric admissions has increased while the number of psychiatric beds has decreased. Mental health teams are now faced with an increased number of discharges and less time to prepare them. In 2003 in Lausanne (Switzerland), a survey among ambulatory care providers highlighted that psychiatric hospital discharges should be improved for people returning home. In this context, a transitional case management team has been established in Lausanne. The intervention begins during hospitalisation and ends one month after discharge. It aims to ensure the continuity of care after discharge, avoid relapses and readmissions, and improve care coordination, network resources and the satisfaction of patients, relatives and care providers. The goal of this study was to assess the effectiveness of this short intervention in terms of the level of engagement with care services one year after discharge, the rate of readmissions during that year, and the patient's clinical status, social functioning and satisfaction with care.

Methods: We conducted a randomised controlled trial. Individuals hospitalised were randomly assigned to be discharged to routine follow up by private psychiatrists or general practitioners with (n=51) or without (n=51) the addition of a transitional case management intervention. Patients were interviewed at one year after discharge to assess their engagement with care services. Hospital notes were examined for information on readmissions.

Results: A total of 84 (82.4%) patients were interviewed at the one year time interval. None of the outcomes differed between groups. However, engagement with ambulatory care exceeded 95% in both groups (p=0.611) markedly higher than previously recorded rate of engagement in Lausanne (50%). The rate of readmission of the transitional

case management group was slightly lower than the treatment as usual group (28% vs. 43.1%), but this difference was not significant (p=0.112).

Discussion/Conclusions: The focus on follow-up after discharge during hospitalisation seems to lead to a markedly increased rate of engagement with ambulatory care at one year despite no differences between the two groups. This may indicate that it is the focus on preparing for engagement, rather than the specifics of the transitional case management process that is effective. Our short transitional intervention suggests a reduction in the rate of readmissions during the following twelve months, but the results are not conclusive. This result suggests that we should conduct a larger, more powerful trial. However, the trend in reduction of readmissions and the increased satisfaction of patients, their relatives and professionals with transitional case management (in qualitative interviews not reported here) have convinced the Department of Public Health to implement transitional case management intervention as part of routine care.

Funding: Swiss National Science Foundation (SNSF): SNF118347

Keywords: Discharge planning, case management, discharge planning.

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S04 – 3 Transition from psychiatric hospitalisation to supportive housing: a quantitative and qualitative project

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Background/Objectives: This project arose from the willingness of the professionals involved in mental health care to improve collaboration between hospital and supportive housing after discharge. It had two primary aims: first, to describe socio-demographic and clinical characteristics of adult inpatients of a general psychiatric hospital, and their use of services in terms of days of hospitalisations and residential care. Second, to explore through interviews and focus groups the viewpoints and needs and preferences regarding the process of the different actors involved in the transition from the psychiatric hospital to residential facilities: patients, relatives and professionals.

Methods: For the quantitative study, data were collected from hospital files of all the patients aged between 18 and 65 years old with a stay of more than 24 hours in the psychiatric hospital of Cery during the year 2012. The group of patients living in independent accommodation was compared to the group whose members were homeless or living in supportive housing in terms of socio-demographic and clinical characteristics and use of services.

Results: 794 patients (1059 hospital stays) were included in the quantitative study. People suffering from severe psychiatric disorders, especially young men presenting with dual diagnoses (psychosis and substance misuse) and behavioural troubles, are more likely to be excluded from residential institutions which are inspired by the "continuum of care model". In this population, there is a higher rate of readmissions and an increased mean length of stay. Four central themes emerged from the qualitative data analysis: break, hope, self-determination and continuity. The "revolving door" phenomenon may be considered as a self-determination and a coping strategies developed by patients to escape the institutional system that seems to contribute to loss of hope, isolation and stigmatization. In this context, despite the fact that the relatives' burden becomes heavier, they are not considered as partners and are insufficiently integrated in care.

Discussion/Conclusions: The transition from psychiatric hospital to residential care is a high emotional and critical moment. It requires specific support. Transitional case management intervention may be an opportuni-

ty to improve the access to an adapted accommodation after discharge. It focuses on individual needs and personal history rather than on the continuity of care. This model needs further assessment. The current “continuum of care model” and the residential services do not fit the patients’ characteristics, nor their needs or preferences. Recovery centred interventions such as “housing first” should be favoured by decision-makers in mental health instead of the current residential care centred ones. Partnerships with relatives have to be improved and peer support developed.
Funding: Several local public funding sources
Keywords: Discharge planning, case management, discharge planning, supportive housing.

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S05 - The risk of PTSD and other mental disorders after trauma

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Background/Objectives: The prevalence of deployment-related mental disorders varies considerably between different nations. US studies suggest high rates of posttraumatic stress disorder (PTSD) and other deployment-related disorders. UK, Dutch and Canadian studies report lower rates. For the German Forces there are no data available so far that would allow reliable estimates of the risk for PTSD and other mental disorders associated with military deployment.
Methods: The PID-PTSD+ study program comprises a cross-sectional and a prospective longitudinal study. In the cross-sectional study, a stratified random sample of 1483 soldiers recently deployed to Afghanistan (DS) and a comparable sample of never deployed soldiers (CO) were comprehensively examined. In the longitudinal study, 621 soldiers were examined prior to and 12 month after deployment in Afghanistan with a retention rate of 76.7% (n=476) at follow-up. The assessment instrument was a standardized diagnostic interview which was adapted for its application in military populations (MI-CIDI). This instrument allows for the reliable and valid assessment of psychiatric symptoms, syndromes and disorders according to the DSM-IV-TR.
Results: In the cross-sectional study, 24.2% of the DS reported at least one traumatic event. The 12-month prevalence for PTSD was 2.9% which was significantly elevated compared to the CO (odds ratio=2.5, p=0.033). The deployment-related incidence of PTSD was 0.9% for DS and 0.2% for CO. Beyond PTSD, DS had higher incidence rates for anxiety disorders (2.6% vs. 0.7%, odds ratio=3.6, p=0.045) and somatoform disorders (1.1% vs. 0.2%, odds ratio=6.5, p=0.001) compared to CO. The number of comorbid deployment-related disorders was also elevated among DS (mean ratio=7.6, p=0.042). Soldiers reporting a mental disorder with onset prior to deployment were at higher risk for the presence of PTSD and other mental disorders after deployment. The results of the longitudinal study support and extend the findings of the cross-sectional study and the role of mental disorders as a risk factor for deployment-related mental health consequences in particular.
Conclusion: The presented findings suggest that rates of deployment-related PTSD are lower than previously reported in US studies. They further point out the relevance of other deployment-related mental disorders. The importance of pre-existing mental disorders as a risk factor for deployment-related disorders has implications for the development of effective screening measures and early interventions.
Funding: The study program was funded by the German Defense Ministry and the Medical Office thereof, project funding number M/SAB X/9A004.

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S05 – 1 Rates of Mental Disorders Among German Soldiers Deployed to Afghanistan

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Background/Objectives: Controversy exists regarding the prevalence of military mission-related PTSD and other mental disorders among deployed soldiers.
Methods: Based on a random stratified sample of n=1599 German soldiers (response rate (RR) 93%, n=1483), we assessed subjects 12 months after deployment to Afghanistan and compared findings to controls of n=932 never deployed soldiers (RR: 95%, n=889). Interviews were conducted by trained non-military clinical interviewers using the DSM-IV-TR-Composite International Diagnostic Interview (CIDI-military). Outcome measures were 12-month prevalence and incidence of PTSD, anxiety, depression, substance use disorders and other DSM-IV-TR mental disorders.
Results: Deployed soldiers reported high rates of combat-related and other traumatic events. Compared to controls they had a higher 12-month incidence (OR: 4.3) and prevalence (OR: 2.4) of PTSD, anxiety (OR: 3.6, 1.4), and alcohol use disorders (OR: 3.5, 1.9). They also had higher rates of multiple diagnoses (MR: 1.72) and higher anxiety distress scores. Incidence of PTSD and other mental disorders were best predicted by prior lifetime mental disorders.
Conclusion: German soldiers deployed to Afghanistan are at increased risk of traumatic events and of mental disorders including PTSD as compared to never-deployed soldiers. The risk for other mental disorders subsequent to traumatic events such as anxiety, somatoform, and alcohol use disorders was substantially larger than the risk for PTSD. Prior mental disorders were found to be the strongest predictor of 12-month mental disorders and suggest that pre-mission psychopathological screening might be crucial to reduce mission-related mental health risks.
Funding: This study was funded by the German Defense Ministry, respectively the Medical Office thereof (Project Funding number M/SAB X/9A004)
Keywords: Trauma, PTSD, military deployment, mental disorders.

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S05 – 2 Substance use and substance use disorders in recently deployed and never deployed soldiers

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Background/Objectives: Military studies investigating the prevalence of substance use (SU) and substance use disorders (SUD) and the relation between SU and mental disorders often lack a comprehensive assessment of SU, SUD and mental disorders and comparable groups of deployed and non-deployed personnel. There are also limited data regarding SU and SUD in the German military to date. **Methods:** Cross-sectional examination of n = 1483 soldiers recently deployed in Afghanistan and 889 never deployed soldiers using a fully-standardized diagnostic interview (MI-CIDI) including a comprehensive substance section. **Results:** Across both groups, 12-months prevalence of DSM-IV alcohol use disorders was 3.1%, 36.9% reported binge drinking, 13.9% heavy drinking, 1.3% illegal drug use. 55.1% were regular smokers, and 10.9% were nicotine dependent. Although recently deployed soldiers revealed slightly higher rates in some measures, there were no significant differences to the never deployed regarding SU and SUD except that recently deployed soldiers smoked more cigarettes per day. The association of SU with mental disorders was substantially different though, revealing significant associations between SU and mental disorders only among recently deployed soldiers. **Conclusions:** We do not find remarkable differences in the prevalence of SU and SUD between recently deployed and never deployed soldiers. Especially binge drinking and regular smoking were prevalent across both samples indicating a need for improved interventions. The finding that SU and mental disorders are only associated in recently deployed soldiers might have implications for improved screening and prevention and suggests that deployment might promote different pathways and mechanisms involved in the evolution of SU and mental disorders. **Funding:** This study was funded by the German Defense Ministry, respectively the Medical Office thereof (Project Funding number M/SAB X/9A004) **Keywords:** Trauma, PTSD, military deployment, substance use.

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S05 – 3 Incidence, course and predictors of deployment-related mental disorders

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Background/Objectives: There is evidence from many international large-scale cross-sectional studies that military deployment is associated with adverse mental health consequences. However, there are limited longitudinal studies available for the assessment of these deployment-related mental health consequences including their development over time as well as potential risk factors for the onset and persistence of mental disorders. This study aims to estimate the deployment-related incidence of mental disorders, their course over time as well as potential risk factors. **Methods:** Prospective longitudinal study with a sample of 621 soldiers of the 26th and 27th German ISAF contingents examined prior to and 12 months after deployment in Afghanistan. At follow-up, 476 soldiers could be re-examined (retention rate: 76.7%). Soldiers were examined using fully-standardized face-to-face diagnostic interviews (MI-CIDI). This instrument allows a reliable and valid assessment of lifetime, 12-month and incident diagnoses of mental disorders according to the DSM-IV-TR criteria. The core diagnostic instrument was accompanied by established diagnostic and psychological psychometric questionnaires, screeners and scales (e.g. HADS, PCL, PTQ, DRRI). **Results:** 12 months after deployment, 1.8% of the sample met the criteria of PTSD. The incidence rate (new onset PTSD) was 0.4%. Mental disorders other than PTSD account for the majority of deployment-related mental health consequences with anxiety disorders, affective disorders and alcohol use disorders as the most frequent diagnoses. Mental disorders prior to deployment were the most important risk factor for deployment-related mental disorders. **Conclusion:** Findings support and extend the results of the representative, cross-sectional study program. Insights in the incidence, course and determinants of deployment-related mental disorders as provided by the results of this study program have noteworthy implications for the improvement of screening and selection measures prior to as well as for interventions after military deployment. **Funding:** This study was funded by the German Defense Ministry, respectively the Medical Office thereof (Project Funding number M/SAB X/9A004) **Keywords:** Trauma, PTSD, longitudinal study, military deployment.

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S05 – 4 Population Burden and Demographic Predictors of Posttraumatic Stress Disorder (PTSD) in Bulgaria

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Background/Objectives: Little is known in Bulgaria about the relationship between traumatic life events and succeeding, its burden among the population and demographic factors that could have a role in the relationship. The Bulgarian epidemiological survey EPIBUL has shown that less than 3.75% of mental health professionals use the diagnosis of PTSD in their everyday practice. On the other hand, the self-referred patients very often prefer to use the services of GPs rather than other professionals when having complaints of symptoms of PTSD. Given the limited data on trauma exposure and PTSD in Bulgaria, the first goal of this paper is to explore the relationship between the type of traumatic life event and the possibility of developing PTSD, and to investigate the burden of this disorder among the population. The second goal was to examine demographic predictors of trauma exposure and PTSD and to explore factors that increase risk of the disorder.

Methods: Data are from a national representative epidemiological study EPIBUL 2003-2007 in Bulgaria, with part of the WHO-World Mental Health Initiative (Harvard and Michigan University) was also used for the analyses. The study covered 5318 respondents over 18. The instrument was the fully structured World Mental Health Initiative version of the Composite International Diagnostic Interview (CIDI-3). The study was approved by a Medical Ethical Committee in Bulgaria. All participants provided informed consent prior to the interview. **Results:** Of all 2233 respondents, diagnosed with mental disorder, 28.6% have had any trauma event in their life. The mean number of trauma events experienced among respondents with any past trauma was 2.6. Two main types of trauma life events accounted for the largest proportion of the PTSD burden in Bulgaria: 1) unexpected death of loved one and 2) having a child with a serious illness. Risk of PTSD among those exposed to traumatic events was highest for previously married and women. There is a lower risk for PTSD among those aged 40-49, compared with those over 60. People with high-average education had significantly increased odds of having lifetime PTSD.

Discussion/Conclusion: Some of the findings may be explained by the ethnic culture of Bulgarians based on the tight family relations and relatively weak social position of women, especially single women. Although not accounting for the largest proportion of the relative burden of PTSD, physical violence plays an important role when associated with the outlined vulnerable groups of respondents. The results emphasize the importance of having more investigations related to domestic violence.

Funding: The Bulgarian Epidemiological Study of common mental disorders EPIBUL is carried out in conjunction with the World Health Organization World Mental Health (WMH) Survey Initiative which is supported by the National Institute of Mental Health. The Bulgarian Epidemiological Study of common mental disorders EPIBUL is supported by the Ministry of Health and the National Centre for Public Health Protection.

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S06 - The epidemiology of psychosis: new evidence on environmental risk factors and mechanisms

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Schizophrenia and other psychoses are disabling disorders with complex aetiologies. In recent years, there has been renewed interest in the association between exposure to childhood adversity and the onset of psychotic disorder. However, research to date has been characterised by a number of methodological shortcomings, most prominently, that, in most studies, measures of childhood adversity are weak and prone to bias. In addition, not all those exposed to childhood adversity go on to develop a psychotic disorder. Identifying the intervening factors that modify and mediate these relationships is an important next step in elucidating how and through which mechanisms exposure to negative social contexts and experiences in childhood might increase risk for psychosis. One hypothesized mechanism through which exposure to childhood adversity may compound vulnerability to psychosis is via deleterious effects on psychological processes (e.g. stress sensitivity). This vulnerability may then become manifest as psychotic disorder in the event of exposure to further risk factors over time, such as subsequent life events and cumulative daily stresses. By contrast, social support from caregivers and peers following childhood adversity may attenuate its deleterious effects on psychological processes and increase resilience to psychosis. This symposium comprises four presentations of novel data on how childhood adversity may combine with other socio-environmental risk factors, and the mechanisms through which they may exert their effects, in pathways to psychosis. Kathryn Hubbard will address methodological shortcomings in the measurement of childhood adversity and present data on the agreement of abuse ratings using a self-report and interview-based measure of childhood adversity. Charlotte Gayer-Anderson will present data from a case-control study on a) the association between childhood adversity and psychosis and b) whether this association is mediated by perceived social support in childhood. Ulrich Reininghaus will present data from an experience sampling study on stress sensitivity as a potential mechanism through which exposure to childhood adversity may compound vulnerability to psychosis. Stephanie Beards will present data on the role of life events as an additional socio-environmental risk factor, which may compound (previously accrued) vulnerability and further increase risk of psychotic disorder.

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S06 – 1 Validity and Bias in Assessments of Abuse Among Cases with Psychosis

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Background/Objectives: There has recently been a renewed interest in the role of childhood adversity in the aetiology and course of psychosis, leading some researchers to conclude that childhood trauma causes psychosis in later adulthood. However, some findings have been criticised on the grounds that reports of early adversity may be unreliable in those experiencing an episode of psychosis. We therefore sought to investigate levels of agreement of abuse ratings between self reported and interview based measures of childhood adversity.

Methods: Preliminary data were drawn from an on-going incidence and case-control study of first episode psychosis conducted in south-east London. An initial sample of 156 first episode psychosis cases and 194 population based controls were assessed, all of whom were aged 18-64 and living within either the London boroughs of Lambeth or Southwark. Childhood adversity was assessed using both the Childhood trauma questionnaire (CTQ) and the Childhood Experience of Care and Abuse interview (CECA). The CTQ is a 25 item retrospective, self-completed questionnaire which asks the participants to record the frequency of maltreatment experiences. The CECA interview is conducted by a trained researcher and designed to collect more detailed information on a range of adversities based on concrete aspects of events rather than respondents' subjective impressions. Interviews are then scored on a range of 1=marked, 2=moderate, 3=mild or 4=little/none. Only physical and sexual abuse were included in analysis as they were comparable from both measures.

Results: We found a strong association between CTQ and CECA ratings of physical abuse in cases (rtetrachoric=0.77, s.e.=0.07, P<0.001) and controls (rtetrachoric=0.83, s.e.=0.06, P<0.001), suggesting good convergent validity in both groups. Levels of agreement of CTQ and CECA physical abuse ratings were similar in cases (=0.42, s.e.=0.07, P<0.001) and controls (=0.45, s.e.=0.06, P<0.001). Further, in both cases and controls, specificity was high and sensitivity was modest: cases (sensitivity=54.6%, 95% CI 44.2% to 64.8%; specificity=93.2%, 95% CI 83.5% to 98.1%), and controls (sensitivity=43.2%, 95% CI 31.8% to 55.3%; specificity=97.5%, 95% CI 92.9% to 99.5%). Findings for sexual abuse were broadly in line with those for physical abuse.

Conclusions: We found good levels of agreement in reports of physical and sexual abuse between self-report and interview based assessments. Further, levels of agreement were similar between cases and controls, suggesting method of assessing abuse does not result in biased estimates of the prevalence of these exposures.

Funding: This work was supported by the Wellcome Trust (WT087417); the European Union (European Community's Seventh Framework Program [HEALTH-F2-2009-241909]: Project EU-GEI); and the UK Department of Health via the National Institute for Health Research (NIHR) Specialist Biomedical Research Centre for Mental Health award to the South London and Maudsley NHS Foundation Trust (SLaM) and the Institute of Psychiatry, King's College London, a Postdoctoral Research Fellowship funded by the National Institute of Health Research, UK, to U.R, and an Economic and Social Research Council PhD studentship, to S.B.

Keywords: Epidemiology, psychosis, childhood adversity, bias.

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S06 – 2 Social support as an effect modifier or mediator in the relationship between childhood adversity and psychosis?

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Background/Objectives: Previous studies have reported an association between various indicators of adversity, including abuse, in childhood and psychosis. However, the majority of exposed individuals do not develop psychosis. This study aimed to explore whether social support modifies the association between childhood trauma and psychosis, or if childhood abuse impacts on psychosis risk indirectly by increasing the individuals' social isolation.

Methods: Data on 227 first-presentation psychosis cases and 199 unaffected population-based controls was drawn from the Childhood Adversity and Psychosis (CAPsy) Study. Using the Childhood Experience of Care and Abuse Interview (CECA), information was obtained on early adversity before the age of 17 (psychological abuse, physical abuse, bullying victimisation) and perceived social support in childhood (from adults, from peers, and perceived loneliness). Data was analysed using mediational analyses and logistic regression (and tested for interaction on an additive scale using Interaction Contrast Ratios).

Results: Compared with controls, cases more commonly reported experiences of severe bullying victimisation (adjusted odds ratio [aOR] 2.69, 95% Confidence Interval [CI] 0.96-7.51), and severe psychological (aOR 6.27, 95% CI 2.48-15.84) and physical (aOR 1.69, 95% CI 0.91-3.11) abuse. In addition, cases were approximately two times more likely than controls to report feeling lonely (aOR 2.36, 95% CI 1.41-3.97), and to having low support from adults (aOR 2.17, 95% CI 1.31-3.59) and peers (aOR 2.15, 95% CI 1.31-3.53). There was no strong evidence that social support modified these relationships, which may be due to limited power to test interaction effects at this point. There was, however, strong evidence that around 35-40% of the total effect of severe psychological abuse, and 50-58% of the total effect of severe physical abuse, on psychosis was via pathways through low perceived support from adults and peers, and perceived loneliness. In addition, 69% of the total effect of severe bullying victimisation on psychosis was via pathways through feelings of loneliness in childhood.

Conclusions: This is the first study to show that the effects of abuse in childhood on psychosis appear to be mainly mediated through low levels of perceived childhood support. Additionally, high levels of support from adults or peers may be protective in those who experience severe bullying victimisation.

Funding: This work was supported by the Wellcome Trust (WT087417); the European Union (European Community's Seventh Framework Program [HEALTH-F2-2009-241909]: Project EU-GEI); and the UK Department of Health via the National Institute for Health Research (NIHR) Specialist Biomedical Research Centre for Mental Health award to the South London and Maudsley NHS Foundation Trust (SLaM) and the Institute of Psychiatry, King's College London, a Postdoctoral Research Fellowship funded by the National Institute of Health Research, UK, to U.R, and an Economic and Social Research Council PhD studentship, to S.B.

Keywords: Epidemiology, psychosis, childhood adversity, social support.

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S06 – 3 Childhood adversity, stress sensitivity, and psychosis: an experience sampling study

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Background/Objectives: In recent years, there has been renewed interest in the role of childhood adversity in the aetiology of psychosis. One hypothesized mechanism through which exposure to social adversity, particularly in childhood, may increase risk for psychosis is through elevated stress sensitivity, characterised by intense emotional reactions and psychotic or psychotic-like experiences in response to daily hassles. We sought to investigate: 1) whether there is an association between daily hassles and a) intense emotional reactions and b) psychotic or psychotic-like experiences; and 2) whether these associations are modified by childhood adversity. **Methods:** The Experience Sampling Method (ESM), a structured, random time-sampling diary technique, was used to assess daily hassles (defined as minor disturbances and distinctive unpleasant events that occur in the natural flow of daily life), emotional reactivity, and psychotic or psychotic-like experiences in three groups: cases with first episode psychosis, subjects with an at-risk mental state (ARMS), and population-based controls with no family history of psychosis. Data on childhood adversity was collected, including physical abuse, sexual abuse, psychological abuse, peer bullying, and household discord. In initial analyses, linear mixed models were used to account for the multilevel structure of ESM data, treating multiple observations (level-1) as nested within subjects (level-2). **Results:** The ESM was completed by 37 cases, 31 ARMS, and 47 controls, yielding a total of 4713 observations. We found that, within each group (cases, ARMS, and controls), daily hassles were associated with a) elevated negative affect and b) increased intensity of psychotic experiences. Also, there was strong evidence of an interaction for daily hassles x group on negative affect (likelihood ratio test, $\chi^2=23.95$, $P<0.001$), with ARMS subjects reporting significantly greater negative affect in response to daily hassles than controls ($B=1.12$, 95% CI 0.70 to 1.54, $P<0.001$) and cases ($B=1.37$, 95% CI 0.93 to 1.80, $P<0.001$). In initial analyses, we further found that the association between daily hassles and negative affect was similar in controls exposed ($B=0.30$, 95% CI 0.12 to 0.47, $P<0.001$) and not exposed ($B=0.31$, 95% CI 0.21 to 0.41, $P<0.001$) to any severe adversity in childhood (i.e. physical abuse, sexual abuse, psychological abuse, peer bullying, and household discord) (likelihood ratio test, $\chi^2=0.02$, $P=0.901$). By contrast, negative emotional reactions in response to daily hassles were stronger in cases exposed to any severe adversity ($B=0.49$, 95% CI 0.20 to 0.78, $P<0.001$) compared with those not exposed ($B=0.15$, 95% CI -0.08 to 0.38, $P=0.202$) (likelihood ratio test, $\chi^2=3.34$, $P=0.0678$). **Conclusions:** Our findings provide evidence consistent with previous ESM research that stress sensitivity appears to be particularly elevated in individuals with ARMS, and, therefore, be more relevant to the initial development of, rather than persistence after transition to psychosis. Further, these findings tentatively suggest that stress sensitivity may be a potential mechanism that links childhood adversity and psychosis. **Funding:** This work was supported by the Wellcome Trust, Wellcome Trust (grant no. WT087417), European Union [European Community's Seventh Framework Programme (grant agreement no. HEALTH-F2-2009-241909) (Project EU-GEI)], and a Postdoctoral Research Fellowship funded by the National Institute of Health Research, UK, to U.R. **Keywords:** Epidemiology, psychosis, stress sensitivity, psychosis.

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S06 – 4 Threatening and Intrusive Life Events as Precursors to Psychotic Disorders

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Background/Objectives: The role of life events in psychosis is still conjectural due to a lack of robust research studies and a limited consideration of contextual influences, such as event type and severity. Research suggests that intrusive life events may show specificity for the onset of psychotic disorders but this has not been thoroughly explored. Therefore, we aimed to investigate the impact of recent experiences on psychosis onset by considering the wider context in which they occur. **Methods:** Preliminary data from 171 first-presentation psychosis cases and 193 unaffected population-based controls were available from an ongoing case-control study in London, UK. The impact of life events and chronic difficulties one year prior to psychosis onset (cases) or interview (controls) was assessed using a modified version of the Life Events and Difficulties Schedule. Associations between the severity, intrusiveness and type of recent life events and difficulties, and case status were assessed using logistic regression. Analyses were adjusted for age, gender, ethnicity and years of education. **Results:** Psychosis cases reported more moderate and severe threatening life events (Adjusted odds ratio [Adj. OR] 4.7, 95% Confidence Interval [CI] 2.65-8.34) and difficulties (Adj. OR 6.31, 95% CI 3.2-12.43) and also more intrusive and threatening life events (Adj. OR 3.6, 95% CI 2.13-6.08) and difficulties (Adj. OR 10.2, 95% CI 2.82-36.89) in the one year prior to onset compared with controls. Exposure to two or three threatening events led to around a three-fold increase in the odds of psychosis (Adj. OR 3.48, 95% CI 1.95-6.2) and exposure to at least four threatening events increased odds by around six-fold (Adj. OR 6.45, 95% CI 2.73-15.25). Certain types of threatening events showed particularly strong associations with case status e.g. crime (Adj. OR 18.18, 95% CI 4.85-68.14), health (Adj. OR 10.74, 95% CI 3.58-32.24), work (Adj. OR 7.55, CI 3.01-18.92), housing (Adj. OR 7.33, CI 2.66-20.23), and relationship (Adj. OR 4.65, 95% CI 2.12-10.2) events. Gender and age did not appear to modify the association between the type and severity of recent events and the onset of psychosis. **Conclusions:** Individuals with psychosis report more severe, chronic, and intrusive events in the year prior to onset than unaffected individuals over a similar time period. There may also be certain events, especially severe crime and health events, which are more likely to increase the odds for psychotic disorders. These findings have significant implications for the prevention and intervention of psychosis. **Funding:** Wellcome Trust (WT087417); the European Union (European Community's Seventh Framework Program [HEALTH-F2-2009-241909]; Project EU-GEI); and the UK Department of Health via the National Institute for Health Research (NIHR) Specialist Biomedical Research Centre for Mental Health award to the South London and Maudsley NHS Foundation Trust (SLaM) and the Institute of Psychiatry, King's College London. Economic and Social Research Council PhD studentship (to S.B.); UK Medical Research Council Population Health Scientist award (G1002366 to H.L.F.). **Keywords:** Epidemiology, psychosis, life events, psychosis.

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S07 - Mental illness stigma - new findings from individual and cultural perspectives

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Background/Objectives: Persons with mental illness consistently report high levels of anticipated and experienced discrimination, and time-trend studies do not show meaningful reductions of negative public attitudes. This symposium puts together societal and individual perspectives to enhance our understanding of mental illness stigma and to identify potential targets and strategies for future anti-stigma initiatives. Methods and results: Antonio Lasalvia and colleagues present data from the international INDIGO/ASPEN-study, showing to what extent people with depression experience discrimination, and examining country differences of discrimination experiences. Sara Evans-Lacko and co-workers use data from 27 European countries to demonstrate the economic effects of the recession on persons with mental illness. Their study suggests that in times of economic hardship, persons with mental illness are at particular risk of social exclusion. Thus, the first two talks provide an international perspective on the discrimination of persons with mental illness. Nicolas Rüsçh and colleagues present longitudinal data from a cohort of young people at risk for psychosis. They show how self-labeling as mentally ill, perceived stigma and shame at baseline affect stigma stress, help-seeking and wellbeing after one year. This talk highlights labeling effects among people at risk for serious mental illness. Georg Schomerus and co-workers examine how belief in a continuum of symptom experience from mental health to mental illness affects attitudes towards persons with mental illness. Using data from a large population survey, they show that continuum beliefs are associated with more tolerant attitudes. This talk raises the question how the dichotomy of current diagnostic systems might exacerbate mental illness stigma. **Conclusion:** Cultural factors shape the stigma and discrimination associated with mental illness, which in turn are related to labeling, self-concept and illness beliefs of people with mental health problems. This symposium addresses both cultural and individual variables and their role for experiencing and coping with stigma. We will discuss implications for future efforts to reduce public and self-stigma. **Funding:** See abstracts of the presentations.

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S07 – 1 Global patterns and cross-cultural variations in reported discrimination among people with major depression. Findings from the ASPEN/INDIGO study

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Background/Objectives: Depression is today the third leading contributor to the global burden of disease, the first in middle- and high-income countries. Although several effective treatments are currently available, fewer than half of people with depression receive treatment. Barriers to care include the lack of resources, and stigma and discrimination associated with mental disorders. This study aimed to: (1) assess nature and severity of experienced and anticipated discrimination reported by adults with major depression worldwide; (2) compare levels of experienced and anticipated discrimination across countries. **Methods:** In a cross-sectional survey (the ASPEN/INDIGO study), people with a diagnosis of major depression were interviewed in 34 countries worldwide with the Discrimination and Stigma Scale (DISC-12). **Results:** Overall, 1082 people participated. Of these, 79% reported experiencing discrimination in at least one life domain. The main source of perceived discrimination was represented by the family and marriage context. Multivariate models found that higher level of experienced discrimination was associated with several lifetime depressive episodes, at least one lifetime psychiatric hospital admission, being single and unemployed. However, individual variables only accounted for 28% of variance. Some additional variables not considered in the models, including contextual factors, should probably be taken into account. The context seems to play a relevant role, since both experienced and anticipated discrimination widely differed across countries. Developed countries (according to the classification based on the Human Development Index) displayed higher levels of reported discrimination than developing countries. A sort of “dose-effect” relationship between anticipated discrimination and levels of socio-economic development was found; this difference remained significant also after having taken into account covariates. **Discussion/Conclusion:** - Discrimination related to depression acts as a barrier to full social participation. Besides some individual clinical characteristics, the socio-cultural environment seems to play a crucial role in determining levels of perceived discrimination. **Funding:** The ASPEN project has received funding from the European Union in the framework of the Public Health Programme. **Keywords:** Stigma, discrimination, depression.

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S07 – 2 The mental health consequences of the recession: economic hardship and employment of people with mental health problems in 27 European countries

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Background/Objectives: High unemployment rates among individuals with mental illness are a main contributor to the substantial societal burden associated with these disorders. Economic recessions may be particularly difficult for vulnerable groups, such as people with mental health problems as they may be at higher risk of losing their job, and more competitive labour conditions may make it more difficult for them to find a job. This study assesses unemployment rates among individuals with mental health problems before and after the economic recession in Europe.

Methods: Using individual and aggregate level data collected from 27 EU countries in the Eurobarometer surveys of 2006 and 2010, linked together with Eurostat data, we examined changes in unemployment rates over this period among individuals with and without mental health problems. Data were collected via face-to-face interviews among EU citizens (n=29,248 in 2006 and n=26,800 in 2010) residing in the 27 member states. All participants were recruited via multistage random probability sampling. Participants were representative of residents aged 15 or older in the participating countries.

Results: This study will present findings on the gap in unemployment rates between individuals with and without mental health problems before and after the onset of the financial crisis and identified subgroups of people with mental illness who were especially vulnerable to unemployment. Finally, it will discuss the role of public stigma on unemployment rates.

Discussion/Conclusion: Findings from this study suggest that times of economic hardship may intensify the social exclusion of vulnerable groups such as people with mental health problems. The findings also suggest that interventions to combat economic exclusion and to promote social participation of individuals with mental health problems are even more needed during times of economic crisis and should target support to the most vulnerable subgroups.

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Keywords: Stigma, discrimination, employment.

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S07 – 3 Self-labeling and stigma variables across one year among young people at risk for psychosis

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Background/Objectives: Early intervention services for young people at risk for psychosis are being implemented worldwide. Besides clinical benefits these services may carry the risk of unintended (self-)labeling and stigmatisation. However, empirical data on the role of labeling and stigma in this population are lacking.

Methods: Among 172 young individuals at risk for psychosis or bipolar disorder, self-labeling as 'mentally ill', shame about having a mental illness, the level of perceived public stigma as well as the cognitive appraisal of stigma as a stressor, well-being and attitudes towards mental health service use were assessed at baseline and again after one year.

Results: We present longitudinal findings on self-labeling, perceived stigma and shame (a proxy of self-stigma) at baseline as predictors of stigma stress, well-being and attitudes towards help-seeking after one year, controlling for symptom levels. Discussion: Implications for clinical early intervention programmes and for initiatives to reduce public and self-stigma in this at-risk population will be discussed. **Funding:** The Zürich programme for the sustainable development of mental health services (zinep.ch)

Keywords: Stigma, discrimination, psychosis, self-stigma.

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S07 – 4 Can belief in a continuum of symptoms reduce the stigma of mental illness?

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Background/Objectives: Alienation is a central step in the process of stigmatizing persons with mental disorders. Belief in a continuum of symptoms from mental health to mental illness could help reducing the stigma of mental illness.

Methods: Using data from a representative population surveys in Germany (n=3642) we assess how belief in a continuum of symptoms relates to the desire for social distance, emotional reactions and negative stereotypes for depression, schizophrenia or alcohol dependence. We use data from a similar survey in France (n=1600) to validate our findings.

Results: While 42% of respondents in Germany agreed in symptom continuity for depression, this percentage was 26% for schizophrenia and 27% for alcohol dependence. Continuum beliefs were associated with more pro-social emotional reactions and less desire for social distance. Results were mixed with regard to negative stereotypes, with strongest negative correlations in schizophrenia. The survey in France yielded similar results.

Conclusion: We discuss illness specific correlates of continuum beliefs. Educational information on the continuous nature of most psychopathological phenomena could usefully be integrated in anti-stigma messages.

Funding: None declared. **Keywords:** Stigma, discrimination, symptom continuum, population surveys.

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**S08 - Health economic evaluation of psychiatric outpatient care:
Methodological problems and recent developments**

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Advanced models of community based psychiatric outpatient care are widely regarded as the most promising strategies for improving the efficiency of mental health care. Nevertheless, systematic health economic evaluation of these models is rare. Main reasons for the lack of relevant studies are the methodological problems related to the investigation of costs and effects of complex community based psychiatric intervention. In this symposium, three papers with results of recent health economic analyses of community based psychiatric outpatient treatment models and one review paper on the economic consequences and the cost-effectiveness of interventions for reducing physical comorbidity with mental disorders will be presented. Taken together, the presented studies provide a good overview about recent research in the field. The methods applied in the presented studies make obvious that the concept of RCTs may not be adequate for the assessment of complex community based psychiatric interventions. Nevertheless, the methodological requirements and also the shortcomings of alternative study designs must be taken into account in the appraisal of study results.
Funding: None declared.

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S08 – 1 Economic evaluation of early intervention in first-episode psychosis in Denmark (the OPUS trial)

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Background/Objectives: In spite of the rapid development of early-intervention services during the past ten years, information about cost-effectiveness of early-intervention programmes for first episode psychosis is still limited with only a few published studies. The objective of this study was to evaluate the cost-effectiveness of the OPUS study which is the largest randomised trial comparing early intervention services for first-episode psychosis with standard treatment to date. The programme consisted of enriched assertive community treatment, psycho-educational family treatment and social skills training for individuals with first episode psychosis.

Methods: The evaluation was based on register data and conducted as an incremental cost-effectiveness analysis. The uncertainty surrounding the estimates of expected costs and expected outcomes was estimated by non-parametric bootstrapping of the incremental cost-effectiveness ratio. A cost-effectiveness acceptability curve was estimated as the probability that OPUS was cost-effective compared with standard treatment, given observed data, for a range of monetary values that a decision-maker might be willing to pay for a unit increase in health outcome. The evaluation adopted a public sector perspective when considering the costs associated with early-intervention services (including those for healthcare and the supporting housing facility). The study period was 5 years.

Results: The study found that the mean total costs of OPUS over 5 years (Euro123 683, s.e. = 8970) were not significantly different from that of standard treatment (Euro148 751, s.e. = 13073). At 2-year follow-up the mean Global Assessment of Functioning (GAF) score in the OPUS group (55.16, s.d. = 15.15) was statistically significantly higher than in the standard treatment group (51.13, s.d. = 15.92). However, the mean GAF did not differ significantly between OPUS and standard treatment at 5-year follow-up (55.35 (s.d.

= 18.28) and 54.16 (s.d. = 18.41), respectively). Cost-effectiveness planes based on non-parametric bootstrapping showed that OPUS was less costly and more effective in 70% of the replications. For a willingness-to-pay up to Euro50 000, the probability that OPUS was cost-effective was more than 80%.
Discussion/Conclusions: The incremental cost-effectiveness analysis showed that there was a high probability of OPUS being cost-effective compared with standard treatment. **Funding:** The economic evaluation was funded by Region Zealand. **Keywords:** Health economics, outpatient care, OPUS study, cost-effectiveness.

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S08 – 2 Cost effectiveness of schizophrenia treatment provided by outpatient clinics in comparison to office based psychiatrists and GP in Germany

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Background/Objectives: In Germany outpatient treatment of persons with schizophrenia can be provided either by outpatient clinics or by psychiatrists or GPs in private practice. Conditions of service provision for all treatment settings are regulated by social code and by contractual agreements between statutory sickness funds and associations of service providers. To date, no information about the health economic effects of the different outpatient treatment settings is available. The aim of the study was to investigate the cost-effectiveness of schizophrenia treatment provided by outpatient clinics in comparison to psychiatrists and GPs in private practice. **Methods:** 374 patients admitted to a psychiatric hospital for schizophrenia were included in a prospective observational study and observed for 24 months after hospital discharge. Data on outpatient treatment setting, psychiatric service use (CSSRI), clinical status (GAF, PANSS) and subjective quality of life (QoLP; EQ5-D) were collected at baseline and at four follow-ups each six months. Data were analyzed by mixed effects regression models using the propensity score method for controlling selection bias. Cost effectiveness analysis was conducted by means of net benefit regression. **Results:** As indicated by the comparison of the baseline data, patients in the three treatment settings had similar sociodemographic and clinical characteristics. Only the GAF score of patients treated in outpatient clinics was lower compared to patients treated by GPs. In addition, patients treated by outpatient clinics had a higher risk of living in a nursing home than patients in the other settings. Raw total (direct and indirect) costs of mental illness were lowest for patients treated by GPs and highest for patients treated by outpatient clinics however, after controlling for these baseline differences cost differences were no longer significant. Raw quality of life did not significantly differ between treatment settings but after controlling for baseline characteristics, quality of life of patients treated by GPs was significantly lower than for patients treated in outpatient clinics. Results of the cost-effectiveness analyses revealed no differences between costs and outcomes between treatment in outpatient clinics and office based psychiatrists while treatment by office based GPs resulted in lower costs but also poorer outcomes compared to treatment by outpatient clinics. **Discussion/Conclusions:** Costs and effectiveness of schizophrenia outpatient treatment is mainly affected by the expertise of the treatment staff and not by the organisational framework of the treatment setting. **Funding:** The study was funded by AstraZeneca with an educational grant to the Universities of Tübingen and Ulm. **Keywords:** Health economics, outpatient care, Schizophrenia, outpatient care, cost-effectiveness.

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S08 – 3 Counting all the costs: the importance of looking at the economic impacts of poor physical health in people with mental health problem

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Background/Objectives: People with mental health problems such as schizophrenia, bipolar disorder and major depression are at increased risk of a range of chronic physical health problems. Co-morbid physical health problems not only have health but substantial economic impacts, in terms of increased health care expenditure and other costs, such as subsequent impacts on absenteeism from work and premature mortality. **Methods:** To scope literature on methods used to estimate the costs of mental and physical co-morbidities, as well as to scope literature on the cost effectiveness of approaches to prevent or reduce the consequences of comorbidity. **Results:** An increasing, albeit still small number of studies, have looked at the economic impacts of co-morbid physical and mental health problems. They illustrate that potentially substantial costs to health care systems might indeed be avoided through early identification and action to address risk factors for poor physical health in people with mental health problems. Methods used in estimating costs vary making comparisons between studies difficult. Some focus solely on costs to health care systems, while time horizons used and modelling techniques vary. **Discussion/Conclusions:** Despite the economic impact of co-morbidity it has received comparatively little attention, especially outside the United States, until recently by health economists, in part because of difficulties in obtaining data and measuring costs. Nonetheless, economic models indicate that if only small reductions in co-morbidity, for instance from diabetes or cardiovascular disease can be achieved, then avoidable health system costs are substantial. Efforts to better safeguard the physical health of people living with mental health problems potentially could avoid substantial costs and need careful evaluation. **Funding:** None declared. **Keywords:** Health economics, outpatient care, physical comorbidity, mental disorder, costs; cost-effectiveness.

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S08 – 4 Cost effectiveness of a health insurance based case management programme for patients with affective disorders

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Background/Objectives: Europe has the highest treatment density / capacity for major depression. However, more than 50% of all prevalent cases are treated too late or remain entirely untreated. To overcome these shortcomings, a case management programme at health insurance level was designed in order to increase or accelerate referrals from GPs or family doctors for adequate depression treatment by specialists. **Objective:** The aim of the study was to analyse the incremental cost-effectiveness-ratio (ICER) of this intervention for patients with a diagnosis of affective disorders. **Methods:** In total, 954 patients suffering from depression were recruited in two different regions covered by a major German health insurance company. Region defined membership of experimental- and control group (477 patients each). Primary endpoint was the utilization of specialist care (psychiatrist or psychotherapist), as provided by top-down health insurance data. ICER estimation techniques were modified by a weighting procedure which was mandatory for the appropriate application of the net-monetary-benefit-approach. Cost-acceptability-curves and sensitivity analysis by bootstrap variation (1-10,000) was performed. **Results:** Demographic and diagnosis related descriptive statistics showed balanced groups in study regions. Overall, 85.2% of patients (813) utilized outpatient care. The average number of contacts to psychiatrists

or psychotherapists was 12.6 in the first year. In the intervention group, the average number of contacts (13.5) differed significantly from the control-group (11.8). Costs of health care did not differ. The modified empirical ICER was 44.16 € per year. The case-management programme was cost-effective at a maximum willingness to pay of 378.82 € per year. This amount declines to 32.58 € per year (2.72 € per month) in sensitivity analyses that varied features of the case management programme. Cost-effectiveness should be confirmed by bottom-up follow-up data. **Funding:** None declared. **Keywords:** Health economics, outpatient care, affective disorders; cost-effectiveness, case management, major depression.

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S09 - Subtyping of common mental disorders: results from ZInEP and PsyCoLaus

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Background/Objectives: Currently, research remains at the mid-point in terms of understanding the extensive heterogeneity of common mental disorders (CMD). Obtaining further information regarding subtypes of CMDs and clarifying these subtypes is crucial for further advancement of the field. There are three complementary approaches that can be used in order to add to the extant knowledge:

- through examining symptom clusters, as defined ex ante or empirically (for example, by latent class analysis (LCA))
- exploring different comorbidity patterns which may be assessed, for example, through correlations and associated multivariate models, or by network analysis tools
- examination of different profiles of risk factors and of associated sociodemographic markers.

In addition, any of these three approaches may rely on or lead to different subtyping models: distinctive subtyping (such as applied in uni- and bipolar disorders) or fuzzy subtyping, allowing for overlap between the subtypes (such as is applied, for example, in specific phobias). The symposium aims to illustrate these approaches and to shed some light on the implications of distinctive vs. fuzzy subtyping.

Methods: The data come from two large Swiss studies, ZInEP and PsyCoLaus. The ZInEP Epidemiology Survey is a subproject of ZInEP (Zürcher Impulsprogramm zur nachhaltigen Entwicklung der Psychiatrie, i.e., "the Zurich Program for Development of Mental Health Services"). The main interview sample consists of 1500 participants and is divided by sex, by 6 age groups (within the age range 20-40) and by two strata (high- and low-/medium-scorers on the SCL-27). After reversing the stratification, the sample comprised 3600 subjects. The survey followed the design of the Zurich Study and used most of its interview instruments, such as the SPIKE. The PsyCoLaus study is situated in Lausanne and constitutes the psychiatric epidemiological part of a large cohort project. Nearly 3700 subjects participated in the first interview wave. The main interview instrument used in PsyCoLaus was the Diagnostic Interview for Genetic Studies (DIGS).

Results: The contributions of this symposium include studies on major depressive episodes, psychosis syndromes, OCD and specific phobias. First, the studies indicate that the subtypes of CMD display more and stronger heterogeneity than commonly believed. Second, in some instances, distinctive subtyping is clearly superior to fuzzy subtyping.

Discussion/Conclusions: Research is in the early stages, rather than near the midpoint, of understanding the heterogeneity of CMD. Distinctive subtyping will open new perspectives on the etiopathogenetic patterns of CMD.

Funding: The ZInEP Epidemiology Survey was supported by a private donation and by the Swiss National Science Foundation (grant # 3247B0-122071). PsyCoLaus was supported by two unrestricted grants from GlaxoSmithKline and two grants of the Swiss National Science Foundation (#105993 and 118308 to Martin Preisig).

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S09 – 1 Familial aggregation patterns of major depressive episode subtypes in the general population

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Background/Objectives: The strong familial aggregation patterns of major depressive episodes (MDE) have recently been established in two family studies of subjects with mood disorders. Moreover, both studies showed specificity of MDE in relation to other types of mood episodes. However, there is a dearth of studies on the familial aggregation of major depressive episodes which consider the heterogeneity of this type of episode by subtyping depression. Indeed, recent studies using depressive subtypes in subjects with major depressive disorder (MDD) suggest differential associations of the subtypes with cardio-vascular risk factors, and an increase of the cardio-vascular risk in subjects with atypical MDD in particular. Accordingly, the objective of this study was to validate the subtypes of MDE by studying the patterns of their familial aggregation in the general population. The establishment of the nosological relationships between MDE subtypes according to the DSM specifiers (i.e. atypical and melancholic depression) using the family study approach is highly warranted.

Methods: The present study is based on a large sample of families from the general population with at least one directly interviewed first-degree relative. The sample included 644 adult probands, from which 327 probands had episodes of major depression occurring within any psychiatric disorder, and their 1'011 adult first-degree relatives. Diagnostic information was collected using a semi-structured interview and diagnoses were assigned according to the DSM-IV. MDE were subtyped into "atypical", "melancholic", "combined atypical-melancholic" and "unspecified".

Results: Generalized linear models showed evidence for the familial aggregation patterns of the melancholic, combined atypical-melancholic and unspecified depressive episode subtypes with no evidence for cross-aggregation among these subtypes. However, there was a lack of evidence for the familial aggregation of the atypical depressive subtype.

Discussion/Conclusions: These data provide evidence for the specific familial aggregation patterns of all MDE subtypes except for atypical, which supports their nosological validity. One limitation of the study was the small sample size particularly of the relatives of atypical and combined depressives. The small sample size could explain the lack of familial aggregation of atypical MDD. Future studies on larger samples of subjects with MDE, and particularly on those with the atypical subtype, could further elucidate these findings.

Funding: This research was supported by two unrestricted grants from GlaxoSmithKline and four grants from the Swiss National Science Foundation (#105993, 118308, 122661 and 139468 to Martin Preisig).

Keywords: Subtyping, common mental disorders, depression, familial aggregation.

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S09 – 2 New risk factor candidates for different psychosis syndromes

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Background/Objectives: Heterogeneity and complexity are major obstacles in research on brain systems and psychiatric diseases. Differentiating subtypes of disorders according to their risk factor profiles is a promising approach to generate new perspectives on the heterogeneity of psychiatric diseases. In this study, we continued the search for risk factors associated with two psychosis syndromes we had derived from the SCL-90-R. These syndromes are related to schizophrenia nuclear symptoms (such as intrusion of thoughts or thought transference) and paranoia symptoms. In particular, risk factors related to the former subtype have been scarce up to now.

Methods: The data were derived from the ZInEP Epidemiology Survey which assessed comprehensive data about mental health in a stratified sample of 1,500 adults aged 20 to 40 years. In contrast to its precursor, the Zurich Study, psychosis was a priority issue in the ZInEP survey. We focused particularly on two psychoticism subscales derived from the SCL-90-R (SNS (schizophrenia nuclear symptoms, derived from the original psychoticism subscale) and STS (schizotypal signs, mostly identical with the original paranoia subscale)). The statistical analysis was based on a three-step approach applying firstly cluster analysis to determine subgroups with different figurations of SNS and STS scores. In the second step, we used correlational analysis to differentiate risk factors associated with these subgroups. Finally, we reduced the analysis to extreme groups.

Results: We differentiated five subgroups: high scorers on SNS and STS, high scorers on STS, medium scorers in both combinations, and low scorers. Together, they mirror two distinct subtypes: the pure paranoia and the mixed SNS-STS subtype. Particular attention was paid to risk factors related to the mixed SNS-STS subtype: that is, the migration background of one of the parents (while bilingualism was related to both subtypes); specific sleep problems (awakening with fears, nightmares); specific speech problems (e.g., repetition of words or syllables); and mania and sleep problems in parents or siblings. A broad range of risk factors, which are also common in anxiety disorders and depression, were related to the paranoia subtype or to both subtypes together.

Discussion/Conclusions: Data analysis in the ZInEP data base yielded several new risk factor candidates related to the mixed SNS-STS subtype and to the pure STS subtype in psychosis. Replication of the analyses with the PsyCoLaus data will further indicate the predictive value of the identified risk factors.

Funding: ZInEP was supported by a private donation. The ZInEP Epidemiology Survey, in particular research in the Center for Neuro- and Sociophysiology, was supported by the Swiss National Science Foundation (grant#3247B0-122071).

Keywords: Subtyping, common mental disorders, psychosis, risk factors.

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S09 – 3 Quite specific: distinctive subtypes in specific phobia

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Background/Objectives: Specific phobias have been differentiated into several subtypes. In particular, there is epidemiological and neuroimaging evidence for substantial differences between animal, environmental and further specific phobias. In this study, we examined which differences between animal and other specific phobias would emerge if we use distinctive subtyping (such as in unipolar and bipolar affective disorders) instead of the common fuzzy subtyping. For the sake of simplicity, we focused on pure animal phobias, pure other specific phobias and a mixed subtype. We examined their outcomes with regard to the most relevant epidemiological parameters, risk factors and sociodemographic marker variables.

Methods: Two representative Swiss community samples were used: The PsyCoLaus sample and the ZInEP Epidemiology Survey sample. The ZInEP Epidemiology Survey of the Zurich Program for Sustainable Development of Mental Health Services (ZInEP; German: Zürcher Impulsprogramm zur nachhaltigen Entwicklung der Psychiatrie) was carried out between August 2010 and September 2012. After a screening CATI interview, 1'500 participants aged 20-41 years were selected for a comprehensive face-to-face-interview. As with the Zurich Study the sample was stratified; in this instance enriched by participants with high scores on the SCL-27. The participants were interviewed in the face-to-face interview with the Mini-SPIKE, a short version of the instrument used in the Zurich Study covering most psychiatric syndromes. The PsyCoLaus study is based on a subsample derived from the population-based CoLaus survey in Lausanne, Switzerland. Participants were recruited between 2003 and 2006. From the 5535 subjects of the CoLaus study, 3720 individuals (67%) participated in PsyCoLaus. The prevalence of psychiatric syndromes in the 35 to 66 year-old population was assessed by the French version of the semi-structured Diagnostic Interview for Genetic Studies (DIGS). The DIGS comprises information on a broad spectrum of DSM-IV common mental disorders (CMD). However, general anxiety disorder and phobias were covered by the corresponding chapters of the Schedule for Affective Disorders and Schizophrenia - Lifetime Version (SADS-L). The analyses comprised basic statistical descriptive models.

Results: In both data bases pure animal phobias displayed a distinctly low age at onset and were more common amongst females (OR=>3). The mixed subtype followed this pattern, whereas the pure other specific phobias on average started 5-6 years later and displayed almost a balanced sex-ratio. With regard to risk factors, pure animal phobias had few. The mixed subtype attracted most associations in respect of familial burden indicated by mental and substance use problems shared by parents and siblings. Traumatic experiences in childhood such as emotional / physical abuse or neglect was mostly associated with pure other phobias. Comparing the results with respect to distinctive vs. fuzzy subtyping it became apparent that the fuzzy subtyping differentiated much less clearly.

Discussion/Conclusions: The study showed that the discrepancies between pure animal and pure other phobias are surprisingly far-reaching. The most notable outcome was lack of associations of pure animal phobias with any common risk factors. In contrast to that, pure other phobias were most clearly associated with various childhood adversities and all types of traumatic experiences, i.e., life course instances. In addition, the mixed subtype accounted for the overlap between animal and other phobias and was distinguished by unique association patterns mostly related to familial aggregation.

Funding: ZInEP was supported by a private donation. The ZInEP Epidemiology Survey, in particular research in the Center for Neuro- and Sociophysiology, was supported by the Swiss National Science Foundation (grant#3247B0-122071).

Keywords: Subtyping, common mental disorders, specific phobia, subtyping.

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S09 – 4 Subtyping specific phobias and obsessive-compulsive disorders: Comorbidity patterns of pure and mixed subtypes in two independent Swiss community samples

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Background/Objectives: Psychiatric diagnoses often display heterogeneous constructs subsuming several subgroups. These subgroups may include distinct biological characteristics, for example, different neural connectivity patterns. Specific phobia (SP) and obsessive-compulsive disorder (OCD) are such phenomenologically heterogeneous disorders, with lifetime prevalence rates of 10% and 1-3%, respectively. The DSM-IV considers five SP subtypes: animal, natural environment, blood-injection-injury, situational, and other. Both epidemiological and neuroimaging data support the view that there are substantial differences between animal, environmental and further phobias. In OCD, the basic differentiation involves obsessive (thoughts) and compulsive (acts) subgroups. Mostly, subtyping is applied in a fuzzy manner, i.e., without evaluating the presence of other subtypes. Distinctive subtyping based on discrimination of pure subtypes has been commonly applied only in unipolar / bipolar affective disorders. This epidemiological study considered distinctive subtyping in SP (pure animal phobias, pure other specific phobias and a mixed subtype) and OCD (pure obsessive thought-subtype, pure compulsive-act subtype, and a mixed subtype). The focus was on comorbidity patterns in two independent community samples of adults.

Methods: Two representative, Swiss community samples were used: The PsyCoLaus sample and the ZInEP epidemiology sample. The PsyCoLaus study is the psychiatric branch of the population-based CoLaus study. A total of 3720 individuals (67%) in the age range 35 to 66 years took part in PsyCoLaus. The psychiatric part of the assessment within the PsyCoLaus study included the French version of the semi-structured Diagnostic Interview for Genetic Studies (DIGS). The DIGS comprises information on a broad spectrum of DSM-IV common mental disorders (CMD). However, general anxiety disorder and phobias were covered by the corresponding chapters of the Schedule for Affective Disorders and Schizophrenia - Lifetime Version (SADS-L). – The epidemiological survey of the Zurich Program for Sustainable Development of Mental Health Services (ZInEP; German: Zürcher Impulsprogramm zur nachhaltigen Entwicklung der Psychiatrie) consists of three components: a) a brief telephone screening, b) a structured face-to-face-interview supplemented by self-report questionnaires, and c) a longitudinal survey. Data from the face-to-face-interview was used. A shortened form of the SPIKE (Structured Psychopathological Interview and Rating of the Social Consequences of Psychological Disturbances for Epidemiology) enables diagnoses of CMD according to the DSM-criteria. The comorbidity patterns of the SP and OCD subtypes were examined by odds ratios ((OR) with 95% confidence intervals [CI]) and tetrachoric correlations. In addition, we compared the outcomes in respect to the subtyping approach, i.e., distinctive vs. fuzzy subtyping.

Results: The analyses revealed in both epidemiological samples that the comorbidity patterns differ more clearly if distinctive subtyping were applied. In SP, comorbidities were found in the mixed subtype and in the pure other specific phobias. Pure animal phobias surprisingly remained almost completely unrelated to other factors. In OCD, the comorbidities gathered around the mixed subtype.

Discussion/Conclusions: This study investigated the comorbidity patterns of pure versus mixed subtypes in SP and OCD with two representative community samples. Both in SP and in OCD, the pure subtypes displayed surprisingly few parallels. Moreover, at first glance the comorbidity patterns of the mixed subtypes indicated greater disease severity. However, this preliminary interpretation cannot account for the full range of discrepancies. The discrepancies between pure and mixed subtypes are surprisingly far-reaching and indicate different entities.

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Keywords: Subtyping, common mental disorders, obsessive-compulsive disorders, specific phobia.

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S10 - Trauma and post-traumatic stress disorder*Matthew Hotopf**Institute of Psychiatry, King's College London, UK*

This symposium will focus on the area of trauma and post-traumatic stress disorder (PTSD), including papers on both military and non-military populations, with the aim to encourage discussion on the overlaps and differences between these populations. The session will start with a number of papers focusing on the risk factors for PTSD, including data from a Sri Lankan cohort and a community health study in South East London. It will conclude with a focus on the potential outcomes of PTSD, including a paper on the comorbidity of PTSD with other mental disorders and a study examining the impact of PTSD in military fathers on their children's mental health and development.

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S10 – 1 Trauma and current symptoms of PTSD in South East London community*Souci Frissa¹, Stephani Hatch¹, Billy Gazard¹, SELCoH study team¹, Nicola Fear², Matthew Hotopf¹**¹Academic Department Psychological Medicine, Institute of Psychiatry, King's College London, UK; ²Academic Centre for Defence Mental Health, King's College London, UK*

Background/Objectives: This study aimed to estimate the prevalence of symptoms of posttraumatic stress disorder (PTSD) and its association with traumatic events in a representative sample of an inner city population in the UK. **Methods:** A representative community sample of 1698 adults, aged 16 years and over from two south London boroughs were interviewed face to face with structured survey questionnaires. **Results:** The prevalence of current symptoms of PTSD was 5.5%. Women were more likely to screen positive (6.4%) than men (3.6%) and symptoms of PTSD were high in the unemployed (12.5%), in those not working because of health reasons (18.2%) and in the lowest household income group (14.8%). Most (78.2%) of the study population had lifetime trauma and more than a third (39.7%) reported childhood trauma. There was an independent association between childhood as well as lifetime trauma and current symptoms of PTSD and a gradient association between an increase in cumulative traumatic events and the likelihood of reporting symptoms of current PTSD (OR 1.8, 95%CI (1.6-2.1)). Although we observed the highest prevalence of current symptoms of PTSD in those migrated for asylum or political reason (13.6%) compared to the non-migrants, the prevalence of exposure to most traumatic life events was higher in the non-migrant group. **Discussion/Conclusions:** The present study demonstrates the high prevalence of exposure to trauma in a South East London community and the cumulative effect on current symptoms of PTSD. As PTSD is a condition which is associated with disability and co-morbidity, the association of current PTSD with common adversities in the community should be noted. **Funding:** National Institute of Health Research (NIHR) via the Biomedical Research Centre for Mental Health (BRC-MH) at the South London and Maudsley NHS Foundation Trust and Institute of Psychiatry, Kings College London - (N/A); South London and Maudsley NHS Foundation Trust Trustees - BRC Nucleus; The Guy's and St Thomas' Charity - R080401 **Keywords:** Trauma, PTSD, Post Traumatic Stress Disorder.

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S10 – 2 The Role of Leaders in Sustaining Mental Health in US Troops Preparing for Deployment*Amy B Adler, Jeffrey L. Thomas**US Army Medical Research Unit-Europe, Heidelberg, Germany*

Background/Objectives: Numerous studies have identified mental health risks associated with high-risk occupations such as military personnel. While some studies identify leadership as a potential moderator of soldier outcomes, specific descriptions of helpful leader behaviors have not been identified. The present study examines the degree to which a series of leader behaviors may be linked to mental health and adjustment for soldiers preparing for a combat deployment. **Methods:** Surveys were conducted with a US Brigade preparing for deployment to Afghanistan as part of a longitudinal assessment over the course of deployment. Self-report measures included assessments of post-traumatic stress disorder (PTSD), anxiety, depression and sleep problems. Soldiers rated their leaders on a series of scales, including ones that assessed leader management of soldier stress, leader emotional regulation, and leader support of adequate sleep in the units. **Results:** Of the 3,113 recruited to participate in the study, 2,738 soldiers consented (89%). In terms of rank, 57.1% were junior enlisted, 32.9% were non-commissioned officers, and 10.0% were officers. Almost all were male (92.7%). More than half (52.2%) had been on a previous combat deployment. Using stringent criteria, 6.2% scored above cut-off on measures of PTSD, anxiety and/or depression. However, 19.1% reported a sleep problem. Soldiers rated leaders on the various leader behaviors. For example, 76.4% reported leaders intervene when a soldier has a stress reaction, 68.3% reported leaders can pause without immediately reacting in emotionally charged situations, and 55.1% reported leaders plan the unit schedule to make sure soldiers have time to get enough sleep. The link between these behaviors and mental health problems will be examined in upcoming analyses. **Discussion/Conclusions:** The results will examine the extent to which leader behaviors moderate the mental health of those serving in high-risk occupations. Additional analyses are planned to examine the degree to which these specific behaviors are helpful above and beyond traditional measures of leadership. The goal is to develop leader-based mental health training that can potentiate the impact of traditional methods of early intervention and treatment. **Disclaimer:** The views expressed in this presentation are those of the authors and do not necessarily represent the official policy or position of the U.S. Army Medical Command or the Department of Defense. **Funding:** Funding for this study comes from the US Army's Psychological Health and Resilience Research Program. **Keywords:** Trauma, PTSD, military.

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S10 – 3 Heterogeneity of Posttraumatic Stress and Depression Symptoms in Canadian veterans: Is health related functioning predictive of symptom group membership?

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Background/Objectives: Posttraumatic stress disorder (PTSD) has been consistently reported as being highly comorbid with major depression and as being associated with functional impairment, health complaints, and decreased health related quality of life. The current study aimed to first assess for discrete patterns of comorbidity between PTSD and depression. Second, we aimed to assess the associations between patterns of comorbidity and health related functioning.

Methods: We used archival data from 283 previously war-zone deployed Canadian veterans. Latent profile analyses (LPA) was used to uncover patterns of PTSD-depression comorbidity. Individuals membership of latent classes was used as a between groups variable in a series of one-way ANOVAs. In doing so we examined differences between the latent classes on the SF-36 subscales.

Results: The LPA resulted in three discrete patterns of PTSD-depression comorbidity which varied quantitatively. All ANOVAs comparing class membership on the SF-36 sub-scales were significant. The subscales of role limitations due to physical health, general health perceptions, vitality, social functioning, role limitations due to emotional health, and mental health indicated a linear trend wherein participants classified into class one had significantly higher scores compared to those classified into class two, who in turn had significantly higher scores than those in class three.

Discussion/Conclusions: Posttraumatic and Depressive symptomatology co-occur across three latent profiles; mild, moderate, and severe. Results support the proposal of a general posttraumatic response given that a distinct profile of only Posttraumatic or only Depressive symptomatology was not found. Furthermore, an increase in the severity of a general posttraumatic response is associated with poorer health related functioning. Treatments targeting both PTSD and Depression will be more effective. In turn this may alleviate difficulties in health related functioning.

Funding: None Declared. **Keywords:** Trauma, PTSD, depression.

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S10 – 4 The impact of paternal PTSD on social and emotional development of their children: Results from the children of military fathers study

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Background/Objectives: It is well documented in the literature that maternal mental health impacts on a range of childhood outcomes. However, little is known about the impact a father's mental health problem(s) may have upon children's development, especially from a military perspective. Within the UK Armed Forces, 4% of military personnel are returning from deployment with PTSD – many of these are fathers. The primary aim of this study was to compare the social and emotional development of military children who have fathers with PTSD with children whose fathers do not have PTSD.

Methods: This study recruited participants who were already part of a larger tri-service cohort recruited by King's Centre for Military Health Research (KCMHR) which was set up in 2003 to determine the impact on mental health and wellbeing of deployment to Iraq and Afghanistan. For the current study, fathers who participated in the KCMHR cohort were approached to participate. Fathers were invited to participate in an online survey and telephone interview. If the fathers gave consent, we contacted the mother(s) of their children and invited them to participate in an online survey. If the mother(s) consented, we invited children aged 11-16 years to participate in an online survey. The online survey (completed by the parents) included: a range of mental health measures (the 9-item Patient Health Questionnaire (PHQ-9); the 17-item PTSD checklist (PCL-C); the 10-item WHO Alcohol Use Disorders Identification Test (AUDIT)); a measure of relationship quality (the 7-item Dyadic Adjustment Scale (DAS)); a measure of father involvement (the 9-item Father Involvement questionnaire)); a range of measures completed for each child (the 25-item Strengths and Difficulties Questionnaire (SDQ); the 41-item Screen for Child Anxiety Related Emotional Disorders (SCARED); the Mood and Feelings Questionnaire (MFQ). For fathers, the interview also included the Severity of Alcohol Questionnaire (SADQ) and the Clinician-Administered PTSD Scale (CAPS). The online survey (completed by the children aged 11+ years) included: SDQ; SCARED; and, MFQ. Preliminary analyses have focused on the role paternal PTSD may play on the impact of childhood emotional and behaviour problems (as measured by the SDQ).

Results: In total, 1030 fathers were invited to participate in the current study, a response rate of 68% was achieved (resulting in 627 participant fathers who completed both components of the study). Over 1000 military children are included within this study. Data were also obtained from 395 mothers and directly from 179 children aged 11+ years. Preliminary data analysis showed that 7% of fathers had PTSD. Having a father with PTSD was associated with childhood social problems (Odds ratio (OR)~2.8), hyperactivity (OR~2) and "total difficulties" (OR~2.3). Associations remained for children <11 years of age and following preliminary adjustment. Younger service personnel were more likely (than older service personnel) to have children with conduct problems, hyperactivity and "total difficulties". No associations with deployment were observed.

Discussion/Conclusions: Preliminary analyses indicate that paternal mental health does impact on the emotional and behavioural development of children.

Funding: US Department of Defense (W81XWH-09-1-0509).

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S10 – 5 Trauma, Post Traumatic Stress Disorder and Psychiatric Disorders in a middle income setting: prevalence and comorbidity in a Sri Lankan population

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Background: Most studies of post traumatic stress disorder (PTSD) in low and middle income countries (LMI) have focused on “high risk” populations defined by exposure to trauma. **Aims:** To estimate the prevalence of criterion A traumas and lifetime PTSD (DSM-IV) in a LMI population, the conditional probability of PTSD given traumatic event and the strength of associations between traumatic events and other psychiatric disorders. **Method:** Our sample contained a mix of 3995 twins and 2019 non-twins, analysed as individuals from the Colombo Twin And Singleton Study (Co-TASS), a Sri Lankan population-based study. **Results:** Traumatic events were reported by 36.3% of participants. Lifetime PTSD was present in 2.0% of the sample. Of people who had experienced 3 or more traumatic events, 13.3% had lifetime PTSD and 40.4% had a non-PTSD psychiatric diagnosis. **Conclusions:** 1) Despite high rates of exposure to trauma, this population was found to have lower rates of PTSD than high-income populations. 2) There are high rates of non-PTSD diagnoses associated with trauma exposure.

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S11 - Mental Health Services and Parenthood: Resources and Challenges

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Mental health professionals (MHPs) are in a central position in the delivery of adequate support for parents affected by mental illness and their children. However, because of a number of risks associated with parenting issues among psychiatric patients, they may face challenging ethical issues. However, there is scant knowledge of MHPs' perspectives on reproductive/parenting issues among psychiatric patients and strategies to deal with ethical conflicts. The scope of the symposium includes four papers dealing with MHPs' perspectives on parenting issues within mental health care.

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S11 – 1 What do psychiatrists know about the children of their patients?

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Background/Objectives: Psychiatry could be a good starting point for preventive work for children of mentally ill parents by detecting children who are potentially at risk and connecting affected families with preventive services. However, it is unclear how much attention clinical psychiatrists pay to children of their patients. Therefore, this study examines the knowledge of German psychiatrists about the children of their patients and their attitude towards the youth welfare and prevention system. **Methods:** Seven psychiatric hospitals of one federal state in Germany participated in a questionnaire survey. **Results:** The majority of the psychiatrists know whether their patients have children or not, but they cannot answer differentiating questions about the children's life circumstances or name preventive programs for children and their families. Furthermore, psychiatrists potentially could forestall preventive programs because of a lack of knowledge about the youth welfare. **Discussion/Conclusions:** Psychiatrists need more information about the children of their patients and about the general possibilities of prevention as well as more knowledge of supportive offers of the youth welfare. **Funding:** None declared. **Keywords:** Mental health professionals, patients' children, psychiatrists, patients' children, prevention.

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S11 – 2 Pre-conception to parenting: a systematic review and meta-synthesis of the qualitative literature on motherhood for women with severe mental illness

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Background/Objectives: The majority of women with a severe mental illness (SMI) become pregnant and have children. The aim of this systematic review and meta-synthesis was to examine the qualitative research on the experiences of motherhood in women with SMI from preconception decision making to being a mother. The experiences of the health professionals treating women with SMI were also reviewed. **Methods:** Eleven databases were searched for papers published up to April 25 2012, using keywords and mesh headings. **Results:** A total of 23 studies were identified that met the inclusion criteria on the views of women with SMI, eight reported the views of health professionals including one which reported both. The meta-synthesis of the eight papers reporting the views of health professionals produced four themes: Discomfort, Stigma, Need for education, and Integration of services. Two overarching themes emerged from the synthesis of women's views: Experiences of Motherhood and Experiences of Services. **Discussion/Conclusions:** An understanding of the experiences of pregnancy and motherhood for women with SMI can inform service development and provision to ensure the needs of women and their families are met. **Funding:** None declared. **Keywords:** Mental health professionals, patients' children, pregnancy, severe mental illness, systematic review, qualitative research.

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S11 – 3 The professional discourse on desire for children and parenthood in mental health service users in Germany – actual ethical challenges

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Background/Objectives: When dealing with reproductive issues among mental health service users, mental health professionals find themselves confronted with complex ethical problems including teratogenic, medical and psycho-social risks for mother and (unborn) child. Despite its high practical relevance there is only scarce knowledge on the perspectives and strategies of mental health professionals on reproductive/parenting issues among their patients. **Methods:** Document analysis was performed on textbooks of different disciplines (psychiatry, clinical psychology, psychiatric nursery and social work in psychiatry) as well as practice guidelines of the corresponding societies. **Results:** Reproductive topics are rarely addressed in textbooks and practice guidelines and related ethical challenges for present psychiatry are only addressed in textbooks on social psychiatry. However, we found that the memory of the history of German psychiatry during the 'Nazi era' is present in the contemporary German psychiatric discourse, leading to a perceivable taboo concerning reproductive issues. We provide a comprehensive matrix of the encountered ethical principles and propose to intensify open discussions within and among the psychiatric disciplines in order to resolve professionals' uncertainties and to approach taboos. **Keywords:** Mental health professionals, patients' children, parenthood, desire for children, mental health professionals, ethical conflicts.

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S11 – 4 Mental health professionals' attitudes towards reproductive/parenting issues among psychiatric patients

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Background/Objectives: Proper care of parents affected by a mental illness and their children is likely to be influenced by professionals' perceptions of reproductive issues. Against the background of limited knowledge on MHPs' perspectives, we aimed to identify their attitudes, perceptions, and coping strategies when dealing with desire for children and parenthood among psychiatric patients. **Methods:** 31 semi-structured interviews with members of four relevant professional groups including psychiatrists, nurses, social workers, psychologists were conducted and analysed by content analysis methods. **Results:** Generally, MHPs consider parenthood issues among patients as part of their professional responsibility, although in most cases this relevance was restricted to the assessment of children's situation at the time of hospital admission. Beyond this, parenting/reproductive issues were mainly addressed if patients express an explicit need. Desire for children is considered relevant only in regard to medication issues. Frequently, MHPs framed their concerns regarding parenting needs with their own status as a parent. **Discussion/Conclusions:** Although most MHPs are aware of service users' children there is a lack of continuing inclusion of the family situation. Also, MHPs should be encouraged to address reproductive/parenting issues beyond the medical context. **Funding:** None declared **Keywords:** Mental health professionals, patients' children, qualitative interviews, family situation.

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S12 – Mental disorders in the German Health Interview and Examination Survey for Adults (DEGS1-MH): Disease burden and service use.

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Mental disorders are associated with a high disease burden in terms of individual distress and role impairment, as well as in terms of direct and indirect costs to economy and society. To ensure appropriate coverage of mental health issues as a core health challenge of the 21st century, the "German Health Interview and Examination Survey for Adults" (DEGS1) was supplemented by a mental health module (DEGS1-MH; field phase: 9/2009 - 3/2012). In the symposium we report results of this large-scale national epidemiological study on various aspects of mental health issues, i.e. the work situation for people with and without mental disorders; self-reported retrospective information on service use and respective treatments of people with and without mental disorders in the general adult population and among those with mental disorders; the prevalence of unipolar and bipolar depression by severity and course type, the role disability and health-related quality of life, and service use including treatment barriers among people with depression in Germany. Finally, first results and methodological challenges regarding comorbidity of mental disorders and chronic somatic conditions in this national population-based sample of adults aged 18-79 years will be presented.

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S12 – 1 Work situation of people with mental disorders

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Introduction: Mental disorders are associated with a high disease burden in terms of individual distress and role impairment, as well as in terms of direct and indirect costs to economy and society. In recent years in particular work disability (sickness days and early retirement) have become the focus of attention. Health insurance companies and governmental disability pension agencies reported huge increases of work loss days and disability pensions due to mental disorders (which was not the case with somatic diagnoses). In order to complement those administrative statistics, the present paper reports data from an epidemiological general population study on the work situation of persons with vs. without current mental disorders.

Methods: The data source is a nationally representative survey sample (N=4483) of the adult German population (age 18-79) from the Mental Health Module of the German Health Interview and Examination Survey for Adults (DEGS1-MH; field phase was 9/2009 - 3/2012). Respondents were comprehensively examined by clinically trained interviewers with a modified version of the Composite International Diagnostic Interview (CIDI; median duration: 90 minutes) to assess 12-month diagnoses according to the criteria of DSM-IV-TR (including substance use disorders, possible psychotic disorders, affective, anxiety, somatoform and eating disorders). Information on work status and related issues (education, work characteristics, household income, aggregated socioeconomic status, disability pensions etc.) come from the comprehensive socio-demographic section of the main survey (DEGS1). For the present analyses the sample was restricted to usual working age (18-65). Cases with mental disorders were divided into severity stages according to a combination of comorbidity (numbers of diagnoses), prior treatment situation (presence of specialized and inpatient treatments) and health related quality of life (SF-36). Results are reported separately for men and women and for several age groups due to apparently different base rates of work characteristics across these groups.

Results: Mental disorders are associated with all stages of work disabilities. First, respondents from the workforce (full time as well as part time) with mental disorders overall report about two times more disability days compared to working respondents without mental diagnoses. Second, the rate of unemployment is two to four times higher when mental diagnoses are present. Third, early retirement is two to ten times higher in persons with mental disorders. Strength of those associations depends on disorder severity and type of diagnosis. Associations were stronger in men compared to women, and stronger in younger compared to older age groups.

Conclusion: This general population study confirms and extends prior findings highlighting the significant disease burden of mental disorders in the community. Next analysis steps will also include somatic health status as well as further psycho-social factors that potentially moderate the impact of mental disorders on work disabilities. Source of funding: see main symposium abstract.

Keywords: Disease burden, service use, mental disorders, work situation.

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S12 – 2 Service use and treatment of people with mental disorders in Germany

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Introduction: The German Health Interview and Examination Survey for Adults (DEGS1) and its Mental Health Module (DEGS1-MH) provide up-to-date epidemiological data on mental health service use and type and adequacy of treatments to pinpoint unmet needs of mental health care in the general population. These data supplement routine administrative statistics by providing self-reported retrospective information on service use and respective treatments of people with and without mental disorders in the general adult population (i.e. without help-seeking bias associated with clinical patient samples).

Methods: Data are derived from a nationally representative survey sample (N=4483) of the adult German population (age 18-79). Data are based exclusively on self-report. Respondents were examined by clinically trained interviewers with a modified version of the Composite International Diagnostic Interview (DIA-X/M-CIDI) to assess diagnoses according to the criteria of DSM-IV-TR. Service use, i.e. contact with mental health care services due to mental health problems, and type, frequency and adequacy (in terms of established evidence-based guidelines) of provided treatments were assessed for the past 12 months and lifetime, by type of health care sector and type of institution.

Results: Among respondents with a 12-month diagnosis of a mental disorder, 23.5% of the women and 11.6% of the men reported any service use in the past 12 months. Rates depend on type of diagnosis, comorbidity and socio-demographic characteristics. Lowest 12-month utilization rates were found for substance use disorders (15.6%; lifetime use 37.3%), highest for psychotic disorders (40.5%; lifetime 72.1%). Median delay between disorder onset and initial service use was 7 years for both any anxiety and mood disorders and 13 years for any mental disorder. Further results on various aspects of mental health care utilization and treatment are presented.

Conclusion: Provided are self-reported epidemiological data on mental health service use in Germany, complementing administrative statistics and the predecessor "German Health Interview and Examination Survey – Mental Health Supplement" (GHS-MHS) study from 1998. Despite considerable changes in the mental health field in Germany and the existence of a comprehensive mental health care system without major financial barriers, we find no indications of substantially higher utilization rates for mental disorders as compared to other comparable European countries. Further, only slight overall changes in utilization rates as compared to a previous nationwide survey in 1998 are apparent. In further analysis steps, appropriately matched comparison with the DEGS1-MH predecessor study are needed to identify changes in patterns of utilization and interventions by type of disorder. Source of funding: see main symposium abstract.

Keywords: Disease burden, service use, treatment.

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S12 – 3 Depression: Prevalence, Disease Burden, Service Use and Treatment Barriers

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Background/Objectives: Previous studies revealed high rates of depressive disorders in the general population and a considerable disease burden, but limited treatment rates. Few studies, however, provide specifications by depression type, severity and course. Moreover, knowledge on barriers for seeking help and reasons for early treatment drop out are rare. This talk presents up to date epidemiologic data on (a) prevalence of unipolar and bipolar depression by severity and course type, (b) role disability and health-related quality of life, and (c) service use including treatment barriers among people with depression in Germany. **Methods:** A nationally representative sample (N=4483) of the adult (18-79) German population was examined by clinically trained interviewers with a modified version of the standardized, computer-assisted Composite International Diagnostic Interview (DEGS-CIDI) to assess symptoms, syndromes and diagnoses of mood and other mental disorders according to DSM-IV-TR criteria and functional disability in daily activities in the past 4 weeks. Health-related quality of life (HRQoL) was measured by the SF-36V2 and the EQ-5d health questionnaires. Service use, i.e. contact with mental health care services due to mental health problems, was assessed for the past 12 months and lifetime, by type of sector and type of institution. Barriers for service use were also assessed as were reasons for treatment drop-out. **Results:** 16.9% of the participants met criteria for any DSM-IV lifetime depression, with unipolar Major Depressive Disorder (MDD) being the most common (recurrent 8.3%, single episode 3.6%), followed by bipolar depression (2.6%), and dysthymia (1.8%). The vast majority of major depressive episodes are mild or moderate; one of ten cases experiences severe depression. Lifetime recurrent major depression and bipolar depression showed the most disability in the past month and current impairments in HRQoL. Lifetime service use was highest among those with bipolar depression (67.1%) and lowest among those with a single major depressive episode (44.7%), with consistently lower rates in males than females. Having seen a psychotherapist for mental health problems was reported most often, followed by general practitioner and psychiatrist; inpatient treatment was highest in dysthymia and bipolar depression. More than one third of depression cases were considering seeking treatment or were advised to do so, but did not use services, with “desire to deal with the problem alone” being by far the most common reason (60%) followed by “thoughts that treatment would not help” and fear of stigma. One quarter of those in treatment dropped out early, most often because they “did not get along with the professional”, “felt out of place”, or “did not improve”. **Discussion/Conclusions:** The findings confirm a high prevalence of depression in the general population in general with a considerable degree of disability and loss of quality of life. Unfortunately, service use and treatment rates remain limited with indications that particularly psychological factors might prevent from approaching or completing treatment. Source of funding: see main symposium abstract. **Keywords:** Disease burden, service use, depression, treatment barriers.

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S12 – 4 Comorbidity of mental disorders and chronic somatic conditions in a population-based sample of adults aged 18-79 years in Germany: first results and methodological challenges

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Background/Objectives: Mental disorders are of major public health impact alone and in combination with chronic physical conditions. The “German Health Interview and Examination Survey for Adults” (DEGS1) conducted by the Robert Koch Institute (RKI) was extended by a mental health module (DEGS1-MH). This database provides a unique chance to examine the prevalence and correlates of comorbidities of mental disorders and somatic diseases in a nationally representative sample of the resident population in Germany 18-79 years of age. **Methods:** Data were derived from the large population-based cross-sectional sample of participants in both DEGS1 and DEGS1-MH (N=4483). In DEGS1 a broad range of chronic diseases were assessed using standardized computer-assisted personal interview, automated medication review, and objective health measures. Health conditions were categorized into cardiometabolic conditions, cardiovascular diseases, musculoskeletal diseases, lower respiratory diseases, liver/renal diseases, upper gastric diseases and severe sensory limitations. Information on socio-demographic characteristics, health-related behavior, health care utilization and further health-related aspects was collected by self-administered questionnaires. In DEGS1-MH, a broad range of mental disorders including affective disorders were assessed with the Composite International Diagnostic Interview (CIDI) according to DSM-IV criteria. Weighted estimates will be used to examine the prevalence of comorbidities in the general population. Associations of mental disorders with chronic somatic conditions will be determined by multivariate regression analyses. **Results:** Prevalence rates of the comorbidity of mental disorders and somatic conditions will be presented. First results on the associations of mental disorders—with a focus on affective disorders—with somatic conditions will be shown. **Discussion:** Large epidemiologic studies including an accurate assessment of somatic and mental conditions are necessary to estimate their comorbidities in the population. Strength, limitations and methodological challenges for the upcoming analyses will be discussed. **Funding:** None declared. **Keywords:** Disease burden, service use, mental disorders, comorbidity, chronic somatic conditions.

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S13 – Understanding Social Determinants at Multiple Levels and Mental Disorder in Community Populations

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This symposium will focus on social determinants, from macro to individual levels, as well as the interrelationship between social statuses and health, as contributors to inequalities in mental health. Papers will focus on macro levels of deprivation; neighbourhood contexts; household and individual level socioeconomic status; and experiences of occupying disadvantaged social statuses. The overall aim will be to encourage discussion of how different methodological and conceptual approaches inform our understanding of a range of mental disorders. Data from US and UK community populations will be presented and comparisons to national data will be included, where appropriate.

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S13 – 1 Neighbourhood social disorder and common mental illness

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Matthew Hotopf*

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Background/Objectives: Individuals' perception of social disorder in their neighbourhood and more general fear of crime have been linked to common mental illness (CMI). However, few studies have looked at both perception and actual individual and community experience of crime. This study aims to identify individual and local area factors associated with increased perceptions of neighbourhood social disorder and test associations between CMI and individuals' perceptions of their neighbourhood, personal experiences of crime and objective neighbourhood crime rates. **Methods:** A cross-sectional survey of 1698 adults living in 1075 households in Lambeth and Southwark boroughs in inner London. Perceived social disorder was defined as identifying at least one of crime, safety, vandalism or graffiti as a somewhat or very serious neighbourhood problem. CMI was assessed using the Revised Clinical Interview Schedule. Data were analysed using multilevel logistic regression with neighbourhood defined as lower super output area (mean population 1500). Individual socio-demographic characteristics and experience of crime and neighbourhood crime rates and deprivation were examined. **Results:** Neighbourhood social disorder problems were identified by 37.6% of respondents. Perception of disorder was higher in income deprived areas and amongst the unemployed. Neighbourhood income deprivation had more effect on perceived disorder than neighbourhood crime rates. Individuals who reported neighbourhood disorder were more likely to suffer CMI (OR 2.12) as were those with individual experience of crime. These effects remained significant when individual characteristics were controlled for. However, neighbourhood crime rates and deprivation did not influence prevalence of CMI. While 14% of the variance in perceived social disorder occurred at neighbourhood level, there was no significant variance at this level for CMI. **Conclusions:** Physical and social disorder within neighbourhoods has an important but complicated relationship with CMI. Officially recorded crime rates have a surprisingly modest association with individuals' perception of neighbourhood disorder and little impact on mental health. At the same time individuals' perception of their local neighbourhood and their own experience of violence have strong associations with CMI. Feeling unsafe and under threat in one's local area disproportionately affects those already experiencing other forms of deprivation in their area and personally. Such perceptions may act as a direct stressor on individuals and reduce their ability to take part in activities that could protect or aid recovery from CMI. **Funding:** Biomedical Research Nucleus at South London and Maudsley NHS Foundation Trust, funded by the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity. (Reference: PALKYIB) **Keywords:** Social determinants, contextual factors, neighborhood, common mental illnesses.

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S13 – 2 Can we identify latent classes of socioeconomic status and what are the associations with mental health?

Laura Goodwin, Matthew Hotopf, Stephani Hatch

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Background/Objectives: Socioeconomic status (SES) can broadly be defined as comprising the different constructs of income and occupational status, housing tenure, and human capital i.e. educational attainment. SES is typically measured in epidemiological studies by a range of separate socio-demographic measures, with a focus on employment status and social occupational class. In this study we aimed to derive latent classes of SES which could be used in future epidemiological studies. The associations between these classes and mental health and alcohol misuse were explored. **Methods:** This study used data from the South East London Community Health (SELCoH) study, which was a household study in the London boroughs of Southwark and Lambeth, including 1698 men and women. The measures of SES available were: social occupational class based upon current occupation; current employment status; household income; any debt in the past year; housing tenure; overcrowding in the home and whether they had moved house in the past 2 years. These data were analysed using latent class analysis (LCA) in MPlus and the goodness of fit of 2- to 7-class models were evaluated. **Results:** A 6-class model provided the best fit and descriptively provided a good explanation of the data. The two most common classes were primarily defined by occupational class, including participants in employment, with 30% in class 1 'professional and managerial occupations' and 22% in class 2 of 'manual occupations', with further factors differentiating between these classes, such as housing tenure, education and level of debt. A third class predominantly included students, with 12% in class 3 and the three remaining classes included individuals who were not in employment. The latter three classes were 'economically inactive with low educational attainment' (class 4, 14%), 'economically inactive with mixed education/income and owner occupiers' (class 5, 9%) and 'unemployed and receiving benefits' (class 6, 13%). The prevalence of common mental disorder was found to be highest in classes 4 and 6, and alcohol misuse was highest in classes 1 and 3. **Discussion/Conclusions:** This LCA identified six unique classes of SES, including three classes which differentiated individuals who were not in employment. CMD was highest in two of the three economically inactive groups, specifically in the classes including individuals with lower education and income, who were not owner occupiers. In this population, alcohol misuse was highest in students and in those in professional and managerial occupations. **Funding statement:** Laura Goodwin receives salary support from the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. **Keywords:** Social determinants, contextual factors, socioeconomic status, common mental disorder.

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S13 – 3 Dynamic Interplay of Socioeconomic Status and Health in Understanding Mental Health Disparities

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Background/Objectives: A strong precept of life course epidemiology tells us that adult health is the product of cumulative, sequenced relations between persons and environments. As powerful as this insight is the opportunity to enact its potential has been limited by the availability of data that allows its realization. We aim to examine a potential “dynamic interplay” between social conditions, cognitive abilities, and emerging health across the life course to explain mental health disparities by race and SES in adult life.

Methods: We employ data from the Child Health and Development Studies (CHDS) that was ascertained in the Bay Area of California. This cohort provides excellent information from early life through adolescence on socioeconomic status (SES), on cognitive ability, and on the health domains we have chosen to study. In the current research, these novel data are brought to fruition to study the emergence of mental health disparities by race and SES in a sample of 603 CHDS cohort members at midlife. **Results:** We describe a study that provides an opportunity to examine a potential “dynamic interplay” between social conditions, cognitive abilities, and emerging health across the life course to explain mental health disparities by race and SES in adult life. The explanatory focus embedded in each of these factors is such that the first emphasizes social factors, the second emphasizes cognitive factors, and the third emerging health itself.

Discussion/Conclusions: Our study brings these strands of inquiry together in one study to allow an examination of their “dynamic interplay” across the life course. **Funding:** National Institute of Child and Health Development (US National Institutes of Health). **Keywords:** Social determinants, contextual factors, cognition, SES, mental health disparities

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S13 – 4 Mental health of an inner London non-heterosexual population

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Background/Objectives: Higher rates of psychiatric disorder and substance abuse have been well documented within non-heterosexual populations. Greater exposure to both stressful life events and perceived discrimination have been investigated as risk factors yet there is limited research examining these factors within the same sample. This study aimed 1) to estimate the prevalence of common mental disorder (CMD), mental well-being (MWB) and substance use by sexual orientation; 2) to estimate the prevalence of both stressful life events and perceived discrimination; 3) to examine the effects of stressful life events and perceived discrimination on CMD, MWB and substance use. **Hypothesis:** inequalities will be observed by sexual orientation. These will be partially explained by greater exposure to stressful life events and perceived discrimination.

Methods: In a community health survey, CMD was measured using the Clinical Interview Schedule Revised, MWB using the Warwick-Edinburgh Mental Well-Being Scale, suicidal ideation/attempts through self-report, hazardous alcohol use using the Alcohol Use Disorders Identification Test and illicit drug use through self-report. Discrimination was a measure of everyday, lifetime major experiences and anticipation of unfair treatment. Stressful life events were a measure of both childhood adversity and lifetime exposure to serious life events. Prevalence of health outcomes, discrimination and stressful life events were estimated by sexual orientation. Odds ratios were calculated to assess the association between health outcomes and sexual orientation in adjusted logistic regression models. Confounders included socio-demographic and socioeconomic characteristics, discrimination and stressful life events.

Results: Non-heterosexuals reported greater exposure to both discriminatory experiences and certain stressful life events. Non-heterosexuality was

associated with half the odds of positive MWB, more than twice the odds of CMD, more than four times the odds of suicidal ideation, hazardous alcohol use and illicit drug use. After adjusting for discrimination and stressful life events strength of associations between non-heterosexuality and CMD, suicidal ideation, hazardous alcohol use and illicit drug use were reduced, supporting the hypothesis. Comparisons were also made to national data.

Discussion/Conclusions: Discrimination and stressful life events were found to be risk factors for inequalities by sexual orientation but did not attenuate associations between non-heterosexuality and mental health. Mechanisms of discrimination and stressful life events that contribute to poor mental health should be considered in reducing inequalities but further risk factors need to be considered. **Funding:** This research was supported by the Economic and Social Research Council (ESRC), the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London. Billy Gazard receives an ESRC Studentship from King's College London. (PCPEAZA and PALKYIB)

Keywords: Social determinants, contextual factors, mental health inequalities, non-heterosexual mental health.

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S14 – Coercion in mental health services in Europe: experiences of involuntary admissions, community treatment orders and informal coercion

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This symposium will address the full spectrum of coercion – from the experience of service users admitted involuntarily or voluntarily to hospital, to the use of community treatment orders and the use of leverage or treatment pressures in voluntary service users in the outpatient setting. The use of restrictive interventions varies across countries, as does the legislation governing these practices. Therefore, within this symposium the experiences of coercion and treatment pressures by service users from a range of European countries will be discussed. Accumulated coercive events during hospital admission in Ireland will be examined and the influence that this may have on outcome, specifically quality of life, functioning and engagement with services following discharge. Community treatment orders have recently been introduced in Switzerland and the legal provisions for the CTOs in different regions will be explored. The use of informal coercion, such as treatment pressures or leverage to comply with treatment, has been demonstrated to be a common practice and a study from the UK will investigate whether community patients under different levels of legal compulsion experience different levels of informal coercion. Finally, it will be discussed how the World Association of Social Psychiatry working group on coercion aims to further the research on coercive practices. In particular, the research on coercion has tended to come from a small number of research groups within developed countries and this working group aims to redress this balance by building relationships and projects with groups from nontraditional centres.

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S14 – 1 Clinical and social outcomes one year after accumulated coercive events during psychiatric admission

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Background/Objectives: Coercion is a complex construct, as it encapsulates the level of perceived coercion and the use of physical coercive measures such as restraint and seclusion. Furthermore, individuals can experience a single episode of coercion or multiple episodes throughout their admission. Therefore, measuring accumulated coercive events (ACEs) gives a more accurate account of the extent of coercion experienced during psychiatric admission. In addition, there is a concern that the experience of coercion can influence the longer term outcome for individuals. We aimed to determine: 1. The level of ACE's experienced by individuals during admission and associated demographic & clinical characteristics. 2. Objective and subjective quality of life and global functioning one year after discharge and the association with accumulated coercion 3. The level of engagement following discharge, the therapeutic relationship and readmission rate and the association with accumulated coercion. **Methods:** Design: Prospective cohort study Sample: Voluntarily and involuntarily admitted inpatients from three psychiatric hospitals in Ireland Instruments: SCID, MacArthur Perceived Coercion Scale, Birchwood Insight Scale and information from clinical file about coercive interventions, MANSA - Manchester Short Assessment of Quality of Life, Objective Social Outcomes Index, GAF **Results:** 162 individuals participated in the study and 42% experienced more than two coercive events during admission. Individuals with a diagnosis of a psychotic disorder, less insight, lower functioning and more positive symptoms were more likely to experience more coercive events during their admission. Accumulated coercion was not associated with subjective or objective quality of life one year following discharge. Over 70% of individuals experienced an improvement in functioning at one year. Engagement with the service following discharge, the therapeutic alliance and the risk of readmission has been determined at one year follow-up and any association with the experience of coercion during hospital admission will be investigated. **Conclusions:** The experience of coercion is unfortunately common in hospital admission, whether voluntary or involuntary. However, it does not appear to influence either subjective or objective quality of life in the year following discharge. Source of **Funding:** Partially funded by a grant from the Mental Health Commission of Ireland. **Keywords:** Coercion, involuntary, involuntary admission, quality of life.

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S14 – 2 Are informal coercion and formal compulsion related?

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Background/Objectives: Literature on coercion in psychiatry usually has been associated with legal detention. However many 'voluntary' patients perceive their treatment as coercive. Evidence suggests that 30%-50% of psychiatric patients experience various types of pressures ('leverage') to comply with treatment. It seems that informal coercion is routinely used alongside legal compulsion but little is known about their relationship. Two potential relationships can be hypothesised. Formal compulsion could lead to reduced informal coercion by substituting for it, or alternatively that it could increase it because of the paternalistic approach to any individual patients when legal compulsion is used. This study aims to investigate whether community patients under different level of legal compulsion experience different levels of informal coercion. **Methods:** Community patients with diagnosis of psychosis were recruited and interviewed in two large studies on formal and informal coercion in various psychiatric service settings across England. Data on the experience of welfare pressures (in access to accommodation, financial assistance, child custody, and in reducing or dropping criminal charges) were collected through interviews with patients using the MacArthur Leverage interview. Data on legal compulsion and portion of clinical data during the preceding 12 months were obtained from medical records. **Results:** Over 500 patients from 190 community mental health teams in 32 local mental health authorities with diagnosis of psychosis were interviewed in two studies. Data on socio-demographic characteristics, reported experience of informal coercion and legal status over the preceding 12 months from both studies will be jointly analysed. Associations of reported informal coercion with the duration of legal compulsion will be reported. **Discussion/Conclusions:** The investigated impact of formal coercion on the reported informal coercion and their relationship will be addressed. Patients under legal compulsion may experience more informal coercion as they are sicker and due to receiving treatment in a coercive setting. If less informal coercion is used with formal compulsion, this could be considered as a legitimate outcome of such compulsion. **Funding:** Programme Grant for Applied Research from the National Institute of Health Research (RP-PG-0606-1006), Department of Health, UK. **Keywords:** Coercion, involuntary, informal coercion, leverage.

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S14 – 3 Coercion in Switzerland: Introduction of Involuntary Outpatient Treatments*Stéphane Morandi**Department of Psychiatry, University Hospital of Lausanne (CHUV), Switzerland*

Background/Objectives: Switzerland is a federal state consisting of 26 cantons. Each of them has its own department of health and specific psychiatric provisions. The Swiss Federal Constitution protects individual liberty and rights. Deprivation of liberty is only permitted in special situations laid down in law. Involuntary psychiatric treatments may be authorized under two distinct legal regimes. The Swiss Criminal Code governs the treatment of forensic patients and the Swiss Civil Code governs the guardianship legislation. In 2008 the latter was amended. The revision aimed to increase individual autonomy and to improve protection for individuals. The introduction of community treatment orders (CTOs) in the revised Swiss Civil Code was believed to offer the opportunity to provide treatment in a less restrictive environment. Historically in Switzerland, the proportion of hospitalisations that are involuntary is high in comparison with international figures. The aim of this presentation is to review the legal provisions for CTO decided in the 26 Swiss cantons and to set this in the context of variations in psychiatric clinical provisions between cantons.

Methods: Databases were searched to obtain relevant publications about CTOs in Switzerland. The Swiss Medical Association, Swiss Federal Statistical Office, Swiss Health Observatory and all the 26 Cantonal medical officers were contacted to complete the information. COPMA, the authority which monitors guardianship legislation, and Pro Mente Sana, a patients' right association, were also approached.

Results: Only a few cantons could provide complete or even partial figures for the rate of compulsory treatment in previous years. Literature concerning compulsory treatment in Switzerland was scarce during the last decades. Only three addressed CTOs. Since 2013, every canton has some form of legal basis for CTOs but the level of detail is often limited. In 8 cantons the powers of the measure are not specified (for example, use of medication). In 12 cantons the maximum duration of the CTO is not specified. German speaking cantons and rural cantons are more likely to specify the details of CTOs.

Discussion/Conclusion: The revised Swiss Civil Code aimed to harmonise use of involuntary treatment between cantons. Conversely, the new legal basis for CTOs differs from one canton to the other. It is not possible to identify a relationship between cantonal psychiatric provisions and content of the measure. In the context of the absence of convincing international evidence for effectiveness of CTOs and no good quality data on current coercive practices in Switzerland, there is an urgent need to monitor these new provisions. **Funding:** None declared. **Keywords:** Coercion, involuntary, community treatment orders, involuntary treatment.

Email: stephane.morandi@chuv.ch**S14 – 4** International themes on coercion in psychiatry and the work of the WASP coercion group*Andrew Molodynski**Department of Psychiatry, University of Oxford, UK*

Coercion is an increasingly recognised and debated issue in mental health services internationally. Service provision varies very substantially in extent and organisation between nations with, for example, a 210 fold difference in the number of psychiatrists between some countries. In some countries the vast majority of care occurs in large institutions, while in others there are well developed community services that can offer high levels of intervention. In other places there may be an almost complete absence of services with care being provided solely by families. Despite these differences (which are also apparent within Europe) the research and literature relating to coercion is overwhelmingly from a small group of generally wealthy nations. The World Association of Social Psychiatry working group on coercion is attempting to begin to redress this balance by building relationships and projects with groups from non traditional centres. It has also developed a website to serve as resource for clinicians, policy makers, and researchers from different regions to begin to think about the complex issues involved. This presentation will briefly describe the issues internationally and then outline the work of the group in terms of relationship building, the website, and future plans for international collaborations along with information on how to get involved. **Funding:** None declared. **Keywords:** Coercion, involuntary.

Email: andrew.molodynski@oxfordhealth.nhs.uk**S15 – Mental health at work is an increasing concern in Europe. What is the current knowledge on factors important for sustainable work participation?***Gunnel Hensing**Department of Public Health and Community Medicine/Social Medicine, Sahlgrenska Academy at the University of Gothenburg, Sweden*

It is well known that Common Mental Disorders (CMD) impact work performance and work participation, but also that work is an important source of exposure to factors that have the potential to contribute to the development of CMD. An increasing number of individuals in Europe is off sick or out of work due to CMD. Research is needed to better guide society and individuals on potential risk factors and possible preventive measures. However, in comparison to other areas in psychiatric epidemiology the development of research directed at mental health at work is still in its beginning. The objective with this symposium is to present the current knowledge on factors important for sustainable work participation and to suggest areas of concern for future research initiatives. The four presentations have been chosen to illustrate different aspects of mental health at work: Initially Dr. Charlotte Clark presents research from the UK on the association between recent life events and stressors in the home and the workplace and mental wellbeing of employees. Professor Harald Gündel presents studies from Germany on the important early identification of individuals with stress-related disorders and the possibility to prevent both the development of the disorders and absence from work. Professor Gunnel Hensing has done studies in Sweden on individuals off sick in new sick-leave episodes and shows the importance of CMD for a slower return to work. Finally, Professor Simon Överland has done several studies in Norway on risk factors for permanent marginalization from the labour market in disability pensions. These presentations will be discussed and provide a basis for future country specific or European research agendas.

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S15 – 1 The relationship of recent life events and stressors in the home and workplace on the mental wellbeing of employees: the 2007 Adult Psychiatric Morbidity Survey

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Background/Objectives: We know little about the factors associated with mental wellbeing (MWB) and therefore capable of exploitation to promote it. We tested the hypothesis that recent life events and stressors in the home and workplace would be inversely associated with MWB, even after controlling for the presence of common mental disorder (CMD). **Methods:** We used data from the 2007 Adult Psychiatric Morbidity Survey, a survey of individuals ≥ 16 years. Analyses were restricted to employed working age participants (N=3383). MWB was assessed using a reliable measure based on 9 questions, with Z-scored used for analyses. CMDs in the past week were derived using a structured diagnostic interview. Questionnaires assessed self-reported recent life events, and stressors in the home and workplace. **Results:** A range of workplace and home stressors were linked to MWB. Job strain (OR=-0.261, p=0.001), active jobs (OR=-0.148, p=0.001), low levels of social support at work (OR=-0.393, p=0.001) and at home (OR=-0.471, p=0.001), domestic abuse (OR=-0.281, p=0.001), and poor housing quality (OR=-0.095, p=0.05) were all independently associated with lower MWB scores after adjustment for CMD and co-occurring stressors and recent life events. Recent life events were not associated with MWB after taking CMD and co-occurring stressors into account. CMD was associated with one-standard deviation lower MWB scores after adjustment for co-occurring stressors and life events. **Conclusions:** This study suggests that employers may have an important role in enhancing MWB, in addition to minimising factors that increase rates of CMD. Interventions focusing on stressors in the workplace or the home should promote MWB. **Funding:** None Declared.

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S15 – 2 Psychosomatic consultation in the workplace – conceptualization and experiences concerning user profiles

Harald Gündel & a multi-professional group of researchers and clinicians involved in the will be recognized within the lecture

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Background/Objectives: Psychosomatic symptoms often show up within the vocational context. In Germany, there is an unmet need for easily accessible and early psychosocial interventions which may reduce the need for later sickness absence. This led to the development of a variety of new interventions in this area. From a clinical as well as a scientific point of view, the question of how such a „psychosomatic consultation in the workplace“ (PCIW) can be conceptualized remains unanswered. Also, data regarding users' first experiences with user profiles of this new approach are available. **Methods:** 1) Various models of PCIW established together with about 6-7 different firms or public administrations will be described. 2) Treatment documentation from 01/2011-01/2012 was analysed descriptively and by qualitative content analysis for all patients engaging in two recently established PCIW. **Results:** 1) PCIW may be organized quite differently in respect to accessibility, referral path, available treatment (diagnostic vs. brief intervention) and cost absorption – such as by health insurance companies or directly through the firm. The PCIW is always developed collaboratively between the involved clinicians (especially occupational health and psychosomatic medicine clinicians, as well as other professions within this vocational context) and the individual firm. 2) In the starting phase of this new model of psychosocial care, n = 67 patients were seen, 75% of them were male. For 75% of users, PCIW constituted the first contact with psychosomatic/psychotherapeutic/psychiatric services. For about 80% of users, illness aetiology was considered to be work-related. 40% of patients were recommended to outpatient psychotherapeutic care. **Conclusions:** PCIW offers an easily accessible therapeutic intervention within the worksite setting. First and scientific experiences suggest that, compared to care as usual offered by a psychosomatic outpatient clinic, this intervention attracts a different type of user with regards to age, gender, utilization, disease severity, work ability, quality of life and work-related stress. By looking more closely at the complaints and needs of the patients directly recruited within the workplace setting, there is often a mix of work-related and personal problems that further supports the need for a close collaboration between occupational and psychosomatic physicians as well as other involved professions. There is a need for further studies to assess whether this new model of easily accessible psychosocial care is capable of reducing sickness-related absenteeism. **Source of Funding:** Partly: Young scientists program of the German network “Health Services Research Baden-Wuerttemberg” of the Department of Science, Research and Arts in collaboration with the Department of Employment and Social Order, Family, Women and Senior Citizens, Baden-Wuerttemberg. In addition, the company CASSIDIAN supported the evaluation in the context of company health management. The work of the Institute of Occupational and Social Medicine and Health Services Research Tuebingen is supported by an unrestricted grant of the employers' association of the metal and electric industry Baden-Wuerttemberg (Suedwestmetall).

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S15 – 3 Self-assessed mental health problems and work capacity as determinants of return to work after sickness absence: a general population-based study

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Background/Objectives: Individuals with CMD have an increased risk of sickness absence but less is known regarding return to work. The aim was to study self-assessed persistent mental illness, mental wellbeing and work capacity as determinants of return to work. **Methods:** Employed women and men (n=6140) who were registered as off sick between February 18 and April 15 2008, received a questionnaire (participation rate 54%). Of these, 1082 currently off sick when answering the questionnaire were followed with regard to time until return to work. Self-reported persistent mental illness, the WHO (Ten) Mental Well-Being Index and self-assessed work capacity in relation to knowledge, mental, collaborative and physical demands at work were used as determinants. **Results:** The OR of late return to work (>105 days) was 2.97 (95% CI 2.10-4.20) among those with persistent mental illness and 2.89 (95% CI 2.31-3.62) among those with low mental wellbeing (adjusted for gender, age, SES, hours worked and sick leave 2007). Low self-reported capacity to work also predicted late return to work. In a multivariable analysis the likelihood of late return to work attenuated but remained significant, OR 1.93 (95% CI 1.46-2.55) after adjustment for all dimensions (knowledge, mental, collaborative and physical) of capacity to work. **Conclusion:** Persistent mental illness, low mental wellbeing and low work capacity predicted late return to work. Low mental wellbeing was identified as a strong determinant of late return to work even after adjustment for work capacity. Early identification and treatment of low mental wellbeing among individuals off sick can be a way to promote return to work. **Funding:** The Swedish Social Insurance Agency and the Swedish Research Council for Health, Working Life and Welfare.

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S15 – 4 CMD as a risk factor for sickness absence and disability pension in a life-course perspective – the development of a model. Work in progress

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Background/Objectives: Common mental disorders (CMD) are now recognized as a major factor in relation to sickness absence and work disability outcomes. Studies suggest that both early life risk factors and CMD in adulthood predict these outcomes in adult life. However, we do not have a clear picture of the relationship and relative importance of these risks. The objective of this project is to review the literature, and propose a model of CMD as a risk factor for sickness absence and disability pension from a life-course perspective. **Methods:** In a narrative review, we will describe the literature on: a) early life

risk factors for disability/sickness absence, b) life-course perspectives on the development of CMD, and c) CMD and risk for sickness absence and disability pension in short-term prospective studies. Based on the review, possible causal mechanisms and models will be discussed. Finally, we will address what the proposed models means for interventions to prevent sickness absence and disability pension for CMD and to promote return to work among those affected. **Results:** Several studies identify childhood and adolescent risks for adult life sickness absence and disability pension. Many of these risks would also be relevant factors for development of CMD. Prospective studies of CMD as risk for sickness absence and disability pension typically follow up participants from one to a few years, and commonly demonstrate that baseline mental disorders are associated with increased risk for these outcomes. There are no readily available models to reconcile these findings. **Discussion / Conclusion:** There is a need to review this branch of the literature, and develop a model on CMD as a risk factor for sickness absence and disability pension from a life-course perspective. The results of the literature review and the proposed model will be presented at the conference. In light of this, the findings will be discussed and related to a research agenda, including its implications for studies of interventions. **Funding:** None declared.

S16 – Using natural language processing to enhance the Psychiatric Case Register

Robert Stewart

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Background/Objectives: The 'case register' has been a mainstay of mental health research since its inception, providing an underpinning methodology for investigating the aetiology of mental disorders, their manifestations and prognosis. Traditionally case registers have relied on routinely recorded structured data. However, this does not sit easily with clinical practice in mental healthcare where there is an emphasis on detailed textual descriptions of symptomatology, life circumstances, interventions and outcomes. Until mental health research using routine data can address the challenges of textual information, it will inevitably rely on an impoverished picture of patients' experiences. Dedicated research studies can provide richer information, but are limited in sample size and generalisability, while routine data provide the latter but are often restricted to 'shallow' data such as diagnosis, pharmacotherapy and outcomes inferred from service contacts. **Methods:** This symposium will consider the role natural language processing (NLP) might play in enhancing data quantity and quality from routine electronic health records. We have previously demonstrated the feasibility of effective pseudonymisation of structured and text fields in the South London and Maudsley Case Register sourced from over 240,000 electronic health records from a large mental healthcare provider in south London, using the Clinical Record Interactive Search (CRIS) application. **Results:** The symposium presentations will illustrate both the methodological development and practical application of NLP in mental health research. Innovations will be described which seek to accelerate the process of app development, reducing the requirement for extensive technical input and allowing researchers independently to train software to identify constructs of interest using machine learning techniques. **Conclusions:** NLP offers important opportunities to transform the use of routine data for observational research. Clearly this has also further downstream applicability in interventions to improve clinical decision-making and service quality through feedback of processed information to those providing it. **Funding:** This work is funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Biomedical Research Unit at South London and Maudsley NHS Foundation Trust and King's College London. CRIS research has received funding from Pfizer, J&J, Lundbeck and Roche.

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S16 – 1 Natural language processing and its application in electronic health records research

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Background/Objectives: Electronic Health Records (EHRs) have opened up the possibility of data re-use, to support both clinical practice, and clinical research. In order to achieve this re-use, we have to address the issue that most EHRs contain large quantities of unstructured narrative text. Free text enables the clinician to quickly and easily express complex concepts, events, and uncertainties, in a way that is not possible in the structured part of the patient record. Free text, however, creates difficulty for re-use and for statistical analysis. **Objectives:** Natural language processing (NLP), the computerised processing of human language, is frequently suggested as a way to automatically extract clinically significant information from the textual component of the medical record, in order to support the re-use of that record. Our objective is to examine ways in which NLP techniques have been used to this end. **Methods:** We examine NLP systems and methods and their use over clinical records, focusing on the techniques of Classification and Information Extraction (IE). We consider some of the tools and resources available, their benefits and their costs. **Results and Conclusions:** NLP can enable the re-use of the free text in clinical records for care and research, and this is reflected in an increased uptake over the past few years. While there are still significant costs, these are being reduced by the improved availability of standard data sets, and by the increasing maturity of NLP software frameworks and tool kits. **Funding:** None declared **Keywords:** Case register, natural language processing, information extraction.

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S16– 2 Natural language processing and its practical application to enhance mental health research using electronic health records data

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Background/Objectives: Observational epidemiology based upon electronic health records is a rapidly growing area, with the promise of vastly increased sample sizes and therefore study power. However, large amounts of information are contained within unstructured, free text components of each patient's record. While natural language processing (NLP) techniques have been previously used to successfully extract structured information, this requires the input of NLP specialists, and often represents a bottleneck in the amount of information that can be extracted. To describe the different NLP approaches which have been used to extract information from the South London and Maudsley Case Register, a data repository of anonymised electronic mental health records on over 220,000 patients. To consider how these can be optimised for future use. **Methods and Results:** Following early work to ascertain constructs such as cognitive function and pharmacotherapy, we have recently developed a range of NLP applications to characterise symptomatology (positive, negative and disorganisation symptoms of schizophrenia; depressive symptoms). We will further present end to end pipeline solutions that make use of machine learning to enable epidemiologists to create and validate their own information extraction applications, without requiring the technical expertise of NLP engineers. **Conclusions:** Substantial enhancement of routine data through NLP appears feasible and application development processes may be automated to accelerate this process. **Funding:** This work is funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Biomedical Research Unit at South London and Maudsley NHS Foundation Trust and King's College London. **Keywords:** Case register, natural language processing, information extraction, symptomatology.

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S16 – 3 Evaluating a new natural language processing application for extracting antipsychotic medication data from clinical records

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Background/Objectives: Clinical records offer an invaluable opportunity to examine 'real world' patterns of medication prescribing. Electronic health records (EHRs) have been kept by South London and Maudsley NHS Foundation Trust (SLAM) across all services since 2006. The Clinical Record Interactive Search (CRIS) system, allows researchers to search and retrieve anonymised SLAM EHRs data with over 200,000 cases currently represented in the CRIS system. Specific natural language processing (NLP) algorithms have been developed to extract and code pharmacotherapy data from free-text fields in CRIS, taking into account the linguistic context in which keywords appear. In the context of broader work to describe antipsychotic medication profiles and their associations with health outcomes, the profile of clozapine use in routine care was investigated. **Methods:** Using CRIS, we identified cases of schizophrenia aged 18 years and over, who were using a SLAM service i) between 2011-2012 and ii) during 2012. Prescribing data, such as type of medication and dose were extracted from structured fields, supplemented by information appearing in the free-text fields. Data in free-text fields were extracted using NLP algorithms evaluated against human raters. **Results:** Current clozapine use was established with a precision (positive predictive value) of 96% and recall (sensitivity) of 91% for 2012, and at 99% and 92% respectively for use between 2011 and 2012. Of 8,475 active cases between 2011 and 2012, clozapine was received by 15.3% (95% CI 14.5-16.1). Prevalence of current clozapine use during 2012 was estimated at 14.4% (95% CI 13.4-15.3) from a total of 5,423 active cases. Data on the most recent prescribed daily dose of clozapine were available for 949 current users: mean 292.7mg (SD 173.6), median 300mg, range 6.25-925mg. **Conclusions:** This proof of principle case study was successful in extracting 'real world data' on antipsychotic use from clinical records for research evaluation. The high degree of precision and recall we detected suggest that this is a promising application which is now being applied more widely to characterise prescribing patterns and evaluate physical and mental health outcomes associated with these. **Funding:** This work is funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Biomedical Research Unit at South London and Maudsley NHS Foundation Trust and King's College London; also through an Medical Research Council Fellowship held by R Jackson. CRIS research has received funding from Pfizer, J&J, Lundbeck and Roche. **Keywords:** Case register, natural language processing, antipsychotic, Schizophrenia.

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S16 – 4 Automated identification of negative symptoms of schizophrenia from electronic health records and their association with health outcomes

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Background/Objectives: Negative symptoms of schizophrenia are thought to be the most important prognostic indicators of the condition, and yet have not to date been quantifiable in routine healthcare because the length and complexity of assessment current scales limits their applicability beyond research settings. To develop and evaluate the performance of a natural language processing (NLP) information extraction tool to ascertain negative symptoms of schizophrenia from correspondence fields in routine electronic health records and to investigate predictive associations with clinical outcomes.

Methods: Ten negative symptoms were identified with >80% precision (positive predictive value) at annotation level. These were extracted and scaled from anonymised electronic health records data from the South London and Maudsley NHS Trust, a large mental health care provider in the UK. Data were analysed from 7678 adults with schizophrenia receiving care during 2011 investigating contemporaneous associations of negative symptoms with demographic and functional status, and predictive associations with mental health admission, readmission and inpatient length of stay.

Results: Negative symptoms were significantly associated with younger age, male gender and single marital status. Two or more symptoms were associated with increased likelihood of hospital admission (odds ratio 1.24, 95% CI 1.10-1.39), re-admission following discharge (odds ratio 1.58, 1.28-1.95) and longer inpatient stay (B coefficient 20.5 days, 7.6-33.5).

Conclusions: Using natural language processing, we were able to ascertain negative symptoms of schizophrenia from routine electronic health records, generating a scale which confirmed robust prediction of adverse clinical outcomes. Ongoing work is investigating associations with mortality and physical health outcomes.

Funding: This work is funded by the National Institute for Health Research (NIHR) Biomedical Research Centre and Dementia Biomedical Research Unit at South London and Maudsley NHS Foundation Trust and King's College London. CRIS research has received funding from Pfizer, J&J, Lundbeck and Roche.

Keywords: Case register, natural language processing, Schizophrenia, negative symptoms.

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S17 – Women's mental health: new findings and new methodologies

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Background/Objectives: Gender differences in the burden of mental illness have been well established, with women experiencing higher prevalence of several disorders, including depression and anxiety. It is therefore important to identify risk factors and effective interventions for mental illness in women, particularly in childbearing women as maternal mental illness is associated with adverse effects for the mother, fetus and infant. However, vulnerable and hard-to-study groups, such as victims of violence or pregnant women are often excluded from research for both practical and ethical reasons. The evidence base for service delivery is therefore limited. This symposium will present new findings and methodologies from research in several areas of women's mental health.

Methods: A range of methodologies will be covered in this symposium. First, a systematic review will be described, examining the prevalence and risk of

antenatal and postpartum mental disorders in obese and overweight pregnant women. A cross-sectional survey of the mental health needs of trafficked women and men will then be presented. Finally, interventions for antenatal mental disorders will be discussed in two talks: an examination of the use of antipsychotic medication during pregnancy using data from routine records and a patient-preference randomised controlled trial comparing group-based psychotherapy with individual counselling for pregnant women with a mental disorder.

Results: These studies identify risk factors for antenatal mental illness, including medication cessation or change, and highlight the increased prevalence of mental disorders among obese pregnant and postpartum women. Risk factors for mental illness among women who have been trafficked are also explored. Findings also show the potential for effective treatments of antenatal mental illness, both pharmacological and psychological.

Discussion/Conclusions: Health professionals should be aware of the prevalence and risk factors for mental disorders in women who may present to services for other reasons, such as pregnancy. These studies highlight gaps in the current literature, but also possibilities for developing an evidence base for clinical practice with hard-to-study populations. Methods such as use of routine medical records, data synthesis and patient preference trials allow for the development of high quality evidence without overburdening participants. Limitations and developments of these findings and methods will be discussed.

Funding: The studies have been funded by the Medical Research Council (UK), the Biomedical Research Nucleus data management and informatics facility at South London and Maudsley NHS Foundation Trust, which is funded by the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity, a National Institute for Health Research (NIHR) Research Professorship to Louise Howard, Tommy's Charity, the Department of Health Policy Research Programme (UK), the Erasmus University Medical Centre (Mrace Foundation) and the Coolisingel Foundation.

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S17 – 1 Pre-pregnancy obesity and mental disorders during pregnancy and postpartum: a systematic review and meta-analysis

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Background/Objectives: There is a significant association between obesity and mental disorders in adult women but little is known about this relationship during pregnancy or postpartum. This systematic review and meta-analysis (PROSPERO reference CRD42013003093) aimed to evaluate the prevalence and risk of antenatal and postpartum mental disorders among obese and overweight women, compared with normal weight controls. **Methods:** Six databases (including MEDLINE, EMBASE, PsycINFO) were searched from inception to January 2013, in addition to citation tracking, hand-searches and expert recommendations. Studies were eligible if antenatal or postnatal mental disorders were assessed with diagnostic or screening tools, or extracted from routine records, for women who were obese or overweight at the start of pregnancy. Of the 4,627 screened articles, 62 met the inclusion criteria for the review. **Results:** Unadjusted odds ratios were pooled using random-effects meta-analysis for studies examining antenatal depression (n=29), postnatal depression (n=16), antenatal anxiety (n=10) and postnatal anxiety (n=3). Obese and overweight women had significantly higher odds of elevated depression symptoms than normal weight women, both during pregnancy and postpartum. Obese women also had higher odds of antenatal anxiety. The few studies identified for eating disorders (n=2) or serious mental illness (n=2) also suggested increased risk among obese pregnant women. **Discussion/Conclusions:** Healthcare providers should be aware that women who are obese when they become pregnant are more likely to experience elevated antenatal and postpartum depression symptoms than normal weight women, with intermediate risks for overweight women. Further high quality studies are needed for other mental disorders, and to investigate the impact of co-morbid obesity and mental disorders on pregnancy outcomes. **Funding:** This review was carried out as part of a PhD studentship funded by the Medical Research Council (UK) and Tommy's Charity. **Keywords:** Women's mental health, methods, obesity, pregnancy.

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S17 – 2 Exploring the longer-term mental health needs of trafficked people

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Background/Objectives: Human trafficking is the recruitment and movement of people – often by force or deception – for the purposes of exploitation. Research indicates high levels of psychological distress among women survivors of human trafficking. Previous studies in this area have focused on women who have been free of their traffickers for less than 6 months; this study aimed to assess the longer-term mental health needs of trafficked people. **Methods:** Cross sectional survey of trafficked women and men (aged 18 and older) who were no longer in the setting in which they had been exploited, and who were in contact with health and support services in England. Service users were excluded if they were considered by their support worker and/or health provider to be too unwell or distressed to participate, or were unable to give informed consent to participate. Fieldwork commenced in June 2013. Eligible service users were approached for participation by their support workers and/or health providers. Service users who were interested in participating were asked to provide contact details; the research team provided further information about the study and arranged interviews with service users who wished to take part. Written information about the study was provided in participants' preferred language. Interviews were conducted with the assistance of independent, qualified interpreters when required. Symptoms of depression, anxiety and post-traumatic stress disorder (PTSD) were assessed using the Patient Health Questionnaire-9, the General Anxiety Disorder-7, and the PC-PTSD. Data were also collected on socio-demographic factors, medical history, physical health symptoms, sexual and reproductive health symptoms, and substance use, experiences of abuse and neglect during and prior to trafficking, and current health and social needs. Preliminary analyses were conducted in STATA 11. **Results:** Preliminary analyses have been conducted with data from 44 trafficked adults (28 women and 16 men); interviews with a further 75 men and women are planned. Study participants ranged in age from 18 to 61 years. Participants were exploited for an average of 26 months (ranging from 1 month to 12 years) and had been out of the trafficking situation for an average of 18 months (ranging from 2 months to 7.5 years). Participants had been trafficked for sexual exploitation (30%), domestic servitude (23%) and labour exploitation in industries such as agriculture, construction, and food processing and packaging (41%). Symptoms suggestive of post-traumatic stress disorder (PTSD) were reported by half of our sample. One-third reported moderate to severe depression symptoms and forty percent reported moderate to severe symptoms of anxiety. The prevalence of all three conditions was significantly higher among female participants than among males (p<0.05). **Discussion/Conclusions:** Our findings highlight that a significant proportion of trafficked women are likely to experience enduring psychological distress. First response and post-trafficking support should consistently include mental health assessment and care in both the crisis and rehabilitation periods. Evidence is needed on the effectiveness of therapies for depression, anxiety and PTSD among people who have been trafficked. **Funding:** This research is commissioned and funded by the Department of Health Policy Research Programme (Optimising Identification, Referral and Care of Trafficked People within the NHS 115/0006). The views expressed in this publication are those of the author(s) and not necessarily those of the Department of Health. **Keywords:** Women's mental health, methods, human trafficking, PTSD.

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S17 – 3 Psychotropic Medication in Pregnancy for Women with Serious Mental Illness

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Background/Objectives: Around 60% of women with SMI have children but there is a very limited evidence base on the risks and benefits of psychotropic medication in pregnancy to inform decision making on prescribing for women with serious mental illness. There are no studies on relapse rates in pregnant women with schizophrenia who stop, switch or continue medication. This study aims to investigate the risk of, and time to, relapse of psychiatric illness during pregnancy and in the postpartum after stopping psychotropic medication compared with continuing.

Methods: Design: Historical cohort study using secondary mental healthcare data from the South London and Maudsley (SLaM) Clinical Record Interactive Search (CRIS) system and maternity Hospital Episode Statistics. Study population: Women with serious mental illness (schizophrenia and related disorders, bipolar disorder and previous puerperal psychosis and other affective psychoses). Measures: Exposure – psychotropic medication use from three months before pregnancy through each trimester to 3 months postpartum, Outcome – relapse of mental disorder through pregnancy to 1 year postpartum, Covariates – Sociodemographics, mental disorder history and severity, drug use in pregnancy.

Results: A cohort of 460 women who gave birth in hospitals from 2007-2011 has been identified, 241 were diagnosed with non-affective psychoses, 219 with affective disorder (166 with bipolar affective disorder, 46 with depressive psychosis and 7 with a history of puerperal psychosis). The mean age at first index delivery was 32 (SD 6.2), the median Townsend (2007) deprivation score for the cohort was 34.92 (range 3.81-77.17 out of a potential range of 0.37-85.46; higher score indicating more severe deprivation); 221 (48%) were from African Caribbean or other Black background, 155 (34%) White, 37 (8%) Asian, and 47 (10%) other; median contact time with SLaM before the index delivery was 799 days. Medication data has been collected for 489 of a total 541 pregnancies for this cohort. Preliminary analysis suggests 70% of women were exposed to medication at the beginning of pregnancy. Olanzapine was the most common exposure (n=141). Data on maternal mental health outcomes will also be presented.

Discussion/Conclusions: Changes in medication and cessation of prophylaxis during pregnancy occur in a significant proportion of women with SMI which may lead to relapse. Challenges of using electronic health records obtain evidence for this of type research will also be discussed. **Funding:** This work is funded by a BRC Nucleus award from Guys and St Thomas Trustees and SLAM Special Trustees) and Tommy's Charity through a grant from Johnson & Johnson.

Keywords: Women's mental health, methods, psychotropic medication, pregnancy.

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S17 – 4 Group-based psychotherapy for pregnant women with a mental disorder compared to individual counselling: Patient-preference randomized controlled trial

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Background/Objectives: Population-based studies have estimated the prevalence of mental disorders during pregnancy to be between 7.4% - 14.1% and have shown that untreated (or incompletely managed) psychiatric symptoms are associated with a range of adverse outcomes. The NICE guidelines advise risk-benefit analysis but still there is a lack of randomized clinical trials, which makes it more difficult for clinicians to offer an evidence-based treatment. With this in mind, we conducted an RCT of group-based psychotherapy versus individual counselling for the treatment of pregnant woman with a mental disorder.

Methods: Design: Patient-preference randomized controlled trial with four arms. Study population: Women with a severe mental illness, confirmed with a Structured Clinical Interview for DSM-IV diagnosis, and 12 - 33 weeks pregnant were included. Intervention: A weekly, structured daily program comprising cognitive behavioural therapy, psycho-education and body-oriented therapy for a group of maximum 8 pregnant women. Controls: Low-frequent individual counselling (treatment as usual). Measures: At baseline, Edinburgh (Postnatal) Depression Scale, Hamilton Depression Rating Scale (HDRS) and Health of the Nation Outcome Scales (HoNOS). Primary outcome: Edinburgh Postnatal Depression Scale (EPDS) at 6 weeks postpartum. Trial number: NTR3015 (www.trialregister.nl)

Results: 158 patients were included, 61 patients did not wish to be randomized because of their previous experiences with mental health care or disliked the idea of participating in a 'lottery'. Most prevalent mental disorders were major depressive disorder and anxiety disorder. Preliminary analyses showed that all four groups showed an improvement on the EPDS, HDRS and HoNOS at 6 weeks postpartum, compared to the baseline measurements during pregnancy.

Discussion/Conclusions: A significant proportion of the patients recovered from their perinatal depressive and anxiety symptoms. A patient-preference randomized controlled trial is useful to recruit patients with a mental disorder and can provide greater evidence of the external validity.

Funding: This study was funded by The Erasmus University Medical Centre (Mrace Foundation) and the Coolsingel Foundation. **Keywords:** Women's mental health, methods, patient-preference design, group psychotherapy.

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S18 – Clinical decision making in the treatment of people with severe mental illness: European multicentre study

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A considerable amount of research has been conducted on clinical decision making in short-term physical conditions. However, there is a lack of knowledge on clinical decision making and its outcome in long-term illnesses, especially in the treatment of people with severe mental illness. Clinical decision making in severe mental illness is characterised by a focus on long-term disease management, a high number of decisions arrived at frequently, often together with more than one service provider and/or informal carer, and patients being highly knowledgeable about their illness. Research tasks identified on the way to establishing a link between clinical decision making and outcome include descriptive research and instrument development focussing on how decisions are actually made in routine care as well as sound measurement of both patients' and professionals' decision making styles and how these are enacted in decision making encounters. Using data from the prospective observational study "Clinical Decision-Making and Outcome in Routine Care for People with Severe Mental Illness" (CEDAR) which took place in six European countries (Ulm, Germany; London, UK; Naples, Italy; Debrecen, Hungary; Aalborg, Denmark; and Zurich, Switzerland), papers in this symposium will examine the effect of CDM on three crucial patient-reported outcomes in mental health care, i.e. recovery, service use, and needs. First, Sabine Loos, using latent class analysis, will shed light on the relation between involvement in clinical decision making and recovery measured by the Stages of Recovery Questionnaire (STORI-30). Second, Suzanne Cosh, using multivariate analyses, will present findings on the effect of clinical decision making on service use measured by the "Client Sociodemographic and Service Use Inventory" (CSSRI-EU). Third, Bernd Puschner, using hierarchical linear modelling, will scrutinize the relation between quality of clinical decision making and unmet needs measured by the "Camberwell Assessment of Needs Short Appraisal Schedule" (CANSAS). Finally, findings of all three presentations will put into perspective by Margareta Östman.

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S18 – 1 Recovery and decision-making involvement in people with severe mental illness

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Background/Objectives: There is common agreement about the importance to promote personal recovery and wellbeing as well as clinical decision making in routine care of people with severe and persistent mental illness. However, the evidence base for these concepts is still limited. The aims of the current study are (1) to examine latent classes to map the answer patterns in the Stages of Recovery Questionnaire (STORI-30) at baseline; (2) to identify predictors of status and change of stage of recovery over time. **Methods:** Data of 588 people with severe mental illness who participated in the European multicentre study "Clinical Decision-Making and Outcome in Routine Care for People with Severe Mental Illness" (CEDAR; IS-RCTN75841675) were analysed using latent class analysis, proportional odds models and generalized estimating equations. Recovery was measured with the Stages of Recovery Questionnaire (STORI-30) which is a patient-rated 30-item assessment resulting in three stages of recovery. Main instruments to assess predictors were: Clinical Decision-Making Involvement and Satisfaction Scale (CDIS), Outcome Questionnaire-45 (OQ-45.2), Manchester Short Assessment of Quality of Life (MANSA), Global Assessment of Functioning (GAF), Health of the Nation Outcome Scale (HoNOS), Threshold Assessment Grid (TAG), Helping Alliance Scale (HAS), Camberwell Assessment of Need Short Appraisal Scale (CANSAS), and the Client Sociodemographic and Service Receipt Inventory (CSSRI-EU). **Results:** A three class solution fitted best the baseline data, indicating that participants clustered into one of three stages of recovery. Significant predictors of stage of recovery at baseline were gender, marital status, years in school, living situation, study site, patient-rated helping alliance, and symptom severity. Involvement in clinical decision making was identified as a significant predictor of change in recovery over time. **Discussion/Conclusions:** Implications of these findings for clinical practice (training for mental health professionals) and research (developing new interventions) will be discussed with a focus of the role of involvement in decision making as a prominent factor for the recovery process of people with severe mental illness. **Funding:** The CEDAR study is funded by a grant from the European Union (Grant agreement number: 223290). **Keywords:** Clinical decision making, severe mental illness, recovery, latent class analysis.

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S18 – 2 The relation between clinical decision making and service use in people with severe mental illness

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Background/Objectives: There is evidence suggesting that shared decision making can positively affect health outcomes and can also reduce health care costs by decreasing the implementation of ineffective treatment modalities. However, there has been a lack of research exploring the effect of clinical decision making (CDM) on service utilisation, especially for people with mental illness. Therefore, the aim of this study is to explore the relationship between CDM and service use, as well as to examine moderators thereof, with patients with severe mental illness. **Methods:** A total of 588 participants from six Europe centres (Ulm (DE), London (UK), Naples (IT), Debrecen (HU), Aalborg (DK), and Zurich (CH)) participated in the study “Clinical Decision-Making and Outcome in Routine Care for People with Severe Mental Illness” (CEDAR). CDM was assessed from both patient and staff perspectives, using three measures: CDM Style (CDMS), CDM Involvement and Satisfaction (CDIS), and CDM in Routine Care (CDRC). Self-reported mental health service use for the prior year was measured at admission and follow up using the “Client Sociodemographic and Service Use Inventory” (CSSRI-EU). Multivariate analyses were undertaken to examine the relationship between CDM and various components of service use, such as hospital in-patient days, out-patient attendance, community-based service contacts (mental health, social services and primary care), criminal justice service contacts, and medication use. In a second step, moderators of the CDM-service use relationship were examined. **Results:** Participants were typically in their early forties, the majority were female, 25% were married, and only 19% were in paid employment. Most commonly, participants had a diagnosis of a psychotic disorder (DSM IV). On average, LOS of inpatient mental health treatment during the year preceding current admission was 11.07 (SD 32.07) days. However, 476 (81%) participants had not received inpatient treatment, while 80 (14%) reported one and 32 (5%) reported two inpatient stays. At follow up (T6), significant decreases in inpatient stays and days, minutes of community-based day services, and minutes of primary and secondary community care contacts were observed. However, CDM (as measured by CDMS and CDIS) did not predict changes in health service utilisation. Changes in medication use were predicted only by patient age and study site. **Discussion/Conclusions:** Overall, service use was not shown to be related to CDM style, involvement or satisfaction, as reported by staff and consumers at baseline. Clinical decision making (CDM) was also not related to changes in psychotropic medication use. However, this study was observational; thus the potential for interventions aimed at improving CDM to demonstrate cost-effectiveness remains. Implications of the findings in terms of developing targeted interventions to improve CDM will be discussed. **Funding:** EU FP7, Grant number 223290. **Keywords:** Clinical decision making, severe mental illness, service use, outcome.

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S18 – 3 Clinical decision making and unmet needs over one year in the routine treatment of people with severe mental illness across Europe

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Background/Objectives: While over the last years a large bulk of research has been accumulated on clinical decision making (CDM) in physical conditions, evidence on the role of CDM in the treatment of people with mental illness is still sparse. This paper examines the relation between clinical decision making and outcome in people receiving routine mental health care across Europe. **Methods:** “Clinical Decision-Making and Outcome in Routine Care for People with Severe Mental Illness” (CEDAR, www.cedar-net.eu) is a naturalistic prospective observational study with bimonthly assessments during a 12-month observation period. Between Nov 09 and Dec 11, 588 participants were recruited from caseloads of outpatient/community mental health services at six study sites across Europe (Ulm, Germany; London, UK; Naples, Italy; Debrecen, Hungary; Aalborg, Denmark; and Zurich, Switzerland). Crucial aspects of CDM from patient and staff perspectives were assessed by the instruments Clinical Decision Making Style (CDMS; subscales Participation and Information) at baseline and one-year follow-up, and Clinical Decision Making Involvement and Satisfaction (CDIS) at all measurement points. Outcome (patient-rated unmet needs) was measured by the “Camberwell Assessment of Needs Short Appraisal Schedule” (CANSAS). Hierarchical linear modeling controlling for clustering of patients among clinicians was used to ascertain the relation between CDM and outcome over time. **Results:** Shared decision making is preferred by patients and staff. This trend increased over time. Decision making style of staff significantly affected unmet needs over time. **Discussion/Conclusions:** Shared decision making is preferred by patients and staff. Decision making style of staff significantly affected unmet needs over time, implying that a shift from shared to active involvement of patients is indicated. Decision making style of staff is a prime candidate for future targeted interventions. **Funding:** The CEDAR study is funded by a grant from the European Union (Grant agreement number: 223290) **Keywords:** Clinical decision making, severe mental illness, unmet needs, clinical decision making style.

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S19 – Measuring social functioning in severe mental illness- recent developments and future directions

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Over recent years there has been an increasing focus on measuring functioning in those with mental health problems. This is the case both in clinical care to monitor and improve outcome and in research assessing the effectiveness of novel interventions or service structures. This focus on 'real world' outcomes such as work, relationships, and self-care has been greeted positively by service users and has enhanced our understanding of the complex effects that such disorders can have. Measurement of this area is however complex and difficult. Instruments need to be sufficiently detailed to capture enough information but also to be brief enough to be useful in clinical practice. This symposium initially sets the scene with a brief overview of social functioning and its measurement from a world renowned expert (Tom Burns) before focusing in on exciting recent developments with two of the more recently developed measures to be used in clinical practice and research. The Personal and Social Performance scale (PSP) was developed by Morosini and colleagues over ten years ago. It has become increasingly recognised and used in a number of studies across a variety of countries and languages. Georg Juckel and colleagues in Germany have developed self and carer rated versions to further extend its usefulness. Professor Juckel will present the process of development of these scales and the results of their use in detail here and will then consider the potential wider implications of these innovations. The Mini ICF-APP was developed by Linden and colleagues in Berlin to measure functioning as defined in the International Classification of Functioning (ICF), the companion volume to the better known International Classification of Disease (ICD 10). Michael Linden will present the reasons for the development of the instrument and the theory behind it before describing the results of its use in Germany. Andrew Molodynski will then go on to describe the English language validation of the Mini ICF-APP, a recent pilot study in community mental health services, and future directions for research and development of this instrument including such things as a self-rated version and an electronic version for remote use.

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S19 – 1 Measuring Social Functioning in Severe Mental Illness

Tom Burns

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Background/Objectives: Most treatment studies of psychoses have measured outcomes either in terms of symptom change or service use (most often rates and duration of hospitalisation). Stakeholder feedback has indicated that social function is more highly rated by patients and their families and many clinicians report that they consider the purpose of symptom control is to lead to improved social outcomes. However there is very little research showing that symptom improvement does transition to social improvements and efforts are now being made to measure social outcomes directly. This study aimed to overview the measures currently in use to rate social outcomes and identify if there was any movement towards a consensus on the most useful.

Methods: A systematic review was conducted of all studies assessing outcomes in schizophrenia from 1990 to 2006. Social function measures were defined as either those with social functioning in their title or when other scales (e.g. measures of quality of life, patient satisfaction) were specifically reported as measures of social functioning. A second filter was used to identify measures used in at least three studies and lastly any measure used as a declared outcome in an antipsychotic RCT was reported.

Results: In 301 articles 87 potentially relevant measures were reported. Only 14 RCTs of antipsychotic medication reported social function as an outcome. 20 measures were used three or more times with the GAF the most frequent at 58 followed by the GAS and SFS with 39 and 37 each. Details on psychometric properties of the scales were very scarce – particularly for the earlier, widely used scales. More recently there has been a development of specific scales for psychotic disorders with more of a focus on domains of functioning (e.g. The Strauss Carpenter and the Personal Social Performance scales)

Discussion/Conclusion: Generic scales such as the GAF and GAS are easy to use and require little training and seem to be very applicable in clinical and research settings. More structured assessments such as the PSP require more training but appear to have greater potential for tracking clinical change over time. Whether total scores or specific subscale ratings in these are more useful remains a contested question. **Funding:** This study was supported by an unrestricted education grant from Johnson and Johnson.

Keywords: Social functioning, measurement scales, measurement.

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S19 – 2 Comparison of self- and clinician's ratings of Personal and Social Performance in patients with schizophrenia*Georg Juckel**University Hospital Bochum, Germany*

In the treatment of schizophrenia, psychosocial functioning is an important aspect of therapeutic success that should be considered in addition to the reduction of psychopathology. Valid and standardised measures are necessary for the diagnosis and management of patients' personal, social and professional functioning. The German version of the Personal and Social Performance (PSP) Scale (with its four subdimensions: „socially useful activities“, „personal and social relationships“, „self-care“ and „disturbing and aggressive behaviour“) was administered to patients with schizophrenia in various studies. These data demonstrated this scale to be a reliable, valid and efficient tool for measuring psychosocial functioning in schizophrenia. Thus, it can be argued that, for everyday clinical practice, the PSP Scale is useful for the assessment of psychosocial functioning in schizophrenia during short, medium and long-term treatment courses. Patients with schizophrenia are often markedly impaired in their social functioning, partly independent of symptom severity. Few studies have examined patients' self-reporting of their social functioning, how a patient's self-perspective differs from third-party ratings, and whether or not the patients' self-rating is influenced by their awareness of their illness. Based on the Personal and Social Performance (PSP) scale as a clinician-administered scale, a PSP self-rating scale for patients with schizophrenia was developed. A significant correlation was found between PSP self- and clinician's rating for 'socially useful activities', whereas the other PSP subdimensions as well as the total score were not significantly correlated. For patients with high insight, a significantly positive association emerged with 'disturbing and aggressive behaviour', while there was no significant correlation between PSP self- and clinician's ratings for the patients with poor insight into their disorder. Patients and clinicians only marginally converge on their judgments concerning the patients' psychosocial functioning. Patients' insight may have a moderating role on the approximation of agreement between self- and third-party ratings. Results are discussed in line with the present literature regarding the accuracy of self-awareness in schizophrenia. **Funding:** None declared. **Keywords:** Social functioning, measurement scales, personal and social performance scale, self rated scales.

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S19 – 3 Assessment, qualification, and consequences of capacity limitations as measured with the Mini-ICF-APP*Michael Linden**Research Group Psychosomatic Rehabilitation, Charite University, Berlin, Germany*

The International Classification of Functioning, Disability and Health belongs to the family of international classifications (WHO 2001). It aims to provide a unified and standard language and framework for the description of health and health-related states. Health conditions (diseases, disorders, injuries) are classified according to ICD-10. Functioning and disability associated with health conditions are classified in the ICF. Disability can be defined as restriction in participation because of a mismatch between capacity and context. Capacity describes an individual's ability to execute a task or an action. The Mini-ICF-APP is an instrument to measure limitations in capacity as they occur in the context of mental disorders, i.e. adherence to regulations, structuring of tasks or time, flexibility, competency, endurance, assertiveness, contact with others, public exposure, intimacy, non-work activities, self-maintenance, and mobility. The Mini-ICF-APP allows one to rate the degree to which a person cannot fulfill his/her role function (e.g. in respect to the occupational role) because of deficiencies in the relevant capacity. This instrument has been developed to support expert social medical assessments in health and pension insurance in order to answer the question of whether a person can work or needs early retirement or other measures. Data on the degree of impairment, as measured with the Mini-ICF-APP, of 307 primary care patients will be reported. Results show that different types of capacity limitations are associated with different types of problems at work. **Funding:** None declared. **Keywords:** Social functioning, measurement scales, MINI ICF-APP.

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S19 – 4 English Language Mini ICF-APP: validation, manual development, use in everyday practice and future directions*Andrew Molodyski**Oxford health NHS Foundation Trust, UK*

This presentation describes the validation of the Mini ICF-APP in a standard UK community mental health team (CMHT) in English with a brief but clear description of its psychometric properties and correlates. 107 patients were interviewed by trained researchers as part of the study using a standardised battery of instruments. Detailed demographic data were also collected. The study showed strong validity and reliability and correlations with other well validated instruments (e.g. SOFAS, PSP, BPRS) and real world outcomes such as employment status. There was a less clear correlation with length of sick leave, probably reflecting the complex issues at play. The presentation then describes the results of a pilot study in a UK community mental health team and focuses on the development of training materials such as case examples and guidelines for assigning scores. Feedback from staff and patients alike regarding its usefulness will be reported also. A concise and clinically orientated manual was developed during the validation study and pilot and will be briefly described. The presentation will conclude with detailed descriptions of potential uses of the instrument as it currently stands and further planned developments to its format and utility. These potential developments include electronic and patient and carer rated versions, advances which we believe will make the scale much more usable in both research and clinical practice and which will be compatible with modern electronic recording and monitoring systems. **Funding:** The initial validation was supported by an educational grant from Janssen Cilag (who had no input into the study design) and the later developments were not funded in this way. **Keywords:** Social functioning, measurement scales, Mini ICF-APP.

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S20 – The impact of the economic crisis on psychiatric morbidity and mental health service delivery

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Background/Objectives: Current evidence has shown that mental health problems are related to social and economic determinants of health among which deprivation, poverty, and inequality. Economic crises are times of high risk to the mental health of the populations and particularly of the people affected and their families. This symposium presents different approaches to the impact of economic crises in Southern European countries: Portugal, Spain and Cyprus. These countries have been, in the last years, strongly affected by the European economic and financial crisis, leading to external interventions and to the implementation of models of austerity. The cutting in social benefits and health delivery spending, as well as in salaries of a large part of the populations, the increase in the number of people unemployed and that go bankrupt, and are evicted from their apartments, are most probably associated with an increase in the prevalence of mental health disorders.

Methods: The presentations will cover different aspects of the impact of the economic crisis at the level of mental disorders and of mental health services delivery and organization. The first author, the PI of the European Joint Action on Mental Health and Well Being, will present results of the national mental health survey and of the assessment of changes that occurred in mental health care delivery in Portugal between 2008 and 2012. The second author will present a survey with the aim to investigate the associations of the economic crisis and recession on the frequency of mood, anxiety, somatoform, alcohol-related and eating disorders among people visiting primary care settings in Spain. The third communication will present the SMAILE Research Project, a study carried out at the national level in Portugal, with the main aim of assessing the effect of environmental and territorial determinants on the mental health of the population and on the use of mental health services in times of an economic and social crisis. The fourth speaker will present data on the family burden for relatives of patients with schizophrenia in Cyprus. The panel will be completed by a presentation of a study examining the relationship of unemployment or job insecurity and care seeking and the consumption of antidepressants.

Results: All of the presentations will show evidence for the effect of social and economic crises on the increase of psychiatric morbidity and for the constraints in mental health care delivery in three Southern European countries strongly affected by the economic crisis.

Discussion/Conclusions: In this context, the evaluation of the impact of unemployment, poverty and deprivation in increased mental disorders prevalence and decreased offers of mental health services is particularly important in order to establish cost-effective strategies aimed at promoting mental health and reducing the prevalence of psychiatric morbidity of the populations.

Funding: Fundação para a Ciência e Tecnologia (FCT) and European Commission - Portugal.

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S20 – 1 Changes in mental health services delivery under the economic crisis in Portugal

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Background/Objectives: Portugal has one of the highest prevalence of mental disorders (12 month prevalence of 22.9%) in Europe and is one of the countries that was more affected by the economic crisis. Just before the beginning of the crisis the government started the implementation of a national mental health plan aiming at a significant reform of mental health services. The main objective of this presentation is to analyse the changes that occurred in mental health services delivery since the beginning of the economic crisis and to discuss the impact the crisis had in the implementation of the mental health plan.

Methods: National data on the prevalence of mental disorders, organization, financing, restructuring and utilization of services between 2006 and 2012 are analysed. We also discuss the available data on alcohol use, suicide and use of psychotropic drugs in the same period.

Results: Mental health reform in 2007 significantly increased the number of psychiatric services in general hospitals and of community-based services, while the number of beds in psychiatric hospitals decreased. With the escalation of the financial crisis outpatient interventions continued to increase while admissions tended to stabilize. Suicide rates, which had slightly decreased until 2011, increased in 2012, especially among old people. The use of some groups of psychotropic drugs (antidepressants and atypical neuroleptics) significantly increased in this period.

Discussion/Conclusions: The first changes that occurred in the mental health system and mental health care delivery since 2006 can be attributed to the implementation of the mental health plan. However, the developments that took place after 2010, when the economic crisis became more severe, cannot be dissociated from a crisis that led to a decrease of the health budget, a suspension of the political support to mental health reform, a sudden rise of unemployment, and a general decrease of salaries. The increasing pressure on the mental health services and the significant increase in the prescription of antidepressants and atypical antipsychotic drugs observed in this second period seem clearly related to the escalation of the crisis. We can conclude that the economic crisis, more evident after 2010, significantly interfered with the implementation of the mental health reform, interrupting many of the changes previously initiated. It also had a significant impact on the utilization of mental health services and led to an increase in the use of psychotropic drugs.

Funding: None declared. **Keywords:** Economic crisis, impact, mental health services delivery, use of services.

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S20 – 2 Mental health risks of economic crisis at primary care level in Spain

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Background/Objectives: Most European countries have been affected by the economic crisis that began in 2007, but the consequences have been among the worst in Spain. Research published before the financial crisis of 2008 suggests that economic difficulties contribute to poorer mental health. To investigate the association of the economic crisis and of recession on the frequency of mood, anxiety, somatoform, alcohol-related and eating disorders among people visiting primary care settings in Spain. **Methods:** A large number of primary care physicians that agreed to participate in the study selected randomized samples of patients attending their primary care centers, representing Spain's consulting populations. This procedure was carried out in 2006-07 and again in 2010-11, providing a total sample of 7940 patients that were interviewed with the Primary Care Evaluation of Mental Disorders (PRIME-MD) instrument to assess the presence of psychiatric morbidity. **Results:** The IMPACT study conducted in Primary Health Care consultation in Spain showed a significant increase in common mental disorders. Mood disorders increased by 19% between 2006 and 2010; anxiety disorders by 8% and alcohol abuse disorders by 5%. There were also gender differences, with increased alcohol dependence in women during the crisis period. Unemployment was the most important risk factor for this increase. In parallel, recent years have seen an increase in consumption of antidepressant drugs, although not a significant increase in the number of suicides. **Discussion/Conclusions:** Some proposals to reduce the impact of the crisis in mental health will be discussed: increased community services, employment activation measures, active policies to reduce alcohol consumption and prevention of suicidal behavior, particularly among young people. **Funding:** None Declared **Keywords:** Economic crisis, impact, psychiatric disorders, primary care.

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S20 – 3 Research strategies to better understand the crisis impact on mental health – the SMAILE project

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Background/Objectives: Mental health results from the interaction of biological, psychological, social and contextual factors. Actual evidence suggests that some environmental aspects can influence mental health independently from or beyond individual characteristics. The main objective of the SMAILE Research Project is to assess the effect of environmental and territorial determinants on the mental health of the population and on the use of mental health services in times of an economic and social crisis. **Methods:** The SMAILE project started in July 2013 and will end in 2015, and involves a team of professionals from such diverse fields as mental health, geography, public health, and economy. It includes an assessment of the use of mental health ambulatory and admission services in seven representative areas of Portugal, in 2002 and 2012. It will also involve an assessment of the evolution in the number of suicides, and the prescription of psychotropic drugs in the last ten years. Simultaneously, data will be collected on contextual, environmental, economical, and social determinants in 2002 and 2012. **Results:** The innovative SMAILE project general outline will be presented, as well as some preliminary results from the assessment of the mental health care delivery in seven representative areas of Portugal, comparing 2002 and 2012. According to the literature mental health is associated with the characteristics of the living area (per capita income average, level of unemployment,

residential stability, family structure, social capital and cohesion, quality of built environment and ethnic diversity), social changes, and economic crises. **Discussion/Conclusions:** Portugal is one of the European countries with the highest prevalence of mental disorders, and one of the more strongly affected by the economic crisis. In this context, the evaluation of the impact of contextual characteristics in mental disorders is particularly important in order to establish cost-effective strategies aimed at promoting mental health and reducing the prevalence of psychiatric morbidity of the populations. **Funding:** Fundação para a Ciência e Tecnologia (FCT) - Portugal. **Keywords:** Economic crisis, impact, psychiatric disorders, social context.

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S20 – 4 Family Burden for Relatives of Patients with Schizophrenia in an Era of Severe Socio-economic Crisis

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Background/Objectives: The trend towards community care offered to treat mental illness has burdened the providers of primary health care and, more than all, families. As a result, numerous studies have focused on the burden of care experienced by family members living with individuals with severe mental disorders. This kind of provision also poses a significant cost to society at large in terms of significant direct and indirect costs; a cost that may be even higher in societies under austerity measures. Therefore, this study aims to examine the burden that the family members experience by caring for individuals with schizophrenia and to identify the parameters, in a micro and macro level, that affect family burden. Secondly, this study aims to investigate whether the welfare state will be fit to help vulnerable groups as the one studied during periods of austerity measures being implemented into welfare systems. **Methods:** For data collection purposes we used the Involvement Evaluation Questionnaire. Participants in this study were either living in rural or urban areas of the district of Nicosia, the capital of the Republic of Cyprus. Those people were attending regular meetings with their allocated Community Psychiatric Nurses (CPN) in Community Mental Health Centres (CMHC). **Results:** Analysis of covariance (ANCOVA) was applied with tension, supervision, worry, and encouragement entered as dependent factors. In each case, participant's age, sex, marital status, income, number of people living in the same house with the participant, degree of relationship between the participant and the person suffering from severe mental disorder, the age of the relative, and the sex of the relative, were entered as independent factors. Four ANCOVAs were performed, one for each dimension of the family burden. The results from this analysis produced only one significant main effect of the sex of the relative on supervision [$F(1,118) = 4.40, p = .011, p_2 = .053$] with male relatives suffering from schizophrenia requiring higher supervision than females, as indicated by their relative caregivers. **Discussion/Conclusions:** Consequently, families under great stress due to the weaknesses of the welfare system described throughout this study might give up care of the mentally ill individuals. Therefore, health systems need to aim to develop psychosocial provisions for both family caregivers and patients in order to decrease the family burden rates and increase the possibility of smooth transition to the society. **Funding:** Self-Funded. **Keywords:** Family burden, patients with schizophrenia, welfare state, economic crisis.

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S20 – 5 Medicalization of the Uncertainty? An Empirical Study of the Relation between Unemployment/Job Insecurity, Professional Care Seeking and the Consumption of Antidepressants

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Background/Objectives: Besides the concerns about the treatment gap in mental health care, more and more researchers pay attention to the medicalization of daily life. In a European context characterized with a substantial growth in the use of antidepressants and, at the same time, economic instability, research that investigates how the observed negative mental health consequences of unemployment and job insecurity translate in general and in specialized mental health care and psychotropic drug use requires more attention. This study has tried to provide an answer to the following research questions: Are unemployment and job insecurity related to general and specialized professional care seeking and antidepressant use? Can we explain these differences in professional care seeking and antidepressant use by differences in the need for care (need hypothesis)? If not, have the unemployed and/or those with job insecurity lower (unmet need) or higher (medicalization hypothesis) professional care and antidepressant use, when taking mental health into account? And do these associations differ by gender?

Methods: The data of the Eurobarometer 345 (2010) are used to perform gender differentiated multilevel logistic regression analyses, with GP-consultations, psychiatrist consultations and antidepressant use as dependent variables.

Results: Our results have shown that, in accordance to the need hypothesis, part of the professional care use for emotional health problems and antidepressant use among the unemployed and those in insecure jobs is associated with worse mental health status. In addition, medicalization processes also occur: Unemployed men are 3,5 and women 2,5 times more likely to consult a psychiatrist, and also one and a half times more likely to use antidepressants, irrespective of mental health. Also an enhanced antidepressant consumption among women in insecure jobs and more GP consultations for emotional health problems among their male counterparts are observed: After controlling for need for care, women in insecure jobs are 1,3 times more likely to use antidepressants and men in insecure jobs are 1,2 times more likely to contact a GP because of mental health problems compared to the employed with job security.

Discussion/Conclusions: In conclusion, evidence is found for both the need hypothesis as well as the medicalization hypothesis. We cannot conclude that women are more vulnerable to medicalization than men. Our study has confirmed that the dichotomy based on employment status is still relevant in research about mental health (care use), but that it is also very important to recognize differences within the group of employed, particularly between the employed with and without job security. In post-industrial economies and especially in times of economic instability, researchers and policy makers have to pay attention to the employed in insecure jobs, since they are greater in number and can also be considered as a risk group for mental health problems with a high demand of care.

Funding: None Declared. **Keywords:** Unemployment, job insecurity, professional care seeking, antidepressant consumption.

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S21 – The Course of Mood and Anxiety Disorders: Results from Population-Based and Clinical Studies

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Background/Objectives: Mood and anxiety disorders are characterized by high rates of chronic developments and recurrences of illness episodes. The speakers of this symposium will present data on the course and outcome of these disorders and their determinants from general population studies and from clinical studies. Martin Preisig (Lausanne, Switzerland) will focus on the prospective associations between mood disorders and the components of the metabolic syndrome using data from PsyCoLaus, a large population-based cohort study including psychiatric and physical evaluations conducted in Lausanne. He will also provide data on the role of inflammatory processes in the association between major depressive disorder subtypes and the metabolic syndrome. Ingmar Skoog (Gothenburg, Sweden) will report data on the life-time prevalence and long-term prognosis of depression in a population sample of women followed from midlife to late-life from the Prospective Population Study of Women in Gothenburg. Jan Spijker (Utrecht, Netherlands) will provide results on the two year course of anxiety and depression and related predictors in the Netherlands Study of Depression and Anxiety (NESDA), a longitudinal, observational study on primary care and specialised mental health care patients with anxiety and depression. Chronicity and recurrences are particularly high in patients referred to specialised mental health care services. Christine Kuehner (Mannheim, Germany) will present results on the long-term course of depression and predictors of chronicity, recurrences, and psychosocial functioning in psychiatric inpatients with depressive disorders who were followed up to five years after discharge in a multi-wave longitudinal study. Jules Angst (Zurich, Switzerland) will present data on the long-term course and mortality of patients with manic, bipolar and depressive disorders. He will use data on treated subjects, who have been followed-up over more than 50 years, and data from the Zurich Cohort Study based on a representative sample of the general population. **Funding:** None declared.

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S21 – 1 The role of inflammatory processes in the prospective association between depression and the components of the metabolic syndrome

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Background/Objectives: Inflammation is postulated to be one of the mechanisms underlying the association between mental disorders and cardiovascular diseases. However, previous studies focusing on the role that inflammatory processes play in the association between depression and cardio-vascular risk factors have provided inconsistent results. Accordingly, the aims of the present study were to prospectively determine 1) the associations between depression subtypes and the incidence of components of the MeS and 2) the potential mediating role of inflammatory processes in these associations.

Methods: Data stemmed from the baseline and 5-year follow-up assessment of the PsyCoLaus Study. This community study included 3717 35 to 66 year-old randomly sampled residents of the city of Lausanne (Switzerland), who underwent an extensive biochemical, physical and psychiatric evaluation (53.3% females; mean age 51.0 years). A 5-year follow-up including a similar biochemical and physical follow-up evaluation with 87% participation has recently been completed. DSM-IV Axis-I criteria were elicited using the semi-structured Diagnostic Interview for Genetic Studies. Major Depressive Disorder (MDD) was subtyped into “atypical”, “melancholic”, “combined atypical-melancholic” and “unspecified”. The levels of high sensitive C-reactive protein (hsCRP) and pro-inflammatory cytokines (IL-1, IL-6 and TNF-) were measured using blood samples at baseline and follow-up.

Results: Subjects with the atypical subtype of MDD at baseline revealed a higher increase in adiposity during the follow-up than subjects without MDD. The associations between this MDD subtype and the BMI and the incidence of obesity remained significant after adjustments for sociodemographic and lifestyle characteristics, psychiatric comorbidities and drug treatment. There was also a strong prospective association between atypical depression and the development of the metabolic syndrome during the follow-up, which was independent of weight gain. Regarding inflammatory processes, the baseline hsCRP level was associated with the incidence of a metabolic syndrome. However, this association disappeared after the adjustment for the baseline BMI.

Discussion/Conclusions: The atypical subtype of MDD, and only this subtype, is a strong predictor of obesity and the metabolic syndrome. Our data did not provide evidence for a mediating role of inflammatory processes in the association between atypical depression and the metabolic syndrome. The elevated levels of inflammation markers in subjects exhibiting this type of depression are likely to be the consequence of weight gain in these subjects. The strong association between the metabolic syndrome and specifically the atypical MDD subtype emphasizes the need to identify subjects with this subtype of MDD in both clinical and research settings. Therapeutic measures to diminish the consequences of increased appetite during depressive episodes with atypical features are advocated. **Funding:** The study was supported by two unrestricted grants from GlaxoSmithKline to build the cohort and to complete the physical and psychiatric baseline investigations. The psychiatric baseline investigation was also supported by two grants of the Swiss National Science Foundation (#105993 and 118308 to MP). The physical and psychiatric follow-up investigations were supported by two other grants of the Swiss National Science Foundation (#139468 and 122661 to MP).

Keywords: Longitudinal studies, mood disorders, depression, metabolic syndrome, inflammation.

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S21 – 2 A population study on depression in women followed from midlife in 1968 to late-life in 2009

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Objective: To study the life-time prevalence and longtime prognosis of depression in a population sample of women followed from midlife to late-life. **Methods:** The study is part of the Prospective Population Study of Women in Gothenburg, Sweden, which started in 1968 with subsequent follow-ups in 1974, 1980, 1992, 2000, 2005, and 2009. Psychiatric examinations were performed at baseline and at all follow-ups. 800 women aged 38-54 years (born in 1914, 1918, 1922 and 1930) were examined at baseline. Major depression was diagnosed according to DSM-IV based on examinations, history, medical records and the Swedish Hospital Discharge Register. Final diagnoses were made by consensus by four senior psychiatrists. **Preliminary results:** Up to 1968, 285 (35.6%) were evaluated as having had major depression during their life. During the 41-years of follow-up, another 52 individuals (6.5%) developed first onset major depression, giving a life-time prevalence of 42.1%. Among those with major depression at the examination 1968, 38.5% of the survivors had major depression also after age 70 (after 24-41 years), compared to 12.8% of those without depression in 1968. **Conclusions:** Major depression is common in a life-time perspective in women. A large proportion of depression in midlife continues into old age. **Funding:** Swedish Research Council, Swedish Research Council for Health, Working Life and Welfare **Keywords:** Longitudinal studies, mood disorders, lifetime prevalence, long-term prognosis, depression.

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S21 – 3 Two year course of anxiety and depression: results from NESDA (The Netherlands Study of Depression and Anxiety)

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Background/Objectives: The Netherlands Study of Depression and Anxiety (NESDA) is a multi-site naturalistic cohort study to describe the long-term course and consequences of depressive and anxiety disorders and to examine (interaction between) predictors of the long-term course and consequences. **Objective:** To determine the two year course of anxiety and depression. **Methods:** The baseline sample consists of 1701 persons participants aged 18 through 65 years with a current (six-month recency) diagnosis of depression and/or anxiety disorder, 907 persons with life-time diagnoses or at risk because of a family history or subthreshold depressive or anxiety symptoms, and 373 healthy controls. Recruitment took place in the general population, in general practices and in mental health organizations in order to recruit persons reflecting various settings and developmental stages of psychopathology. During baseline assessment extensive information was gathered about key (mental) health outcomes and demographic, psychosocial, clinical, biological and genetic determinants. **Results:** Lifetime comorbidity between anxiety and depressive disorders is high and ranged between 63-81%. Course is better for pure depression compared to pure anxiety. Worse course was found in comorbid anxiety-depression. Childhood trauma was associated with poor course. Course trajectories of unipolar depression do not match with DSM classifications and recurrence rates of depression were not different in different care settings. Those with multiple anxiety disorders had a worse course compared to a single anxiety disorder. **Conclusions:** The findings of NESDA provide more detailed insight into (predictors of) the long-term course of depressive and anxiety disorders in adults. The results may contribute to more effective prevention and treatment of depressive and anxiety disorders. **Funding:** The infrastructure for the NESDA study is funded through the Geestkracht program of the Netherlands Organisation for Health Research and Development (Zon-Mw, grant number 10-000-1002) and is supported by participating universities and mental health care organizations (including VU University Medical Center and Netherlands Institute of Mental Health and Addiction (TrimbosInstitute)). **Keywords:** Longitudinal studies, mood disorders, depressive disorders, anxiety disorders, long-term course, predictors.

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S21 – 4 Factors predicting the long-term illness course in a cohort of depressed inpatients

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Background/Objectives: Depressive disorders are characterized by high rates of recurrence and chronic developments, particularly in treated patient samples. The identification of relevant predictors related to course and outcome is of particular importance for tertiary prevention. In this study, we assessed factors influencing the prospective five-year course and outcome of illness in a cohort of depressed patients. **Methods:** A cohort of 71 patients suffering from major depression or dysthymia was comprehensively assessed one, six, 36, and 60 months after discharge from inpatient treatment. Predictor measures included demographic and clinical variables, as well as cognitive vulnerability and social support measures assessed one month after discharge. Outcome variables were time in remission, relapse/recurrence rates, and course of psychosocial functioning over the 5-year interval. **Results:** During the 5-year observation period, 12% of patients spent less than 50% of time in remission, and 55% of those remitted at discharge suffered a relapse or recurrence, three patients developed a bipolar course. Mean psychosocial functioning was below normal functioning at all assessment points. Predictors of nonremission, relapse/recurrence, and psychosocial functioning were only partly overlapped. Depression levels after discharge and unsatisfactory relationships within the support network predicted all outcomes. Early onset, longer episode duration prior to study entry, and state orientation predicted time spent in episodes. Further predictors of time to recurrence included number of previous hospitalizations and lack of psychotherapy after discharge. Long-term psychosocial functioning was additionally predicted by previous hospitalizations, duration of index episode, and state orientation. **Conclusions:** Our results demonstrate a highly recurrent and chronic illness course in depressed psychiatric inpatients. Identified predictors point to the need of treating depressive episodes to full remission. Psychological interventions should explicitly address patients' interpersonal needs and possible deficits. **Funding:** Deutsche Forschungsgemeinschaft (KU1464/1-1,3,4, KU1464/4-1,2) **Keywords:** Longitudinal studies, mood disorders, depression, long-term course, predictors.

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S21 – 5 Long-term course and mortality of patients with manic, bipolar and depressive disorders

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Background/Objectives: Long-term course, long-term outcome and mortality are validators for psychiatric diagnostic concepts and of great clinical relevance. Decisions on the long-term treatment of patients are mainly based on retrospective information; additional data from prospective studies, if possible of both patient and epidemiological samples, are needed. This presentation will contribute recent research data of both types. **Methods:** In a lifelong study of 406 mood disorder patients admitted to Zurich University Psychiatric Hospital between 1959 and 1963, 403 patients were assessed clinically until 1985; data on their mortality were subsequently collected from the Swiss Federal Register until 2009. Results are presented as standardised mortality ratios. In a second study a representative age cohort of the general population was investigated from age 20 to 50 by seven professional interviews (1979 to 2008); the diagnoses of major depressive episodes and mania were based on DSM-III-R. **Results:** In the clinical study the diagnostic spectrum consisted of Mania (M), Bipolar-I Disorder (BP-I), Bipolar-II Disorder (BP-II) and Major Depressive Disorder (MDD); by 2009, 87% of the patients had died. There was a systematic decrease in suicide rates across the spectrum MDD>BP-II>BP-I>M but a reverse trend for cardiovascular deaths, which were highest among manic patients (M) without Major Depressive Episodes (MDE). Long-term treatment with lithium, neuroleptics and antidepressants was strongly associated with reduced deaths by suicide with some additive effects by combination. Patients with bipolar disorders experienced more and shorter episodes per year than those with MDD; the chronicity rates were similar. There were clear associations of personality types with subgroups of affective disorders: melancholic, anxious-insecure and unrealistic-dreamy types were more common among patients with MDD, whereas the manic type predominated in patients with mania. In the epidemiological study chronicity rates were similar in BP and MDD but tended to be higher in minor depressive than in minor bipolar disorders. However, on the Symptom Checklist 90-R (given 9 times from 1978 to 2008) subjects with BP reported more depressive symptoms than those with MDD and women also consistently reported more depressive symptoms than men. **Discussion/Conclusions:** The findings favour the separation of mania from bipolar disorders, which is compatible with newest reports on the genetic independence of mania from depression. They also demonstrate the clinical importance of minor mood disorders. The gender difference in reporting depressive symptoms calls into question the current identical thresholds for MDE in both sexes. Research should collect more descriptive clinical data than required by DSM-5 or ICD in order to investigate the validity of current diagnostic concepts. **Funding:** Original Funding by Swiss Science Foundation Grants No 3.804.76, 3.957.80, 32-9502/3 / 3.873.088, 32-33980-92, 3200-050881.97/1. **Keywords:** Longitudinal studies, depressive disorders, bipolar disorders, mortality.

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S22 – Assuring and benchmarking the quality of mental health services

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Background/Objectives: Improving the quality of care is one of the top objectives in many health policy strategies. Therefore more and more health systems implement quality assurance systems. Quality assurance systems aim to improve the quality of care by providing feedback to service providing institutions on their strengths and weakness in service provision. They also hold valuable information for health system and service planning. Internationally, an increasing number of health services are implementing quality assurance systems that assess processes and outcomes using a range of indicators and standardized measures. These systems provide opportunities for benchmarking and comparing the quality of care of services locally, nationally and internationally and ultimately, driving up standards. This symposium presents different approaches to quality assurance systems in mental health care across Europe. These include voluntary systems for assessing and benchmarking the quality of long-term facilities, exemplary research projects as well as mandatory data reporting as part of a national public health strategy:

- The EU-Refinement Project aims at assessing the quality of mental health care in eight European Countries. Therefore they developed a selection of core indicators that were assessed in the participating countries. Outcomes of this assessment will be presented.
- France looks back on 13 years of experience with statutory quality assurance in mental health care at a national level. For quality assessment, primarily accreditation methods are used. Experiences during time will be discussed.
- In Germany statutory quality assurance is planned to be implemented for mental health care. The scopes and challenges of this project, that as a national policy project takes a different pace than research projects, will be described.
- The Quality Instrument for Rehabilitative Care (QuIRC) was developed in the European DEMoBInc project. It aims at assessing and benchmarking the quality of long-term mental health care facilities. Results from the implementation of QuIRC in various countries also beyond the DEMoBInc partners are presented.
- In Portugal, all residential facilities for people with long-term mental disorders have been assessed using QuIRC. Based on these data an intervention to improve the skills and the quality of care delivered by the staff working there was carried out. The outcomes of the quality of rehabilitative care and of the intervention effectiveness in the residential facilities in Portugal will be presented.
- The discussion will focus on the challenges of introducing quality assurance in mental health care, requirements for feedback to institutions to translate quality assessment into quality management and the gains and challenges that could potentially come along with benchmarking institutions on their quality.

Funding: None declared.

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S22 – 1 Quality of mental health and social care in Europe. The REFINEMENT project experience

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The REFINEMENT (REsearch on FINancing systems' Effect on the quality of MENTAL health care) Workpackage 8 "Quality of Mental Health care and met/unmet needs" aims to identify indicators of performances and outcomes of mental health care and social care and to compare quality of mental health care in the 9 European REFINEMENT countries. The Refinement QUALITY of care toolkit (Requalit) was developed to describe the various aspects of the mental health system quality within the European Union context. The measures included in the Requalit try to cover the different system phases (input, process and outcome level) and quality of care dimensions (e.g. accessibility, continuity, appropriateness, effectiveness). As mental health care takes place in a variety of settings throughout the health and social care system, Requalit takes into account different integrated and connected features - primary care, inpatient, outpatient and community services, health and social care. A large number of possible indicators and measures resulted from a search for indicators in reports of health and mental health international organisations and in published papers on electronic databases. Selection of indicators was based on feasibility and relevance through experts' evaluations using likert scales and during meetings with REFINEMENT partners. Both statistical indicators (e.g. readmission rate) and survey based measures of quality (e.g. quality of life assessment) were considered. The first indicators were calculated by using administrative data systems, often hospital administrative databases or national/regional health/mental health registries. The second ones were described in each country on the basis of published data or stakeholder interviews (e.g. information on the presence/absence of a regulation). The main results of statistical indicators in eight of the REFINEMENT countries will be reported in the presentation. These indicators provide crucial data on different dimensions of mental health system performances in European countries. **Funding:** None declared. **Keywords:** Service quality, benchmark, indicators.

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S22 – 2 Developing a mandatory cross-sectoral quality assurance system in mental health care in Germany

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In the German health care system quality is assured by mandatory quality assessment using indicators. As such, mandatory quality assurance is currently implemented in 30 clinical areas, most of them surgical. In 2012 the highest decision-making body in German health care, the Federal Joint Commission, commissioned the AQUA-Institute to develop cross-sectoral quality assurance in mental health care. As the target group for mandatory quality assurance in mental health care patients with a severe course of mental illness were chosen. Further, it was decided to assess quality along the whole service chain including in- and outpatient care, and base quality assessment as much as possible on administrative data. Finally it was wished to include patient and family views in quality assurance. The presentation outlines the legal and technical constraints, under which mandatory quality assurance in mental health care has to operate in the German health care system. It further outlines, what these constraints imply for the contents of the quality assurance system to be developed and for its implementation. **Keywords:** Service quality, benchmark, legislation, quality assurance.

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S22 – 3 The "PromQual" study – promoting and assessing quality of care in longer term mental health facilities in Portugal

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Background/Objectives: a. Assessing the quality of care, living conditions, and rehabilitation of people in long-term psychiatric and social institutions; b. Developing a new training intervention for the institutions' staff, to improve quality of care and rehabilitation programmes; c. Evaluating the effectiveness of the intervention. **Methods:** An RCT is being carried out. All the existing units in Portugal were assessed at baseline with the Quality Instrument for Rehabilitative Care (QulRC) completed online by the manager, and face-to-face interviews with the Service User Interview Schedule with a random sample of service users. The intervention consisted of workshops attended by the managers and the staff of the residential units in the intervention arm; and of a 4-week local intervention delivered by one occupational therapist and one activity worker to help local professionals integrate the knowledge and skills gained from the workshops into their everyday work with residents. Units are being reassessed at 4 and 8-months after training is completed using the baseline instruments. All managers and users gave their informed consent. **Results:** The majority of the residential units assessed (n=42) were in Lisbon and surrounding districts (59.5%), 50% were in hospital surroundings and 50% in the community, and had a mean number of 11.5±6.9 beds [5-31]. The QulRC mean score was 52.5% [26.6-78.8%], and did not differ from the European mean score in most of the dimensions. The interviewed users (n=278) were mainly men (66.2%), had a mean age of 49.4±10.6 years [23-83], and studied on average 9.1±4.9 years [0-30]. **Conclusions:** The baseline assessment showed significant problems in several areas of the quality of care provided by the residential units. The training intervention was already carried out in half of the units without major problems, proving its feasibility. The final assessment will be complete on March 2014. **Funding:** General Health Directorate, Ministry of Health. **Keywords:** Service quality, benchmark, quality of care, rehabilitation.

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S22 – 4 The development, application and dissemination of QuIRC, Quality Indicator for Rehabilitative Care

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Background/Objectives: This presentation will report on the development and application of an internationally validated quality assessment tool for longer term mental health care facilities, the Quality Indicator for Rehabilitative Care (QuIRC).

Methods: The presentation will detail the methods used to build the tool that ensured its content validity and reliability. The online tool has been collecting data from not only the original countries involved in DEMoBInc but further European countries and outside Europe. This online resource will be analysed to illustrate the range of countries and units using the tool.

Results: Examples of how the QuIRC is being incorporated into national quality assessment processes will be given. The range of QuIRC ratings across countries will be presented. For those units who have completed QuIRC more than once, change on the domains of QuIRC will be examined.

Conclusion: QuIRC is being widely used across Europe and further afield. With quality assurance systems becoming mandatory in many settings it is an excellent example of a rigorously developed tool which has shown to be widely applicable and of significant utility.

Funding: The DEMoBInc study was funded by the Sixth Framework of the European Commission. **Keywords:** Service quality, benchmark, longterm care.

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S22 – 5 13 years of experience in accrediting mental health care organizations in France

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A mandatory system of hospital accreditation was established 13 years ago in France to regulate the quality and safety of care and ensure improvement in healthcare organizations. The accreditation of healthcare organisations is conducted by the HAS Haute Autorité de Santé, an independent publicly funded national body. It is compulsory for all public and private healthcare organisations. It engages each healthcare organisation in a process of improvement, including internal assessment and an independent external evaluation of quality in the organisation. It includes :

- a self-assessment phase, during which professionals and patient representatives are invited to evaluate the functioning of the organisation with reference to the Accreditation Manual;
- an on-site visit, called the initial visit, conducted by healthcare professionals who have been appointed and trained by HAS, known as surveyors;
- the production of a report including observations and any recommendations or reservations. These indicate improvements that need to be made, and are classified according to their severity: recommendations, reservations or major reservations;
- validation and publication of the report, any recommendations or reservations, and the corresponding level of decision made by the HAS Board.

The mental health care organizations undergo the same accreditation process as the other health care organizations in France.

The presentation will point out:

- the history of accreditation in mental health care organizations in France and the challenges of balancing out equity, standardization and the need for a clinically relevant approach;
- the specific quality problems and strengths of the mental health organizations seen through accreditation data, i.e several thousand reports and recommendations;
- the expectations of the stakeholders of the mental health care field to ward accreditation and the controversies and discussions between the HAS and the actors of the mental health field care that arose throughout the years.

The presentation will bear on quantitative descriptive analysis of accreditation data, documentary review of mental health organizations' files and interviews of stakeholders in the mental health care field.

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S23 – Use of Coercion in Mental Health Services in different European countries: Legislation, politics, data, developments

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The aim of this symposium is to compare the development in the use of coercion in four different European countries (Germany, United Kingdom, Netherlands, Switzerland). Though economic development and development of civil rights have been on a comparable level in these societies within the last decade, attitudes towards the use of different aspects of coercion differ considerably among psychiatrists as well as in public opinion. Each presenter will address the following aspects in his country, based on available evidence and knowledge of legislation and political discussions:

1. Changes in legislation within the last decade: In some countries, in particular, the use of involuntary medication has been the subject of more in-depth regulations. Also legislation regarding guardianship and involuntary outpatient commitment underlies changes.
2. Involuntary admission procedures: These procedures differ to a considerable extent both between countries and within countries. Correspondingly, rates of involuntarily admitted patients show high differences which are poorly explained.
3. Involuntary outpatient treatment: Attitudes towards involuntary outpatient treatment are very different among professionals as well as in the public. The legal framework has developed in opposite directions in different European countries. Evidence on the efficacy of such measures is increasingly available.
4. Use of involuntary medication: Involuntary medication has been basically banned in the Netherlands for many years, while it has been widely used in the UK and in Germany. In Germany, a decision of the Constitutional Court required changes of legislation which increased the threshold for the use of involuntary medication considerably. There is some evidence that mechanical coercion such as mechanical restraint and seclusion increased as a consequence.
5. Use of seclusion, restraint, and other containment measures: The use of these interventions is very different among the four countries. Data are increasingly available and reliable due to the introduction of electronic charts and electronic data management systems.
6. Changes in clinical practice: This refers to aspects such as introduction of new interventions, increased requirements for surveillance, training of techniques and use of guidelines.
7. Expected developments: This refers to developments in all areas mentioned above, as far as is foreseeable. **Funding:** None declared.

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S23 – 1 Use of coercion in mental health services in Germany

Tilman Steinert

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Background/Objectives: The use of different aspects of coercion in mental health care currently underlies extensive ethical, legal and professional discussions and aspects of clinical practice have been changing within the last decade.

Methods: based on available evidence and knowledge of legislation and political discussions, an overview is given on the following aspects in Germany:

1. changes in legislation within the last decade
2. Involuntary admission procedures
3. involuntary outpatient treatment
4. use of involuntary medication
5. use of seclusion, restraint, and other containment measures
6. changes in clinical practice
7. expected developments

The data base on the use of coercive measures in mental health services is continuously improving. Guidelines and de-escalation trainings are widely in use. Less restrictive interventions such as holding techniques instead of mechanical restraint are being introduced in several hospitals. The legal requirements for the application of involuntary medication have been considerably increased and the awareness for the critical impact on patients' autonomy has increased among professionals. However, there is some concern and some evidence that disapproval for the use of medication can lead to an increased use of mechanical coercion such as seclusion and restraint.

Discussion: Further evidence is needed on the short-term and long-term effects of different coercive measures. The financing system for psychiatric hospitals to be introduced within the next years probably will be an obstacle to a further reduction of the use of coercion.

Source of funding: none declared. **Keywords:** Coercion, legislation, coercion, Germany.

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S23 – 2 Use of coercion in mental health services in Switzerland*Matthias Jaeger**Psychiatric University Hospital Zurich, Switzerland*

Background/Objectives: The use of different aspects of coercion in mental health care currently underlies extensive ethical, legal and professional discussions and aspects of clinical practice have been changing within the last decade.

Methods: based on available evidence and knowledge of legislation and political discussions, an overview is given on the following aspects in Switzerland:

1. changes in legislation within the last decade
2. involuntary admission procedures
3. involuntary outpatient treatment
4. use of involuntary medication
5. use of seclusion, restraint, and other containment measures
6. changes in clinical practice
7. expected developments

In 2013 a new legislation concerning several aspects of involuntary admission, mandatory treatment and legal guardianship has been introduced in Switzerland (Kindes- und Erwachsenenschutzrecht, KESR). The revision of relevant chapters of the civil code led to various discussions among mental health professionals and on a societal level about the implications on clinical practice and quality management. Before the introduction, formal and factual criteria as well as procedures of involuntary admission varied considerably between cantons, regions and authorities. Attitudes of mental health professionals and the general population towards psychiatric patients and involuntary treatment practices are intertwined with the legislation.

Discussion: The effects of the new legislation concerning admission procedures, treatment practices and staff attitudes are discussed. Measures of involuntary treatment have been introduced in basic documentation (PSYREC) on a national level in 2012. Evaluations of changes in clinical practice associated with alterations in legislation are needed. Source of funding: none declared. **Keywords:** Coercion, legislation, Switzerland.

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S23 – 3 Use of coercion in mental health services in the Netherlands*Eric Noorthoorn**GGNet, Netherlands*

Background/Objectives: The use of different aspects of coercion in mental health care currently underlies extensive ethical, legal and professional discussions and aspects of clinical practice have been changing within the last decade.

Methods: based on available evidence and knowledge of legislation and political discussions, an overview is given on the following aspects in the Netherlands:

1. changes in legislation within the last decade
2. Involuntary admission procedures
3. involuntary outpatient treatment
4. use of involuntary medication
5. use of seclusion, restraint, and other containment measures
6. changes in clinical practice
7. expected developments

Legislation from 1994 onwards aimed at the integrity of the patient, thus legislation allowed for the regulating of admissions, but not necessarily enforced treatment. This legislation led to an increase in the use of seclusion. Data gathered in 2002 showed high figures of seclusion use compared with other nations. Reduction efforts were implemented, as supported by substantial governmental support of over 35 million Euro in 7 years. Currently, the figures of seclusion use are more comparable with international rates, however, comparisons are hard to make, given that the accuracy of the previous data is questionable. Most importantly, the law was changed in 2008, relieving a number of restrictions. New mental health legislation is planned to be implemented in 2015 and is designed in accordance with the English example.

Keywords: Coercion, legislation, Netherlands.

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S23 – 4 Use of coercion in mental health services in the United Kingdom*Andrew Molodynski**Department of Psychiatry, University of Oxford, UK*

Background/Objectives: The use of different aspects of coercion in mental health care currently underlies extensive ethical, legal and professional discussions and aspects of clinical practice have been changing within the last decade.

Methods: based on available evidence and knowledge of legislation and political discussions, an overview is given on the following aspects in the UK:

1. changes in legislation within the last decade
2. Involuntary admission procedures
3. involuntary outpatient treatment
4. use of involuntary medication
5. use of seclusion, restraint, and other containment measures
6. changes in clinical practice
7. expected developments

In the UK, mechanical restraint is not allowed. Instead, physical restraint (holding) is used and staff members are extensively trained in the required techniques. Staff levels are about twice in comparison to Germany. However, mostly only involuntary patients are admitted to psychiatric hospitals. Seclusion rooms are used in some hospitals, but others manage violent patients without such measures. Supervised community treatment orders (CTO) were introduced in England and Wales in 2008. In 2013, a large multicentre RCT (OCTET study) revealed that the CTO group had not less involuntary readmissions compared to a group with treatment as usual. The use of involuntary medication is not a topical subject of discussion.

Funding: None declared. **Keywords:** Coercion, legislation, United Kingdom.

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S24 – Comorbidity and health service use*Laura Goodwin**Institute of Psychiatry, King's College London, UK*

This symposium will focus on research studies which examine the consequences of comorbidity on health service utilisation. A common theme across these papers is that individuals with a comorbidity are more likely to utilise services compared to those without. The focus of the papers ranges from mental health comorbidity in different polydrug groups, to physical health comorbidity in patients with a serious mental illness, and a study examining ethnic inequalities in relation to mental health service use.

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S24 – 1 Mental-physical comorbidity and mental health service use

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Background/Objectives: Mental illness and chronic physical conditions incur substantial individual and societal burdens. Their reciprocal relationship means that the burden of both is amplified rather than additive, especially for psychotic disorders. Although mental and physical illnesses share social risk factors, limited research examines mental-physical comorbidity inequalities. This study aimed to 1) estimate comorbidity prevalence, and 2) examine the representation of socially disadvantaged characteristics across comorbidity groups. Hypothesis: greater inequalities would be observed as mental illness co-occurred with physical illness and became more severe.

Methods: In a cross-sectional community survey we ascertained physical illness through self-report, common mental disorder (CMD) using the Clinical Interview Schedule Revised, and psychotic symptoms (PS) using the Psychotic Screening Questionnaire. We estimated comorbidity prevalence, and compared inequalities by socio-demographic and socio-economic characteristics across groups of non-comorbid mental illness, CMD-physical comorbidity, and PS-physical comorbidity, relative to “no mental illness” in adjusted multinomial regression models. Confounders included in the fully adjusted models were gender and/or age, childhood trauma, life-time trauma, self-rated health and health behaviours (smoking and hazardous alcohol use). Logistic regression models examined comorbidity in relation to past-year service use due to mental health problems, measured through self-report. Adjustments were made for the previously outlined confounders and household income.

Results: Physical illness in mental illness was common (>55%). Stark socio-economic inequalities were observed. In the final models inequalities by household income, non-working employment status, and benefits receipt increased from non-comorbid mental illness, through CMD-physical comorbidity, to PS-physical comorbidity, supporting the hypothesis. The PS-physical group was at seven-fold increased risk of placement in the lower income category, relative to the reference. Migrant status and ethnicity were not distributed as hypothesised. Those in the CMD- and SMI-comorbidity categories were over 4.5 more likely to report service use for mental health problems compared to those without mental illness, while those who reported non-comorbid mental illness symptoms were at 3.7 elevated risk of service use.

Discussion/Conclusions: Important socio-economic inequalities in comorbidity were found which increased with mental illness severity. Barriers associated with socio-economic disadvantage and comorbidity should be considered in planning services to enable equitable healthcare access and reduce inequalities.

Funding: National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity. L. Aschan receives an Institute of Psychiatry Excellence Studentship from the Institute of Psychiatry, King's College London. (PALKYIB)

Keywords: Comorbidity, mental health, health services inequalities, mental-physical comorbidity.

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S24 – 2 The associations of polydrug use and mental health comorbidity with service use and functioning: a comparison of national and inner city samples

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Background/Objectives: It has been suggested that the disease burden of comorbid health conditions is multiplicative rather than additive. Given the report that polydrug use prevalence is double that of national estimates in inner city areas of London, we examined if there was a corresponding increase in comorbidity, functioning impairment and service use with polydrug use in inner cities as well.

Methods: Using data from the South East London Community Health (SELCoH) survey (n=1698) and the national Adult Psychiatric Morbidity Study (APMS) in England (n=7403) a latent class analysis identified three types of polydrug users: a high group using a range of substances; a moderate group using cannabis, alcohol and cigarettes; and a low group with only low probabilities of using cigarettes and alcohol. Membership in these polydrug groups was used to predict common mental disorders, psychotic symptoms, PTSD and suicide attempts. Six groups representing the low, moderate and high polydrug groups with and without any mental health comorbidity (“NoMH”=without comorbidity; “CoMO”=with comorbidity) were then used to predict service use and social and emotional functioning impairment across SELCoH and APMS.

Results: Membership in moderate and high polydrug groups compared to the low group increased the odds of reporting all mental health symptoms in both samples, but moving from the moderate to high polydrug group further increased the odds of mental health symptoms only in APMS. Using the polydrug-comorbidity groupings and referencing the low-NoMH group, reporting any mental health comorbidity increased service use and functioning impairment. The one exception was that the high-CoMO group in both samples did not report an increase in outpatient visits. Service use between the samples was also inconsistent between polydrug groups without mental health comorbidity. When referencing the low-CoMO group, lower odds of service use and functioning impairment were found for moderate and high-NoMH groups in both samples. There were also no differences in either sample between low and moderate-CoMO groups on service use and functioning. Lastly, the high-CoMO group in SELCoH reported higher odds of emotional functioning impairment not seen in APMS.

Discussion: This study raises interesting questions about the nature of drug use versus drug addiction in regards to deleterious outcomes. Specifically, there may not be higher odds of functioning impairment and service use if polydrug use is not accompanied by mental health comorbidity. Differences between inner city and national comorbidity patterns suggest a need to use local data when planning public health programs, particularly for understanding how social context affects help seeking.

Funding: National Institute for Health Research (NIHR), Guy's and St Thomas' Charity and the Maudsley Charity. J. Carter receives a King's Overseas Research Studentship from the King's College London. (Reference number: PALKYIB)

Keywords: Comorbidity, mental health, polydrug use.

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S24 – 3 Patterns of physical health co/multi-morbidities and serious mental illness

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Background/Objectives: The inequality characterised by excess mortality, estimated at between 10 and 20 years, experienced by patients with serious mental illness (SMI) – including bipolar affective disorder, schizophrenia, and other non-organic psychoses – has been well documented. This is largely attributed to an elevated risk of preventable physical health conditions beyond that caused by unnatural deaths, related to several interrelated factors: disease-related factors; side effects of antipsychotic medications; poorer access/ utilisation of health services; inferior health care; and, a higher prevalence of several health risk factors – including greater BMI, smoking and alcohol use, poorer diet and less exercise. Few large studies of primary care patients compare individual physical health conditions among patients with SMI to those from the same primary care population without SMI. This study aims to support and extend previous findings, by including adjustment for socio-demographic characteristics - including ethnicity – and by investigating whether the pattern of physical health comorbidity differs by SMI status.

Methods: Data were extracted from the medical records of patients aged 16+ years from 49/50 GP practices within the London borough of Lambeth (n=308,643). The prevalence and frequency distribution of 13 health conditions were compared among SMI and non-SMI patients. Data summarising the combination of health conditions registered for each patient were collapsed separately by SMI status; frequencies of discrete combinations of conditions were generated and ordered from the most to least frequent. Lastly, socio-demographic characteristics, health risk factors (BMI and smoking), and individual health conditions were compared by SMI status using multivariate logistic regression analyses.

Results: SMI patients were at increased risk of a range of physical health conditions and health risk factors, but the pattern of co/multi-morbidity did not differ by SMI status. Compared to non-SMI patients, those with SMI were at greater risk of being recorded with one, two, and three or more physical conditions. After accounting for differences in age, ethnicity and BMI status, only the association between SMI status and having one physical condition (compared to none) remained significant. After adjustment for socio-demographic factors (namely, age and to a lesser extent, ethnicity – but not sex or deprivation score) and BMI, the elevated risk of several health conditions among SMI patients remained significant; in order of increasing strength, these were: COPD, stroke, heart failure, chronic kidney disease, hypothyroidism, diabetes, epilepsy and dementia.

Conclusions: Excess physical health morbidity does not represent a different pattern of co/multi-morbidity among SMI patients, rather reflects higher levels of physical conditions. Much of this excess risk may be accounted for by differences in socio-demographic and health behaviour characteristics though significant differences remain.

Funding: UK Medical Research Council (MR/J013471/1). **Keywords:** Comorbidity, mental health, health inequalities, serious mental- illness.

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S24 – 4 Inequalities in Mental Health Services by Ethnicity: the role of ethnic identity, religious involvement and discrimination

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Background/Objectives: National data in the UK has suggested that there is less mental health service use among combined ethnic minority groups. However, few studies are able to provide a detailed assessment of these differences across ethnic groups and consider important explanatory social factors. This study aimed to 1) identify whether or not there are inequalities in mental health service use by ethnicity; 2) examine the role of factors such as ethnic identity, religious involvement and discrimination experiences in explaining any identified differences in mental health service use.

Methods: This analysis uses from the South East London Community Health study (SELCoH), a prospective study of 1052 individuals in an economically and ethnically diverse sample. We collected data on ethnic identity, frequency of attendance to religious services, both experienced and anticipated discrimination, a range of mental disorders (including common mental disorder (CMD), substance use, and post-traumatic stress disorder) and past year and lifetime mental health service use (i.e., receipt of talking therapy, as well as other sources of formal and informal help). Regression models tested whether ethnic identity, religious involvement and discrimination were included as main explanatory variables. Fully adjusted models included further controls for potential confounders such as gender, age, socioeconomic status, migrant status and comorbid mental disorders.

Results: Individuals from ethnic minority groups had a decreased likelihood to engage with mental health services compared to the white majority. Ethnic identity partially explained identified differences; religious involvement fully attenuated differences across ethnic groups and the effects of discrimination varied across types.

Discussion: The underuse of mental health services by ethnic minority groups has been understudied in ethnically diverse community samples. Interventions focused on the importance of ethnic identity, religion and the anticipation of unfair treatment in decision making deserves further consideration.

Funding: National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity. L. Aschan receives an Institute of Psychiatry Excellence Studentship from the Institute of Psychiatry, King's College London. (PCPEAZA and PALKYIB). **Keywords:** Comorbidity, mental health, health service use inequalities, ethnicity.

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S25 – Mental health care provision for adults with mild or moderate intellectual disabilities and a comorbid psychiatric disorder. The MEMENTA-Study

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Mental health problems in adults with intellectual disabilities (ID) are a widely understudied topic. The few existing studies on the prevalence of mental ill-health in adults with ID show a wide discrepancy in reported prevalence rates which range from 7 % to 97 %. One of the methodically most elaborate studies from the UK reports population-based point prevalence rates varying between 15,7 % and 40,9 %, depending on the diagnostic criteria used. In general, there is a growing consensus that adults with ID are affected by mental ill health as least as often as adults without ID and that there is an increased vulnerability to develop a mental disorder among people with ID. During the last years, stimulated by the ratification of the UN Convention on the Rights of Persons with Disabilities (UNCRPD), mental health care provision for mentally ill adults with ID has been subject to critical reflections. In Germany, experts working in the field stated that mental health services provision to this group was inadequate, as indicated by not sufficiently equipped general psychiatric institutions and a shortage of specialized intellectual disability mental health services. Thus, there is growing agreement across Germany that mental health services provision and mental health care for adults with ID and mental ill health has to be improved. However, there are only scant empirical data allowing well-founded measures aiming to improve health services provision for this specific population. The three presentations within this symposium will show and discuss early findings from the MEMENTA-study (“Mental health care provision for adults with intellectual disability and a mental disorder”) which is addressing this knowledge gap. It is a cross-sectional epidemiological multi-site study carried out in three different regions of Germany. Matthias Schützwohl (Dresden) reports the design of the study and findings on the prevalence of mental ill health among adults with mild or moderate ID as well as findings on specific needs and problems among intellectually disabled adults with a mental disorder compared to intellectually disabled adults without a mental disorder. Amelie Werner (Mannheim) shows the overall prevalence of subjective family burden in comorbid intellectual disability and mental disorder and compares the subjective burden experienced by informal caregivers of intellectually disabled persons with and without psychiatric co-morbidity. Using qualitative methodology, Maja Stiawa (Günzburg) investigates mental health care from the perspective of patients with ID. Margareta Östman (Malmö) will be the discussant within this symposium, thus providing an external perspective. **Funding:** The MEMENTA-Study is funded by the German Federal Ministry for Education and Research (BMBF), grant number 01GY1134.

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S25 – 1 Mental health problems and specific needs in adults with mild or moderate intellectual disabilities

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Background/Objectives: There is growing agreement across Germany that mental health services provision and mental health care for adults with ID and mental ill health has to be improved. However, there are only scant empirical data allowing well-founded measures aiming to improve health services provision for this specific population. Against this background, the MEMENTA-Study (“Mental health care provision for adults with intellectual disability and a mental disorder”) has two main aims. The first is to provide data on the prevalence of mental ill health among adults with mild or moderate ID. The second is to identify specific needs and problems among intellectually disabled adults with a mental disorder compared to intellectually disabled adults without a mental disorder. **Methods:** The MEMENTA-Study is a cross-sectional epidemiological multicentre study. Settings include urban and rural areas in the Regional Area Dresden, the Rhine Neckar Metropolitan Region and Bavarian Swabia. Included in the study were n=413 persons aged between 18 and 65 years with a mild or moderate intellectual disability working at sheltered workshops. A representative sample of the target population was realized by two-stage sampling. Institutions were selected in a stratified cluster sampling, with strata being service-providing non-governmental organisations and sizes of their sheltered workshops. In the second stage, persons working in selected institutions were selected by simple random sampling in each cluster, with sample size in each institution being proportional to the population size of the strata. Prevalence of mental health problems was assessed with the German version of the Psychiatric Assessment Schedule for Adults with Developmental Disability Checklist (PAS ADD-Checklist) and the Mini Psychiatric Assessment Schedule for Adults with Developmental Disability (Mini PAS ADD). The German version of the Aberrant Behavior Checklist - Community (ABC-C) was used to assess problem behavior. Needs were assessed using the Camberwell Assessment of Need for Adults with Developmental and Intellectual Disabilities (CANDID). **Results:** Preliminary results will be presented and discussed. **Funding:** The MEMENTA-Study is funded by the German Federal Ministry for Education and Research (BMBF), grant number 01GY1134. **Keywords:** Intellectual disability, mental disorders, MEMENTA-study, epidemiology.

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S25 – 2 Caregiver burden in people with intellectual disability

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Psychosocial or financial family burden is a concept increasingly applied in mental health research, in particular in the field of schizophrenia, mood or addiction disorders. However, caregivers of intellectually disabled persons with a comorbid mental disorder (double diagnosis) are under-researched in this regard so far, although some studies suggest a high psychosocial or financial burden for caregivers of people with a co-morbid mental disorder. As a part of the MEMENTA-study on the comorbidity of intellectual disability and mental disorder, informal caregivers of people with ID and a mental disorder (mainly parents) were asked to participate in this study. Inclusion criteria required that informal caregivers and the intellectually disabled person lived together or were in close contact with each other. 103 family members were recruited. Caregiver burden in family members was assessed with the "Involvement Evaluation Questionnaire" (IEQ), which originally was directed at schizophrenia cases, but was adapted for the specific circumstances of the MEMENTA-study. Psychiatric symptoms of the MEMENTA study-patients were assessed with the Psychiatric Assessment Schedule for Adults with Developmental Disability (PAS-ADD); behavioural problems were assessed with the Aberrant Behaviour Checklist (ABC). Apart from determining the overall prevalence of subjective family burden in comorbid intellectual disability and mental disorder, an additional aim of this study was to compare the subjective burden experienced by informal caregivers of intellectually disabled persons with and without psychiatric co-morbidity. In a further step of the analyses, the association between family burden and levels of disability or behavior problems of the patients will be analyzed. Preliminary results will be presented. **Funding:** The MEMENTA-Study is funded by the German Federal Ministry for Education and Research (BMBF), grant number 01GY1134. **Keywords:** Intellectual disability, mental disorders, family burden.

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S25 – 3 Mental health care for people with intellectual disabilities and mental health problems: qualitative study

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Background/Objectives: There is limited evidence on the quality of care for people with intellectual disability (ID) and comorbid mental health problems. Via qualitative methods, this paper investigates mental health care from the perspective of patients with ID focusing on essential aspects of treatment including history, barriers and satisfaction. **Methods:** Six interviews were conducted with participants of the German multicentre study "Mental health care provision for adults with intellectual disability and a mental disorder (MEMENTA)". In order to receive a wide range of opinions, participants were selected by means of purposive sampling after responding to a standardized questionnaire about satisfaction with mental health treatment yielding two groups (high vs. low satisfaction) with N=3 in each. Further inclusion criteria were presence of moderate ID and sufficient language skills. Semi-structured problem-focused interviews were conducted making possible inductive as well as deductive methods, focusing on the participants' perception via narrative aspects. The interviews were recorded, transcribed and analyzed using MAXQDA. **Results:** Participants who indicated complete satisfaction with treatment said that they were treated respectfully by committed psychiatrists who closely monitored treatment and were supportive in crisis situations such as severe unwanted side effects. Some participants were surprised about the psychiatrists' behaviour which they had expected to be less positive. Usually, mental health care was initiated by carers rather than by the patients. This has been attributed to limited illness insight before the start of treatment, not making it possible to see certain symptoms as "belonging" to a mental illness, which changed due to treatment. Moreover, inpatients highly valued social support from other psychiatric patients. Further results of the analysis of interviews with participants who stated dissatisfaction will be presented. **Conclusions:** Preliminary results indicate that respectful and committed-behaviour by mental health professionals is vital for patients with ID and comorbid mental health problems. Furthermore, negative attitudes toward mental health care and psychiatrists became more positive over the course of treatment, probably also due to increased illness insight, and social support by other patients was considered a valuable resource. **Funding:** The MEMENTA-Study is funded by the German Federal Ministry for Education and Research (BMBF), grant number 01GY1134. **Keywords:** Intellectual disability, mental disorders, qualitative study.

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S26 – A integrated urban model of social inclusion involving rehabilitation assertive outreach services and community social networks for individuals with enduring mental health problems in Ireland

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Overview: This paper proposes to give an overview on the development and implementation of a model of social inclusion involving a Dublin rehabilitation assertive outreach service and a range of community social networks. This integration of mental health services and community social networks has supported the building up of capacity in the local community for individuals with enduring mental health problems to access and sustain community living. The paper will describe the hub & spoke model which was used by the rehabilitation assertive outreach team, which in turn increased accessibility to the rehabilitation service for individuals with enduring mental health problems whose needs could not be met at the level of the sector service. The assertive outreach service is accessible at an earlier stage than traditional rehabilitation services linking in with early intervention and home-based services at sector level. The paper will describe the health and social outcomes of the service users on the assertive outreach service who benefited from being linked in with a range of community social networks which include projects presented in this symposium. The symposium will include presentations from community social network projects which were developed and implemented and supported the building up of capacity in the community by the employment of bridge builders and support workers to provided both support to the individuals with mental health problems and the local community networks which in turn addressed some issues around stigma and discrimination. This integrated urban model of social inclusion involving mental health services and community social networks is an innovative approach to improving the health and social outcomes of individuals with enduring mental health problems which is in line with the national mental health strategy vision for change in Ireland. The rehabilitation assertive outreach service has developed a hub and spoke model of service delivery. The hub is based in the community headquarters where the rehabilitation assertive outreach team is located and carries out its core administrative, management and training business. This is located in a new primary health centre alongside a secondary sector mental health service. The rehabilitation assertive outreach service has a multidisciplinary team and covers an area population of approximately 250,000. The team assesses approximately 35-45 new referrals annually and the overview will describe the cohort of service users and their outcomes in this paper. The spoke is based in each sector of the overall mental health service (4 sectors, where the team collaborate closely with the sector teams in taking new referrals, doing structured assessments of needs and developing modules of rehabilitation interventions based on individual needs. This is the only hub and spoke model of community rehabilitation assertive outreach service in Ireland for individuals with enduring mental health problems

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S26– 1 The stepping in programme; a collaboration between a community partnership and a community rehabilitation assertive outreach services

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Background/Objectives: The Stepping-In Project supports individuals with lived experience of mental health difficulties who have disengaged from their community to transition back into and reconnect with community life in a meaningful way. Most service users would like support to participate in social and leisure activities alongside other members of the community rather than in settings specifically designed for people with mental health difficulties. This collaboration is an approach to finding an effective way of mental health and community organisations working together to support transitions.

Aims: To address the challenges experienced by individuals with mental health difficulties wishing to access social/leisure/vocational opportunities in their own communities. To address the challenges experienced by community resources in providing meaningful access to individuals with mental health difficulties. To provide one-to-one support for individuals to engage in and sustain mainstream activities. To work in partnership with community organisations to break down the stigma attached to mental health. To build capacity of the community organisations that will ensure opportunities for individuals to continue to participate. To demonstrate the effectiveness of this approach in order to create change within the mental health service and community.

Methods: The project employed a Community Links Worker (CLW) for a 12 month period. The CLW works with the individuals accessing the project and the community organisations. The CLW is supported in this work by both the Partnership and Occupational Therapists within the mental health service. The project provides a variety of 'Stepping-In' options within local community resources utilising community tutors/instructors e.g., art/guitar lessons/woodwork. Facilities are shared (materials, tea-breaks) with other students. This enables the individuals to explore and get used to being in the environment and provides opportunities to trial mainstream programmes. Individuals are supported to step into/transition into mainstream options following completion of a 'Stepping-In' programme. The CLW serves as a link between the individual and the organisation and supports both parties. The role of the community in an individual's transition is enhanced by the provision of learning inputs e.g., open workshops for community workers on social inclusion/stigma/recovery.

Results: 30 individuals have taken part in this project in the past 10 months with 17 individuals making the full transition into mainstream services. 12 community organisations within the local community have been part of the project such as the local gym, family resource centre, adult education centre. A local steering group have formed to inform the future direction of the project and provide expertise and experience. The project has achieved sustainability in the short term for another 2 year period by the approval of the Health Service Executive to fund a support worker for a 2 year period to continue with this programme for further participants

Discussion/Conclusions: Organisations working together to address the needs of marginalised individuals within a community is a more effective strategy than working in isolation. It is vital that the CLW is embedded within the community ie. based in the Ballyfermot/Chapelizod Partnership and not based in a mental health centre. Stigma associated with mental health difficulties is still very prevalent within the community, however if the community is supported in very practical ways, barriers can be broken down and stigma can be challenged.

Funding: GENIO research grant euros 37,000. **Keywords:** Social inclusion, mental health, occupational function.

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S26– 2 My recovery, my home: supporting sustainable transition into independent community living

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Background/Objectives: The Irish mental health service is in the process of considerable change in how it provides services to meet the individual needs of people it serves. Providing accommodation is no longer a core element of what the mental health services do. This project is a local partnership between the HSE, Focus Ireland and SDCC, service users and carers. The objective of the project is to 1. assist individuals to identify their own subjective desired housing and support solutions, and making sure that their needs and preferences are the focus of the work 2. working closely with individuals, families and housing services.

Methods: A Housing support worker is employed over a 12 month period. This individual will use a specifically developed Housing Preference Assessment Survey (HPAS) to develop and implement individual support plans for 9 individuals with mental health difficulties to facilitate their way towards desirable independent living in their communities. They will support and work collaboratively with peers who are successful role models, who have made successful transitions to desirable accommodation and who are willing to encourage and support others with housing needs. It is envisaged that the plan will roll out this approach throughout the overall local mental health service.

Results: The results from the project will be presented for the individuals and evidence which will inform the future service development and reconfiguration of services to ensure that the practice of prioritising service users' housing choices become an integral part of the mental health recovery planning.

Discussion/Conclusions: Ultimately outcomes for the individuals will be measured against their expressed desires and wishes. Success is measured by the number of individuals successfully moving to their desired housing. Evidence of community integration for those individuals will also be presented in relation to involvement in education, training, employment and social outlets. Organisational outcomes will measure the number of staff to whom the HPAS training has been delivered and demonstrate the use of peer support working.

Funding: GENIO research grant: euros 44,748. **Keywords:** Social inclusion, mental health, social housing, community integration.

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S26– 3 Supporting communication and enabling social integration

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Background/Objectives: There is a growing awareness of the importance of communication for individuals with mental health problems. This can present in various forms of language and communication breakdown in individuals with mental health problems leaving them more socially isolated from the community in which they live. Speech and Language Therapy (SLT) for adults with Mental Health Disorders, although established in some contexts, needs to continue to break new ground in terms of its principles and processes of intervention. Until recently, SLT for adults with mental health disorders (MHDs) has not been available in Ireland, or indeed in many other international countries. This exciting new area of service provision has been informed by (i) increased knowledge of the nature of the speech, language and communication needs often associated with, or intrinsic to, many mental health presentations and (ii) the identified social inclusion needs of people who are long term mental health service users. This paper will discuss the core principles of SLT in this clinical area and how it is central to empowering and facilitating service users to engage with the recovery process in a way that is meaningful for them. In this way, SLTs, through the lens of language and communication, work alongside service users to enable them to become better equipped to exchange opinions, negotiate ideas, express needs and share experiences- the real life purposes to which most of us put our communication. A model will be proposed, which suggests a continuum of interventions, supports and outcomes ranging from individual SLT intervention to Supported Socialisation initiatives using volunteers, all depending on the social participation needs of the individual in their community and illustrated by 4 case studies. **Funding:** none declared. **Keywords:** Social inclusion, mental health, speech & language therapy.

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Oral presentations

(in order of appearance in the program)

OP01 - Primary and community care

OP01 – 1 The Refocus trial: Quantitative and economic evaluation of a pro-recovery intervention within community based mental health services

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Background/Objectives: This paper will present the quantitative and economic evaluation findings from the REFOCUS randomised controlled trial (RCT).

Methods: The REFOCUS intervention, investigated in a two-arm, pragmatic cluster randomised controlled trial (RCT) is an example of a complex intervention. The manualised intervention is intended to increase the focus of community adult mental health teams on supporting personal recovery (Bird et al., 2011). It is a whole team intervention, delivered to teams of healthcare professionals who provided care co-ordination (the unit of allocation in the RCT). It was designed to change clinical practice from the bottom-up, i.e. at both an individual and team level, rather than from a top-down, organisational level. Of 27 participating community mental health teams, 14 were allocated to the 12 month intervention. These intervention teams included 'Support and Recovery' and 'Recovery' teams (N=9); Forensic, high support teams (N=2); Low intensity treatment team (N=1) and Psychosis teams (N=2). All staff that provided clinical care within a team were included, regardless of discipline, level of qualification, or length of experience. Within the trial, outcome data was only collected from people with a primary diagnosis of psychosis, but as the intervention was provided to teams whose caseload was broader than this, some recipients of the intervention had other mental health diagnoses. **Results:** The REFOCUS model was developed as an underpinning theoretical explanation of the intervention, process and outcome evaluation of the trial. **Intervention:** with a primary diagnosis of psychosis, but as the intervention was provided to teams whose caseload was broader than this, some recipients of the intervention had other mental health diagnoses. **Results:** The REFOCUS model was developed as an underpinning theoretical explanation of the intervention, process and outcome evaluation of the trial. **Intervention:** 1. Intervention components: Relationships: staff values, knowledge, coaching skills and partnership and Working practices: understanding values and treatment preferences, strengths assessment and supporting goal-striving

2. Process evaluation: Practice change Team and individual staff values, knowledge, skills, behavioural intent and behaviour

3. Experience of service users: increased experience of personal recovery support, including coaching, increased focus upon strengths, values and personal goals

4. Outcome evaluation: Recovery outcomes - Increased personal recovery, including hope, empowerment, quality of life and well-being.

5. Clinical outcomes – Needs, functioning, mental health symptoms

6. Economic evaluation: Client receipt of services

Discussion/Conclusions: A general interpretation of study results from the outcome and economic evaluation will be given. **Funding:** 5 year National Institute of Health Research Programme Grant for Applied Research, England, UK.

Keywords: Recovery-oriented practice, complex intervention, randomised controlled trial, quantitative and economic evaluation.

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OP01 – 2 Education for Community Care in Slovenia: European Public Health Education or Training in Skills and Legislation

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Background/Objectives: The first multidisciplinary regional community mental health teams (CMHTs) for Slovenian regions were established in 2013. The education for these teams and the wider professional mental health service was prepared in collaboration with the University of Plymouth, Slovenian and Austrian NGOs, service user and carer organizations together, with the University of Maribor.

Methods: The draft of the educational programme was distributed to service users' and families' representatives, to the Department of Family Medicine and the Department of Public Health at two Slovenian Universities, to representatives of Plymouth University, Mental Health Europe, and pro mente NGO Vienna. Within this international consortium, the materials were discussed, and a draft plan corrected and consequently adopted. It was decided that an NGO should organize this programme to access involvement in academic process, empowerment, control over educational process and involvement in educational needs assessment.

Results: This education was first renamed to "training" by public authorities and was advised to be reduced in costs and time to a short training course of legislation and clinical skills. The primary care teams that were the beneficiaries of the community programme strongly supported the original proposed education, as did the NGOs. The proposed programme will be presented, as well as the evaluation method and first results.

Discussion/Conclusions: Community care needs education on communication among staff and clients and also on community culture differed from the institutional one. Serious political decisions about establishing community care services according to identified mental health needs is essential. The first step towards implementation in Slovenia is a public health educational programme on community care aimed at de-institutionalisation and development of personalised support to achieve social inclusion. This goal is to be supported by the evaluation process. Following the UN-CRPD user-representatives should be involved in all steps of the programme from development and teaching to evaluation. **Funding:** None declared. **Keywords:** Community care, education, UN-CRPD, Slovenia.

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OP01 – 3 The influence of physicians' recommendations on primary care patients' reluctance toward mental health treatment

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Background/Objectives: World Health Organization (WHO) data reveal that a quarter of primary care visits are for mental health issues. Research in Israel and elsewhere indicates that about half of patients seek care from primary care physicians rather than mental health professionals, mainly due to perceived stigma. Since positive attitudes towards mental health treatment lead to actual service use, the issue is whether primary care physicians might positively impact their patients' willingness to use mental health services. The objectives of the present study were, first, to examine differences between primary care patients who have different attitudes (positive, ambivalent or negative) towards mental health professionals; and second, among patients who are ambivalent or negative, to examine characteristics for those who change or do not change their attitudes following the recommendations of primary care physicians for specialized mental health treatment.

Methods: Data were collected in face-to-face interviews with 902 Jewish patients aged 25-75 in eight primary care clinics in Israel. Measures included validated mental health instruments and a vignette eliciting patients' readiness to consider treatment and potential influence of physicians' recommendation.

Results: Initially, almost half the patients were reluctant to consider specialized mental health treatment. More positive attitudes toward treatment were found among women, those aged 35-64 years and those with a higher education. Immigrants from the former Soviet Union were especially hesitant to get treatment. Also, religiously observant patients were less likely than others to have positive attitudes towards treatment. Following their doctor's recommendation, the opinions of about a quarter of the initially reluctant to consider treatment from a mental health professional became more positive. The probability of a more positive attitude following the physician's recommendation was significantly higher among those with more severe clinical diagnoses, the elderly (65+) and those born in the former Soviet Union.

Discussion/Conclusions: A positive attitude towards treatment is a prerequisite for mental health help-seeking. Therefore, it is important to change negative or uncertain attitudes of patients, especially those with mental health diagnoses. A major finding is the positive impact of primary care physicians' recommendations on reluctant patients. Therefore, encouraging physicians to discuss mental health issues would likely promote more positive attitudes and increase patients' willingness to use mental health services when needed.

Funding: This research was supported by a grant from The National Institute for Health Policy and Health Services Research (# 83656101).

Keywords: Influence of physicians' recommendation, negative attitudes towards mental health treatment, primary care physicians, primary care patients.

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OP01– 4 Therapeutic Alliances and Service User Satisfaction in Residential Crisis Houses and Acute Psychiatric Wards: A mixed-methods U.K. based study

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Background/Objectives: There is substantial evidence of problematic aspects of hospital-based acute psychiatric care in the U.K. and elsewhere, including low levels of service user satisfaction and poor relationships with staff (therapeutic alliances). Residential crisis houses have been developed as one solution to these problems. They tend to be smaller and have a more domestic atmosphere than hospital wards, serving similar populations to acute wards, but usually not admitting patients compulsorily. Despite a long history, there is little research on crisis houses, although there is some evidence that service user satisfaction may be greater than for acute psychiatric wards. The current study aimed to: i) test whether therapeutic alliances are stronger in crisis houses than in acute psychiatric wards; ii) develop a model of factors that influence service user satisfaction with acute services, exploring how far stronger therapeutic alliances may explain greater satisfaction with crisis houses; iii) explore factors facilitating and impeding good therapeutic relationships in crisis houses and in hospitals.

Methods: Data were collected in 4 crisis houses in London, and in acute psychiatric wards in the same localities. Quantitative measures of therapeutic alliances, client satisfaction, peer support, recovery and negative events were collected from consecutive admissions (N=355). Semi-structured interviews on experiences of therapeutic alliances and factors that facilitate or hinder these were conducted with 29 service users and 13 staff members.

Results: Better therapeutic alliances, service user satisfaction and peer support were found in crisis houses than in acute hospital wards. Regression analyses suggest that greater satisfaction with crisis house care can be explained by better therapeutic alliances, fewer staff-related negative events and better peer relationships. In qualitative interviews, service users talk about valuing basic human qualities as well as professionalism in staff, and identify physical freedom, autonomy / dependency, service atmosphere and the availability of staff as factors impacting on therapeutic alliances. Staff perspectives mirror some of these themes and also identify time, workloads and morale.

Discussion/Conclusions: Findings shed light on why service users may be more satisfied with crisis housing than acute hospital-based care. They point to staff-based, environment-based and organisational factors that could be targeted to improve service users' experiences of acute residential care.

Funding: This project was funded by the National Institute for Health Research Health Services and Delivery Research Programme (project number 09/1001/51).

Keywords: Therapeutic alliances, crisis houses, acute psychiatry, service user satisfaction.

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OP01– 5 Between Hospital and Supported Housing: Preliminary Results of a Qualitative Evaluation Study of Transitional Psychiatric Nursing Care

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Background/Objectives: Chronically mentally ill persons who live in the community often experience several admissions and re-admissions to the local mental hospital. This phenomenon, usually known as the ‘revolving door’, is frustrating for all persons involved: service users, hospital care staff and community care staff. Transitional care for clients to be discharged is regarded as one of the major interventions which might prevent re-admissions from the community to the mental hospital. This paper reports on an ongoing qualitative evaluation study in Switzerland which aims at exploring whether a newly set up nursing intervention for transitional care meets its goals.

Methods: A transitional psychiatric nursing project was implemented in eastern Switzerland. In order to overcome the gaps between service providers, transition nurses are employed both by the hospital and by the community care agency. The transition nurses are involved into hospital discharge planning and provide continuous care for the newly discharged service users. If necessary, the transition nurses provide continuous care for the re-admitted service users too. Semi-structured focus groups and single interviews were conducted with all stakeholders of the transition into the community: 3 service users, 10 hospital staff, 3 community care staff, 2 transition nurses, and 1 community psychiatrist. Structured content analysis was utilized for data analysis.

Results: Preliminary results can be reported. At the time of writing, 12 services users have been included into the transitional nursing care project. After nearly 6 months, only 1 patient was re-admitted to the local hospital. The continuity of care between inpatient services and community services, and the early involvement into discharge planning in particular, are regarded as crucial factors in successfully preventing re-admission into the hospital. Stakeholders who were not directly involved in the transition care described the project as an efficient instrument to bridge the traditionally wide gaps between hospital care and community care.

Discussion/Conclusions: Due to the short duration of project implementation and due to not yet having conducted all interviews, our results have to be interpreted with caution. The preliminary results suggest, however, that transitional psychiatric nursing care may be an effective intervention for bridging the gap between hospital care and community care.

Funding: This study is funded by the Psychiatric Services of the Canton of St. Gallen, Switzerland, and by the St. Gallen Community Care Agency for Mentally Ill Persons, Switzerland, with financial support from the Ebnet Foundation. (Grant number not available). **Keywords:** Transition, nursing, hospital, supported Housing.

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OP02 - Coercion, prison and forensic care

OP02 – 1 Factors correlating with the directive for forensic outpatient service based on an exhaustive evaluation in Baden-Württemberg 2009-2012

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Background/Objectives: In 2007 Forensic outpatient services (Forensische Ambulanzen) have legally become part of the Supervision of Conduct (Führungsaufsicht). Either former patients with detention orders or prisoners with unfavorable legal prognoses can be directed to forensic aftercare. Since then in the federal state of Baden-Württemberg outpatient units were developed at seven forensic hospitals. The decision regarding who is referred to forensic aftercare is partly determined by the regional provision (Verwaltungsvorschrift), which excludes addicted patients without comorbidity, but is also strongly influenced by forensic risk assessment before release from detention. The objective of this study is: Which clinical and criminological factors support the decision whether a directive for forensic outpatient service is given at discharge.

Methods: In 2009 the forensic documentation system (FoDoBa) was introduced in Baden-Württemberg. At the end of each year a computer based form is filled out for every patient with detention order by their therapists. The centrally managed database contains historical (both medical and criminological) data, yearly updated items which characterize the clinical and legal process of detention, and items concerning social circumstances after release. Using data from this exhaustive survey, descriptive statistics were applied using SPSS 21.0 and Excel 2010.

Results: Between 2009-2012 N=928 patients were discharged, 25.3% (N=235) underwent forensic aftercare (FO_Y). Gender, age, social circumstances before the index offense, number of previous convictions and age at first conviction differed only slightly. Although first psychiatric hospitalization appeared in both groups at mean age of 27, the number of hospital admissions before detention orders differed (FO_Y: 3,7; FO_N: 2,3). For both limited (§64 StGB) and unlimited (§ 64 StGB) detentions, duration of stay was longer in the FO_Y group: § 63 StGB 4,35 vs 3,69 years, § 64 StGB 3,0 vs 2,46 years.

Discussion/Conclusions: Preliminary results suggest that the decision for a forensic aftercare directive is determined by course of disease and process during detention but not by criminological risk factors. This could be a contradiction to the risk-need-responsivity principle by Andrews and Bonta. The risk principle requires that resources are allocated to the people at highest risk for reoffending. The foundation of forensic outpatient services is driven by the idea that forensic patients need more intense and specific care than health insurance funded outpatient care could provide. This preliminary conclusion must be tested by further analysis of the gathered data.

Funding: None declared. **Keywords:** Forensic outpatient service, offender treatment, exhaustive evaluation, health services research.

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OP02 – 2 Prevalence, Socio-demographic and Penal Correlates of Depression Among Inmates of the Port Harcourt Prison

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Background/Objectives: Imprisonment has been associated with mental illness, especially depression. This study examined the risk factors, clinical and socio-demographic and penal profiles of inmates in a maximum security prison. **Aims/objective:** To investigate the prevalence of depressive disorders among inmates of Port Harcourt Prisons, South, Nigeria and to examine the correlates and predictors. **Methods:** Through stratified random sampling, 400 prisoners were interviewed using the Depression component of WHO's Schedule for Clinical Assessment in Neuropsychiatry (SCAN) in a 2-stage design after having been screened with the Beck Depression Inventory (BDI). The study was descriptive in nature and used psychometric evaluation. A questionnaire with socio-demographic, clinical and penal situation information was administered, along with the Beck Depression Inventory. The author performed bivariate and multivariate analysis regarding depression. SPSS Version 17, was used for analysis and test of significance was set at $p < 0.05$. **Findings:** One hundred and sixty nine subjects presented with depression according to the BDI [mild = 57 (14.2%), moderate = 67 (16.8%) and severe = 37 (9.2%), and extreme 8 (2.0%)]. However SCAN revealed a prevalence of 59 (14.8%) for mild depression with somatic features, 57 (14.2%) for moderate depression with somatic features, 25 (6.2%) severe depression without psychotic features, while 18 (4.5%) had severe depression with psychotic features. The overall true prevalence of depression was 37% calculated from the apparent prevalence using the sensitivity and specificity values. The prevalence of depression was found to be high. Socio-demographic factors that were found to be statistically significant included age (with being older acting as a protective factor), marital status, and place of living. Clinical factors that were statistically significant risk factors for depression included retroviral status and past psychiatric history. Prison and social support factors included abandonment by family, poor feeding, death of parent(s) or sibling(s) while in prison, drug use and violence by parents, parents' psychiatric history and family history of depression. Penal factors of statistical significance included nature of crime, reasons for delay in trial, duration of stay in prison custody, time sentenced, conviction or serial convictions for same offence. Multiple Logistic regression analysis, however, revealed that the strongest predictors of depression among the subjects, were living in the urban area (OR:0.31, CI=0.14-0.68, $p < 0.01$), past psychiatry history (OR:0.19, CI=0.08-0.48, $p < 0.01$), duration of time spent in prison (OR:1.43, CI=1.19-1.73, $p < 0.01$), poor feeding (OR: 3.06, CI=1.47-6.34, $p < 0.01$), and death of parent or sibling while in prison (OR:3.88, CI=1.98-7.55, $p < 0.01$), when correcting for the confounders. **Discussion/conclusions:** Several socio-demographic, clinical, penal or criminological factors were found to be associated with depression in prisoners. Most of those identified were neither diagnosed nor received treatment. Undetected, under-detected and under-treated depression in the prisoners is an increasing public health problem. **Funding:** None declared. **Keywords:** Prevalence, prison, penal, depression.

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OP02 – 3 Perceived coercion in voluntary admission

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Background/Objectives: The legal status of service users admitted to psychiatric wards is not synonymous with the level of coercion that they can perceive during the admission. This study aimed to identify and describe the proportion of individuals who were admitted voluntarily but experienced levels of perceived coercion comparable to those admitted involuntarily. One year outcome in this cohort will also be examined, in particular engagement with services, readmission rates and quality of life. **Methods:** Individuals admitted voluntarily and involuntarily to three psychiatric hospitals were interviewed using the MacArthur Admission Experience Interview and the Structured Clinical Interview for DSM-IV Diagnoses. Follow-up interviews took place one year after discharge and the Service Engagement Scale and the GAF, MANSAs and SIX were administered at follow up. **Results:** 161 individuals were interviewed and 22% of the voluntarily admitted service users had levels of perceived coercion similar to that of the majority of involuntarily admitted service users. Voluntarily admitted service users who experienced high levels of perceived coercion were more likely to have more severe psychotic symptoms, have experienced more negative pressures and less procedural justices on admission. Individuals brought to hospital under mental health legislation but who subsequently agreed to be admitted voluntarily and those treated on a secure ward also reported higher levels of perceived coercion. The level of engagement, risk of readmission, quality of life and functioning at one year will be reported. **Conclusions:** It needs to be ensured that if any service user, whether voluntary or involuntary, experiences treatment pressures or coercion that there is sufficient oversight of the practice, to ensure that individual's rights are respected. **Funding:** None declared. **Keywords:** Coercion, involuntary, ethics, perceived coercion.

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OP02 – 4 The Independent Effects of Income on Involuntary Admission, 2000-2010

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Background/Objectives: Social Economic Status (SES) is known to be associated with illness and health in both cross-sectional and longitudinal studies. It is, however, not known to what extent income, as a sub-aspect of SES, is related to the decision to admit psychiatric patients involuntarily. The present study aims to investigate, using both univariate and multivariate approaches, to what extent income has an independent effect on the clinician's decision to admit patients involuntarily. We study: (a) the effects of having income (compared to having no income), (b) the effects of the level of income, and (c) temporal trends between 2000 and 2010. **Methods:** We report data from the Leuven Study on Emergency Psychiatry in Leuven, Belgium (N=25,376). **Results:** between 2000 and 2010, 1,050 patients were admitted involuntarily, 62% were male and 48% were between the ages of 20 and 39. 28% were referred with primary psychotic symptoms, 28% with suicidal behaviours, and 20% with aggressive behaviours towards others. About 1/4 met criteria for a DSM-IV psychotic disorder. Involuntarily admitted patients were less likely to have income compared to those voluntarily admitted (16 vs. 27%, FET: p<.001). In multivariate models, patients without income were 2.10 times more likely to be admitted involuntarily, even after adjustment for sex, age, gender, living arrangements, presenting problems, and DSM-IV axis 1 disorders. Not having any income significantly increased the decision to admit patients involuntarily. We found similar effects for the level of income, among those patients who reported having an income. Those with lower income levels systematically had 1.77-1.96 higher odds of being admitted involuntarily, even after adjustment for sex, age, gender, living arrangements, presenting problems, and DSM-IV axis 1 disorders. The differential effects of income levels on the decision for an involuntary admission did not change considerably between 2000 and 2010. **Discussion/Conclusions:** We found that the effects of income on admitting patients involuntarily were considerable, even after adjusting for a number of covariates. Our findings suggest that income, as a non-clinical variable, is more predictive of involuntary admission than it was 10 years ago. **Funding:** None declared. **Keywords:** Involuntary, admission, income, income level.

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OP02 - 5 Life Trajectories of Psychosocial Dysfunctioning and Care of Patients Admitted to New Long-term Compulsory Inpatient Treatment

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Background/Objectives: In 2006 the Dutch government and the municipalities of Amsterdam and Rotterdam decided to create a new treatment facility for a group of clients for whom the prevailing mental health services were considered to have been insufficient. This group consisted of clients with co-occurring severe mental and substance use disorders, who had been treated by all available means - including compulsory hospital admissions - but who did not gain from these efforts. These clients live on the streets, causing considerable inconvenience to their surroundings, and are at risk of ultimate societal deterioration. The new service - referred to as 'Sustainable Residence' (SR) and located in a rural area in the North of the Netherlands - is explicitly intended as an 'ultima remedia', that is an ultimate treatment effort for patients who are considered 'untreatable' within current services, but whose only perspective is further physical and societal deterioration if no treatment is provided. Patients are compulsory admitted to SR, for as long as necessary (and supported by the judge). They are offered comprehensive treatment, addressing their somatic, addiction, psychiatric, and psychosocial problems, in superb new housing facilities. The primary aim of SR is to improve patient functioning, in multiple domains of the patient's life. The objective of the current presentation is to study the inter-relationships between the life trajectories of childhood adversity, psychiatric and social dysfunctioning, and care provided to clients admitted to SR. **Methods:** Detailed information on the personal histories of clients admitted to SR was gathered from referral letters, court orders, and personal and social interviews. Assessed were the occurrence, timing and nature of childhood adversities (e.g. physical or sexual abuse, court custody, emigration, and psychiatric, addiction or judicial problems of the primary caregiver), psychiatric, addiction, and social problems (e.g. homelessness, police contacts, detention) of the client, social achievements (e.g. educational qualifications, lasting jobs, marriage, independent living), and psychiatric and addiction care histories. **Results:** Relatively complete personal histories were obtained for 177 of the 183 clients admitted to SR between 2007 and 2012. The life trajectories of psychosocial dysfunctioning and care of these clients will be presented and studied for their inter-relationships. In addition, the clinical presentation of these clients at admittance to SR will be described, as well as first results of duration of admittance and follow-up services provided. **Discussion/Conclusions:** 'Sustainable Residence' is an innovative treatment facility, for an extremely difficult group of patients seen in many cities, who have severe and persistent addiction and mental health problems. The present study explores the life histories of these clients to generate hypotheses about the role of personal adversities, psychiatric disorder, and care experiences in the development of grave social dysfunctioning. **Funding:** MentalHealthcareOrganizationDrenthe, MunicipalHealthAuthorities of Amsterdam and Rotterdam. **Keywords:** Social dysfunctioning, patient history, compulsory treatment, co-occurring mental and substance use disorders.

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OP03 - Psychotropic drug treatment**OP03 – 1** The effect of clozapine on premature mortality: an assessment of clinical monitoring and other potential confounders

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Background/Objectives: Clozapine, a third-line atypical antipsychotic for serious mental illness (SMI) can cause severe adverse effects such as agranulocytosis. Paradoxically, a number of studies have reported that clozapine is associated with reduced mortality compared to other antipsychotics. However, this reduction in premature mortality may be due to the intensive clinical monitoring that individuals taking clozapine receive during treatment. Our aim was to test the hypothesis that the apparent protective effect of clozapine is a consequence of increased clinical monitoring and determine if clozapine is associated with reduced risk of premature mortality due to natural causes.

Methods: We identified cases of Serious Mental Illness (SMI) including schizophrenia, schizoaffective and bipolar disorder aged ≥ 15 years in a large secondary mental healthcare case register linked to national mortality tracing. We modelled the effect of being prescribed clozapine on all-cause mortality over a 5-year observation period (2007-11) using Cox regression. We controlled for confounders including the proportion of time that patients had face to face contact with secondary mental health services.

Results: We identified 14,754 SMI cases (879 deaths) in the observation period. Individuals with SMI prescribed clozapine had more severe psychopathology (including hallucinations, delusions, aggression, subclinical depression, addiction) and poorer functional status (problems with ADL impairment, occupational and recreational activities, social relationships, living conditions). Cox regression analysis revealed a strong negative association between being prescribed clozapine and mortality which persisted after controlling for a broad range of potential confounders including clinical monitoring and markers of disease severity (adjusted hazard ratio 0.4; 95% CI 0.2-0.7; $p=0.001$). The association between clozapine and reduced risk of mortality remained after restricting the sample to those with a diagnosis of schizophrenia or those taking antipsychotics. Among individuals with SMI, those prescribed clozapine had a reduced risk of mortality due to both natural and unnatural causes.

Discussion/Conclusions: In patients with SMI, clozapine was associated with a reduction in mortality due to both natural and unnatural causes observed over a five year period. We found no evidence to support the hypothesis that the apparent protective effect of clozapine in SMI was either due to increased clinical monitoring or due to other confounding factors.

Funding: Medical Research Council Population Health Scientist Fellowship; National Institute for Health Research (NIHR) Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London

Keywords: Clozapine, mortality, clinician contact, serious mental illness.

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OP03 – 2 Approval Process of Psychiatric Drugs in Europe: Time for a New Regulatory Strategy? A systematic review

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Background/Objectives: Since its establishment the European Medicine Agency (EMA) has issued recommendations, conceptual papers and other official documents intended to guide the design of clinical studies conducted for regulatory purposes in Europe. This work aims to critically review the EMA methodological requirements on the conduct of phase III studies on medicines used for psychiatric disorders, with specific focus on the use of placebo or active comparator in evaluating a new drug's efficacy. As a second objective this study aims to check the number of patients studied to establish efficacy and tolerability of approved psychiatric drugs.

Methods: Scientific guidelines issued by the EMA on the conduct of phase III randomized clinical trials on psychiatric drugs were identified using the EMA web-based publicly available database; the documents were systematically read by two independent reviewers to extract information of interest.

Results: Critical appraisal of EMA guidelines showed that in psychiatric disorders a demonstration of a difference against placebo, and not against an active comparator, makes a new medicine eligible for registration in Europe. When three-arm studies are suggested, a demonstration of superiority to placebo is required, and a demonstration of non-inferiority to an active comparator is suggested but not compulsory required. The analysis on the number of patients studied for the approval of psychiatric drugs is currently ongoing.

Discussion/Conclusions: In psychiatric disorders, an area where several effective medicines are already available, EMA's policy may open the way to the approval of medicines that might have a less favourable profile than those already on the market. In order to limit this risk, we raise for consideration the following regulatory changes: (1) three-arm studies should be designed to demonstrate superiority of the new product to placebo and non-inferiority to an active comparator, so that new medicines that are less effective than others already on the market would not obtain a marketing authorization; (2) in addition to three-arm trials, the EMA should require at least one two-arm head-to-head comparative trial in order to demonstrate superiority of the investigational product over an active comparator in terms of efficacy, acceptability, tolerability or adverse effects. These regulatory changes would allow to demonstrate efficacy in absolute terms and establish the added value of new drugs.

Funding: None Declared. **Keywords:** Psychiatric drug approval, placebo, clinical trials, EMA requirements.

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OP03 – 3 Treatment with antidepressants in the Swedish population in relation to major workplace downsizing

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Background/Objectives: Previous research has indicated that downsizing may be a risk factor for morbidity and mortality both among those who are made redundant and those remaining in the workplace. However, there are contradictory results and little evidence on clinically relevant mental health effects. Our objective was to investigate change in antidepressant treatment across 5 years in relation to workplace downsizing.

Methods: This study is based on all individuals in Sweden 22-54 years of age in 2006, registered as living in Sweden Dec 31 2004 to Dec 31 2010, gainfully employed and with a stable labour market position in 2004-2006. Organisational changes were assessed from national statistics on workplaces and purchases of prescribed psychotropic drugs from the Prescribed Drug Register. People with their primary employment at an establishment with $\geq 18\%$ personnel reduction were considered exposed to major downsizing between the end of 2006 to the end of 2007, 2007-2008 or 2008-2009. We applied a repeated-measures regression analysis by the generalised estimating equations (GEE) method, calculating yearly prevalence of any antidepressant treatment two years before, during the year of major downsizing and two years after workplace downsizing and tested for trends.

Results: There was a significant increase in prevalence of antidepressant treatment during the years preceding a major downsizing, although small, for all exposed (632500 persons). In separate analyses, however, only those who remained at the same establishment at the end of the downsizing period (stayers) had a significant upward trend before and a downward trend in the years after, and this was most obvious among survivors with no long period of sickness absence or disability pension the past two years before downsizing. The prevalence ratio (PR) comparing year -1 to -2 was 1.11 with 95% confidence interval (CI) of 1.10-1.13 and the PR comparing year 2 to 1 after was 0.98 (CI 0.96-1.00, $P < 0.05$). Among those becoming unemployed, the prevalence of antidepressant treatment tended to increase before but then stayed virtually the same during and after downsizing. The patterns were slightly different for people with longer periods of sickness absence or disability pension before, especially for those changing jobs, but a significant decrease in prevalence was only found when analysing stayers, job changers and unemployed collectively (PR 0.83, CI 0.77-0.88).

Discussion/Conclusions: This large scale study indicates that downsizing is associated with increased risk of treatment with antidepressants among those seemingly healthy before and remaining in work after major personnel reduction. Moreover, the increased prevalence for those remaining at the same workplace seems to be explained by workplace characteristics or anticipation some time before downsizing was carried out.

Funding: The study was supported by the Swedish Research Council for Health, Working Life and Welfare (FORTE) [grant numbers 2009-1758, 2008-1103], partly through the Stockholm Stress Centre of excellence.

Keywords: Downsizing, organisational change, depressive disorder, antidepressants.

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OP03 – 4 Mortality in patients who have been prescribed antipsychotic medication in Poland

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Introduction: The excess mortality of people with mental illness has been known for many years. It has been estimated that mortality risk is more than double for deaths owing to natural causes, and almost 10 times for deaths owing to suicide. The risk of death in people with mental illness in Poland has not been investigated yet. The aim of this study was to assess mortality in individuals who were prescribed neuroleptics in one region of northern Poland.

Methods: Data from National Health Fund on neuroleptic prescriptions during the period 2008-2012 from Gdansk voivodship have been included into analysis. Data on deaths in this population have been collected from National Death Registry. Age-standardized all-cause mortality rates were calculated in the adult exposed population and a matched general population of Gdansk voivodship.

Results: There were 1095518 neuroleptic prescriptions for 84881 patients. There were 16010 deaths in this population during the analyzed period. In individuals who were prescribed antipsychotic medication the age-standardized all-cause mortality rate was significantly higher than in people from the general population: 71.43 per 1000, 95% confidence interval (95% CI) 69.28–73.58 compared with 7.48 per 1000, 95% CI 7.43–7.53. Age-standardized mortality rate in men with prescribed antipsychotics was 97.49 per 1000, 95% CI 94.27–100.7 compared with 10.13 per 1000, 95% CI 10.04–10.2 in the male general population. Age-standardized mortality rate in women with prescribed antipsychotics was 53.19 per 1000, 95% CI 50.73–55.66 compared with 5.42 per 1000, 95% CI 5.37–5.47 in the female general population. The highest mortality rates were found in the younger age groups for both genders.

Conclusion: With respect to mortality, a substantial gap exists between the health of people requiring prescriptions of neuroleptics and the general community. Analysis based on administrative record linkage is the major limitation of this study. No adjustment has been made for the comorbid conditions, psychosocial, demographic, and lifestyle factors that may modify mortality risk. The use of antipsychotics may reflect not only the presence of psychiatric problems but also the existence of any organic disease affecting mental health.

Source of Funding: This study was supported by grant no. ST-20 from the Medical University of Gdansk. **Keywords:** Mortality, epidemiology, mental illness, antipsychotics.

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OP03 – 5 Patients' Experiences of Receiving Financial Incentives for their Anti-Psychotic Medication: A Qualitative Study

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Background/Objectives: The use of financial incentives has been shown to be effective in improving treatment adherence to anti-psychotic maintenance medication in non-adherent patients. It has also been shown to improve a subjective quality of life for those patients. Yet little is known about the patients' experiences of this practice; whether receiving money for their medication affected their relationship with their care coordinators and other members of their care team, and whether patients felt the incentive had affected their adherence and if so, in what way. It is important to explore these factors and identify to what extent the positive effect on subjective quality of life was due to an improved adherence to medication or other wider benefits. This presentation reports on the qualitative interviews conducted with patients who received a financial incentive for a twelve month period, as part of the Financial Incentives to Improve Adherence to Treatment (FIAT) Study. **Methods:** Qualitative interviews using open-ended questions with 26 patients recruited from the intervention arm of the Financial Incentives to Improve Adherence to Treatment (FIAT) Study sample. Data were coded by two researchers using a thematic analysis approach. **Results:** The same two researchers were involved in both the interviewing process and the coding. At the time of writing this abstract the data from 26 transcriptions has been coded and is being analysed. Various themes are emerging. These are around the experience of receiving financial incentives, including how the money received has been spent and the impact that has had on the patients' perceived quality of life. **Discussion/Conclusion:** These interviews will enable us to better understand how patients' experienced receiving financial incentives for their medication and determine what factors contributed to the improvement in their quality of life. **Funding:** The trial is supported by a grant from the NIHR Health Technology Assessment Programme (Grant reference: 07/60/43). **Keywords:** Financial Incentives, medication Adherence, qualitative, schizophrenia.

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OP04 - Prevalence of mental disorders

OP04 – 1 Prevalence Rates of Mental Disorders among Individuals with Turkish Migration Backgrounds in Germany

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Background/Objectives: According to a recent meta-analysis, there is no evidence for an increased risk of mood disorders associated with migration in general. Nevertheless Turkish migrants in the Netherlands seem to have a higher risk of current affective disorders. In Belgium epidemiological surveys also found increased values for psychological strain for Turkish migrants. So far people with a migration background are underrepresented in German epidemiological mental health surveys. An international research project on "Mental health and immigration" (www.segemi.de) is aiming to provide missing epidemiological data in Germany on prevalence and co-morbidity rates of mental disorders and issues of health care utilisation of individuals with Turkish migration backgrounds living in Germany. One of the challenges is to get access to the target group. **Methods:** In order to increase the participation rates, a number of actions have been taken: monetary incentives, local interviewing facilities, language and culturally sensitive material, cooperation with disseminators and key persons from the Turkish communities, and a media campaign. The mental health status of 663 individuals of the target group (age 18-65) living in Berlin and Hamburg have been assessed by Computer Assisted Personal Interviewing (CAPI) using the Composite International Diagnostic Interview (CIDI) in Turkish and German. **Results:** Compared to the general population in Germany (DEGS), the analyses illustrate significantly higher prevalence rates of mental disorders among individuals with Turkish migration backgrounds living in Hamburg and Berlin. **Discussion:** Though the study sample represents the local Turkish communities in Hamburg and Berlin according to the relevant sociodemographic characteristics, potential biases can be assumed. These can be caused by unclear potential selection effects and the survey methods (e.g. different recruitment methods in Berlin and Hamburg, problems of translating). **Funding:** The project was fully funded by the Volkswagen-Foundation as part of their program "Future Issues of our Society". **Keywords:** Mental disorders, migration, composite International Diagnostic Interview (CIDI), Turkish.

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OP04 – 2 Prevalence and Correlates of Depressive Symptoms and Diagnosed Depression in Germany – Results from the German Health Interview and Examination Survey (DEGS1)

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Background/Objectives: Data on the prevalence and correlates of depression in the general population provide the basis for estimating disease burden and health care needs and planning preventive measures. We assessed the prevalence and correlates of depressive symptoms and diagnosed depression in a population-based sample of adults aged 18-79 years in Germany. **Methods:** Data came from the first wave of the German Health Interview and Examination Survey (DEGS1), a population-based cross-sectional study that collected health data from a representative sample (n=7987) of German adults aged 18 to 79 years in 2009-2011. Current depressive symptoms were assessed with the Patient Health Questionnaire (PHQ-9) and defined as a PHQ-9 sum score ≥ 10 . Diagnosed depression within the last 12 months was assessed in a standardized computer-assisted physician interview by asking whether a diagnosis of depression was ever made by a physician or psychotherapist, and if so, whether the depression was present within the past 12 months. Associations between these indicators of depression and a range of health-related outcomes were analysed using multivariable regression analyses adjusted for sociodemographic characteristics and other relevant confounders. **Results:** The overall prevalence of current depressive symptoms is 8.1% (women 10.2%, men 6.1%). Prevalence is highest among 18- to 29-year-olds and gradually declines with increasing age. The 12-month prevalence of diagnosed depression is 6.0% (women 8.1%, men 3.8%) and is highest among 50- to 59-year-olds. Prevalence of current depressive symptoms and diagnosed depression decrease with increasing socioeconomic status (SES). After adjusting for age, sex and SES, adults living in small towns are less likely to report current depressive symptoms or diagnosed depression, compared to larger towns, cities and rural areas. In analyses adjusted for sociodemographic factors and other relevant confounders, current depressive symptoms and diagnosed depression are both associated with adverse health behaviours, higher prevalence of chronic somatic diseases, lower self-rated health and health-related quality of life, reduced physical functioning and higher utilisation of in-patient and out-patient health services. **Discussion/Conclusions:** Current depressive symptoms and diagnosed depression are wide-spread among adults in Germany and associated with a wide range of adverse health characteristics. The associations with health behaviours suggest the need for a multidimensional, integrated approach to prevention and care of depression. **Source of Funding:** None declared. **Keywords:** Depressive symptoms, depression, health service, population.

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OP04 – 3 Prevalence of Affective Disorders in the Polish Population - EZOP Study. Is our Society so Healthy?

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Background/Objectives: The aim of the first national survey “Epidemiology of Mental Disorders and Access to Care – EZOP Poland” was the assessment of prevalence of common mental disorders (CMD), service provision and attitudes towards treatment in the Polish population. Previously available data referring to prevalence of mental disorders were predominately based on register data gathered by the Institute of Psychiatry and Neurology and published annually. Such data were often criticized due to poor methodology. **Methods:** The survey was built on a representative stratified sample of 10,081 adults fulfilling inclusion criteria and randomly selected from approximately 24,000 potential participants. Computer based WHO CIDI questionnaire version 3.0 was adapted for the Polish population according to World Mental Health protocol. The survey was performed by certified and supervised interviewers recruited from an international poll agency. Data were collected during face-to-face interviews. **Results:** Taking into account lifetime prevalence of solely affective disorders in the Polish population the results showed that, according to ICD-10 criteria, MDE was found in 1,5% of respondents (0,7 in men vs. 2,2 in women, $df=1$, Pearson’s χ^2 37,033, $p<0,000$, Fisher test $p<0,000$). More in-depth analysis showed that out of 10081 respondents, 3083 screened positive with the screening section of the CIDI (SC) and were assessed with the depression section. Among 2666 individuals fulfilling ICD-10 MDE Criteria A Part 1, 293 (11%) suffered from MDE and 2373 (89%) did not ($df=1$, Pearson’s χ^2 1770,313, $p<0,000$, Fisher test $p<0,000$). None of the particular CIDI items of the depression section of the CIDI was shown to have significant influence on respondents’ drop-out from diagnostic computerized protocol. **Discussion/Conclusions:** The results of other surveys conducted with the CIDI showed higher prevalence rates of affective disorders. The rather surprising results of EZOP seem not to have been caused by the diagnostic tool itself. Adherence to WMH protocol during adaptation, cognitive interviews and lack of significant influence of particular items on respondents’ drop-out leave the question open. More surprising is the fact that results of the section shortly assessing symptoms during last 30 days (NSD) showed that 40,2% felt “deeply depressed and nothing could cheer them up”. Is the Polish society healthier than expected or is the population not prone to discuss issues of mental health in a more profound and precise manner? Currently sociodemographic variables are being tested to answer the above-mentioned question. **Funding:** Project was funded by EEA Grants – Norway Grants (PL 0256), Ministry of Health of the Republic of Poland. **Keywords:** Epidemiology, affective disorders, CIDI, depression.

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OP04 – 4 Secular Changes in the Prevalence of Common Mental Disorders. A systematic Review and Meta-analysis

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Background/Objectives: It is a widespread claim in popular media and health circles that the prevalence of common mental disorders is on the increase. We investigated secular trends in the prevalence of anxiety and depression in the general population by a systematic review of published literature and a meta-analysis of included papers. **Methods:** We searched Medline and PsychInfo via ISI Web of Science for published papers up until the end of 2012. The general search strategy involved keywords on common mental disorders intersected with time trend keywords and restricted where possible to general human populations and original articles. Inclusion criteria where observational studies with repeated cross-sectional design with at least two waves, data on prevalence rates of CMD (including depression or anxiety), measurement time points at least 5 years apart, sampling from community-dwelling adult populations from the general population, at least 500 participants per wave, validated measurements of common mental disorders. Exclusion criteria where cohort studies, studies of particular sub-groups (i.e. groups at risk or patient groups) of the general population, studies not using identical sampling methods and base populations at both time points, studies not using identical psychometric definitions of caseness at each time point, and studies with a response rate of less than 60% and less than 15% change in participation rate between waves. Studies with more than two waves where included as multiple studies. **Results:** Seven studies were included with samples from the Netherlands, Australia, Taiwan, USA and the UK using PRIME-MD, GHQ-12, CIDI and CIS-R. The studies covered the time period from 1990 until 2008. Overall, we found an increase of 1.59 (95% CI 0.28 – 2.90) per cent per calendar year in overall prevalence of common mental disorders. However, there was also a significant publication bias in favor of positive findings reported from smaller studies as examined by a funnel plot. Excluding the only study based on a screening instrument (GHQ-12) and diagnoses reached by clinical interviews, there was no overall secular increase in prevalence rates of common mental disorder (ES=0.83, 95% CI -0.21 – 1.87). **Conclusion:** There are only a few published studies with high methodological standards on secular trends in the prevalence of common mental disorders, and there is evidence for a publication bias in favor of positive findings. This meta-analysis of studies with prevalence estimates based on diagnostic data indicated no increase in the prevalence of common mental disorders. However, the possibility of a type 1 error cannot be excluded.

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OP04 – 5 Association between healthy lifestyle behaviours and mental health - findings from the German Health Update (GEDA)

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Background/Objectives: Health risk behaviours such as smoking, physical inactivity and poor diet are independently associated with depression. However, there is a paucity of data examining associations between combined healthy behaviours and mental distress and depression. We examined associations between a combination of five healthy lifestyle behaviours and mental health. We hypothesised that a greater adherence to these healthy behaviours is associated with better mental health. **Methods:** Using cross-sectional data from a nationwide population-based sample of adults in Germany (German Health Update (GEDA) 2009 and 2010 telephone surveys; n=21940 women, n=17061 men) we examined associations between five healthy behaviours and frequent mental distress (FMD) and self-reported diagnosed depression in the past 12 months. Healthy behaviours included non-smoking, low-risk alcohol drinking, regular sport, maintaining normal weight and healthy fruit and vegetable consumption. Multiple logistic regression analyses adjusted for potential confounders examined associations between the combined number of healthy behaviours and FMD and self-reported diagnosed depression. **Results:** FMD was reported by 13.6% and 8.0% and diagnosed depression in the last 12 months by 8.3% and 4.7% of women and men, respectively. At least four of five assessed healthy behaviours were reported by 18.0% of women and 11.7% of men. Women reported healthy behaviours more often than men particularly for normal weight and low-risk alcohol drinking. Compared to those with less than two healthy behaviours, women and men with at least four behaviours were about half as likely to report FMD (OR 0.51, 95% CI 0.42-0.62, and OR 0.51, 95% CI 0.39-0.67, respectively) and women with at least four behaviours were less likely to report diagnosed depression (OR 0.72, 95% CI 0.58-0.91). **Discussion/Conclusions:** A higher number of healthy behaviours are associated with a lower prevalence of FMD for both women and men and of self-reported diagnosed depression in women. These findings support the promotion of healthy lifestyles in public health strategies for improved mental health and the prevention of depression. **Source of Funding:** None declared. **Keywords:** Healthy lifestyle behaviours, depression, mental distress, health survey.

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OP05 - Severe mental illness**OP05 – 1** Prevalence of at-risk criteria of psychosis in the Swiss general population between 8 and 40 years

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Background/Objectives: Questionnaire assessed subclinical psychotic-like experiences are a poor estimate of attenuated psychotic symptoms (APS) and tend to overestimate the prevalence of APS by far. Thus, the prevalence and pathological value of APS and other at-risk criteria – when, as done in clinical services, assessed in clinical interviews using special assessment instruments – in the general population is still unclear. **Methods:** In 2 complimentary studies, we studied the 3-month prevalence of ultra-high risk and basic symptom at-risk criteria assessed with the Structured Interview for Psychosis-Risk Syndromes (SIPS) and the Schizophrenia Proneness Instrument, Adult version (SPI-A) in random Swiss general population samples of 8-17 years and 16-40 years. Children and adolescents were assessed in a face-to-face, young adults in a telephone interview by trained clinical psychologists. Before the start of the telephone survey, the reliability of telephone interviews in comparison to face-to-face interviews was studied and found sufficient. Exclusion criteria were communication problems and life-time psychosis. **Results:** As of July 2012, 1,229 interviews with young adults and 55 interviews with children and adolescents were completed. While 2.8% of the young adults acknowledged the presence of any one at-risk criterion (incl. frequency and onset requirements) within the last 3 months, 9.1% of the children and adolescents did so. An age-related difference was also found in the prevalence of at least 1 lifetime at-risk phenomenon: 25.2% in young adults and 45.5% in children and adolescents. Thereby, “perceptual abnormalities/hallucinations” of the SIPS, mainly on APS level, were the most frequent phenomenon in both samples. **Discussion/Conclusions:** While at-risk phenomena occur in a quarter of young adults of the general population and even in nearly half of the children and adolescents at least temporarily, only a minority reports sufficient recency, frequency or change in severity of these phenomena to meet present at-risk criteria according to SIPS and SPI-A – again with higher rates in children and adolescents. This highlights the importance of the recency, frequency or behavior-/conviction-related change-in-severity criteria included in the at-risk criteria, but also the need to further examine developmental peculiarities. These factors might play a crucial role in the differentiation between ill and non-ill persons and thus should be studied in more detail. **Funding:** This work was supported by two project funding grants from the Swiss National Science Foundation (32003B_135381 and 320030L_144100). **Keywords:** Attenuated psychotic Symptoms, prevalence, general population, psychosis.

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OP05 – 2 Changes in quality of life in patients with a schizophrenia spectrum disorder during day clinic treatment

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Background/Objectives: People with a schizophrenia-spectrum disorder show considerably lower levels of self-reported quality of life than the general public. A day clinic program oriented toward quality of life, empowerment and recovery might help to increase their quality of life. The present study aims to assess changes in quality of life over time and explore which domains of quality of life can be influenced by day clinic treatment. **Methods:** Two groups of patients were compared, the day clinic group attending the day clinic program and the control group waiting for the day clinic program. Measures of quality of life, internalized stigma and psychopathology were collected twice, at baseline and after five weeks. T-test and general linear model were conducted to analyze longitudinal data. **Results:** Patients in day clinic treatment showed a significantly greater improvement in psychological quality of life than patients on the waiting list. There was also a tendency to a greater improvement in the quality of life domain social relationships within the day clinic group compared to the control group. No significant differences between both groups were found regarding the overall quality of life and the quality of life domains physical health and environmental aspects. Compared to the control group the day clinic group also showed better results regarding changes in internalized stigma and psychopathology. Interestingly, changes in quality of life did not correlate with changes in psychopathology. **Discussion/Conclusions:** Recovery-oriented day clinic treatment might promote important changes with the biggest effect being found in psychological quality of life. Other quality of life domains are less prone to change. These results should be confirmed within a randomized controlled trial representing the next phase in a phased approach to the evaluation of a complex program of interventions. In addition, future studies are necessary to explore the specific effectiveness of the day clinic treatment and to assess the stability of the outcomes achieved over time. **Funding:** None Declared. **Keywords:** Psychosis, well-being, service evaluation, recovery.

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OP05 – 3 Disparities in the Health Care of Persons with Schizophrenia: A Case-control Epidemiological Study in a Country with National Health Insurance

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Background/Objectives: Studies have reported higher mortality rates from cardiovascular disorders among people with severe mental illness. In addition, studies have showed disparities in the medical care provided. A problem rarely investigated is whether the disparities differ between social groups in countries with national health insurance schemes. The study aimed to investigate health care disparities among persons with schizophrenia affected by cardiovascular disorders, and to compare between different social groups. **Methods:** A cross-linkage was performed between the Israeli National Psychiatric Case Registry (INPCR) and the database of Clalit Health Services (CHS), Israel's largest health care provider. The INPCR applied the inclusion criteria of hospitalized patients born before 1960 with a release diagnosis of schizophrenia. A matched comparison group of CHS members was built according to age, sex, national, and socioeconomic status in a ratio of 2:1. Measures of visits to specialists, preventive medical procedures (Hemoglobin A1C, blood lipids, stress test, and electrocardiography), surgical interventions (cardiac catheterization, coronary artery bypass graft, and cardiac pacemaker implantation), and cardiovascular drug use were compared between service users of the two groups, as well as by socio-demographics, such as by gender, socioeconomic status and nationality. **Results:** The cross linkage identified 17,377 service users registered both in the INPCR and CHS. They were matched to 34,754 control subjects with identical sociodemographic characteristics. The average annual performance of LDL and stress tests, chest X-ray, and visits showed decreased rates of CVD among service users with schizophrenia compared to the matched control subjects. Lower rates of cardiac catheterization and pacemaker implantation were indicated among service users with schizophrenia compared to matched controls. The total rate of interventions among service users with schizophrenia was 60% (adjusted rate) of matched controls. The annual utilization was lower among service users with schizophrenia than matched controls diagnosed with a cardiovascular disease. In the next step the analysis will be repeated according to contrasting social groups. **Conclusions:** Israel has a national health insurance system providing primary health care, laboratory tests and surgical interventions that are free of charge for the service users, and almost free for specialized care. The findings indicate that persons with schizophrenia and with cardiovascular disorders are receiving unequal care compared to their counterparts. The homogeneity of those findings with regards to social disadvantage is under analysis. **Source of funding:** Israel National Institute for Health Policy Research. **Keywords:** Health care, schizophrenia, epidemiology, cardiovascular.

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OP05 – 4 Association of attenuated psychotic symptoms with current mental disorders, quality of life, and help-seeking behaviour: results from a Swiss general population sample

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Background/Objectives: The discussion about the inclusion of 'Attenuated Psychosis Syndrome' into DSM-5 has highlighted the lack of knowledge about the prevalence and clinical significance of attenuated psychotic symptoms (APS) outside the specialized early detection of psychosis services. Yet, this is also true for the other at-risk criteria for psychosis. Thus, we studied the clinical significance of at-risk criteria and symptoms for psychosis, according to the ultra-high risk and the basic symptoms approach, in older adolescents and young adults in the general population. **Methods:** In a general population sample (age 16-40, at the time of writing N=1'229), we studied the association of axis-I morbidity, psychosocial functioning, quality of life, subjective description and evaluation of health status, as well as the rate of help-seeking associated with current ultra-high and basic symptoms with at-risk criteria and symptoms. **Results:** The presence of at-risk criteria (in 2.8%) and but also the presence of any at-risk symptoms, irrespective of meeting duration or frequency requirements (in 25.2%), were related to several indicators of psychopathological significance such as: higher frequency of current axis-I-disorders; lower psychosocial functioning; lower estimation of current health; lower satisfaction with health, oneself and life; and a higher rate of help-seeking for mental problems. Yet, help-seeking was rarely motivated by at-risk symptoms (only 2 persons acknowledged cognitive basic symptoms as a reason for help-seeking), but – as in help-seekers without at-risk symptoms – was rather related to depressive mood, anxiousness anxiety or familial problems. Interestingly, help-seekers with at-risk symptoms were less satisfied with the outcome of their help-seeking than those without at-risk symptoms. **Discussion/Conclusions:** These findings indicate that current at-risk criteria and even risk symptoms for psychosis have some clinical significance on a population level, yet help is predominately sought for other problems than attenuated psychotic or basic symptoms. Follow-up of those reporting at-risk symptoms will be needed to evaluate if there is a real need of raising awareness to these symptoms in the general population and primary health services. **Funding:** This work was supported by a project funding grant from the Swiss National Science Foundation (32003B_135381). **Keyword:** Attenuated Psychosis Syndrome, general population, prevalence, clinical significance.

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OP05 – 5 Low satisfaction with sex life in persons with severe mental illness living in the community*Margareta Östman**Department of Health and Welfare studies, Malmö University, Sweden*

Background/Objectives: Research on sex lives of people with severe mental illness (SMI) most often focuses on dysfunction and the side-effects of medication. We wished to determine how people with SMI experience sex and assess satisfaction with it in a broader evaluation of quality of life. **Methods:** Data were gathered using mixed methods, including a reliable psychometric quality of life instrument and in-depth interviews with 79 people with SMI living in the community. **Results:** Sex life showed the lowest rating of all quality of life domains, with men indicating lower satisfaction with sex life than women. Low satisfaction also correlated with lower scores on the total quality of life index. Sex life for people with SMI was seen to be of secondary importance in daily living and as an area of taboo in treatment processes. **Discussion/Conclusions:** Our interview-based study verified that intimate relationships and sexual experiences are considered unattainable among those suffering from SMI. The lack of sex life or low satisfaction with one's sex life among people with SMI affected their whole quality of life. Such a condition may also be a barrier to recovery from illness or make an illness worse. There is a primary need to increase the awareness of psychiatric and social services staff to unmet needs in the realm of sex life among those with SMI. This will require greater clinical competence than health care providers routinely possess. Although the optimal therapy for schizophrenia and other SMI according to current clinical guidelines employs a range of pharmacological, psychosocial, and psychological interventions to treat symptoms and bring about functional recovery, there are no recommendations at present for persons with SMI aimed at increasing their sexual capacity and their possibility of engaging in relationships with sexual content and meaning. Three different studies accomplished by our research group verify that partners in the relationship also suffer from dysfunctional and reduced sexual functioning. In order to meet the needs of people with severe mental illness, open-minded programs aiming to increase the possibility of sustaining a sex life might need to be added to existing recommendations for people with SMI living in the community. **Funding:** Malmö University. **Keywords:** Sexuality, relationships, satisfaction, QoL.

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OP06 - Suicide**OP06 – 1** Epidemiology of Suicide in Province of Bushehr, Iran*Abdollah Hajivandi, Fatemeh Akbarizadeh**Bushehr University of Medical Sciences & Health Services, Islamic Republic of Iran*

Background/Objectives: Suicide in any region can be used to help in control and prevention programs. Longitudinal registry of annual death data has been analysed in this study. **Methods:** In a cross sectional study, forms of suicide were analysed with register data; crude and specific attempted and completed suicides rates were calculated and demographic variables were also examined. Statistical analysis includes estimation of relative risks and also correlation analysis between variables. Data were released from the health province center of Bushehr University of Medical Sciences. Only suicide acts that resulted in hospitalization or death were included in the study. **Results:** Annual incidence of suicide in women was 5.7 and 2.88 in men per 100000 persons in the province. Overall, 6.6 % of all suicide acts proved lethal (no significant difference between males and females), but number of attempted suicides and completed suicides in females were twice more compared to males (RR=2.3 & 1.98 respectively). Poisoning with drugs accounted for 87% of suicide acts but only 8% of fatalities. Self-immolation accounted for only 6% of suicide acts but 71% of fatalities. Hanging was the most fatal method (fatality rate 100%) followed by self-immolation (fatality rate 69%). Highest fatality rate was observed in unemployed men (9.3%) followed by housewives (7.2%). **Discussion/Conclusions:** Incidence of suicide in the province for men is lower and for women was higher than that was observed in other deprived regions of the country. The most high risk groups for completed suicide were illiterate housewives and unemployed men with low education. Attempted suicides typically occur in those under the age of 25 years, in educated women - single or married - and in educated single men. **Source of funding:** Bushehr University of Medical Sciences & Health Services **Keywords:** Attempted suicide, completed suicide, relative risk, self-immolation.

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OP06 – 2 “He left me a message on Facebook”: Comparing the risk profiles of self-harming patients who leave suicide notes compared with those who leave messages via new media

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Background/Objectives: Self-harm is a strong risk factor for later suicide and repeated self-harm. Previous research has indicated additional risk factors such as young age, male gender, mental illness, social support, substance abuse and the presence of a suicide note. As technology advances, a suicide note no longer needs to be left via the traditional method of pen and paper, and new media platforms such as email or text, or social networking sites such as Facebook and Twitter might also be used to convey a message. The aims of this research were to compare those who leave a new media note with those who leave paper notes, and to characterise these groups demographically and in terms of risk factors. **Methods:** SHIELD is a study which collected data about every self-harm presentation over 2011-2 to two large teaching hospitals in South London, UK. These data were linked to the electronic casenote system of the local mental health care provider and searches were undertaken for mentions of terms related to new media such as ‘facebook’ or ‘twitter’. Every mention was examined and data were extracted with an electronic extraction sheet. ‘Hits’ were examined and in response to the data graded into categories. The Beck Suicide Intent Scale score was compared between three groups along with demographic and other relevant variables: No-note; New media note; Paper note. The analysis was a multinomial logistic regression to compare the three groups. **Results:** The sample was 1437 self-harm presentations. There were 44 new-media notes left (which were comparable with paper notes), 71 paper notes left, 1320 presentations with no note left. There were two presentations where a new-media and a paper note were left, which were excluded. In the multinomial model, new-media note leaving was associated with younger age and substance use, both risk factors for repeated self-harm. Suicidal intent is higher in those who leave paper notes than new media note leavers, suggesting paper note leavers are at higher risk. **Discussion/Conclusions:** This is an early study of the use of new-media for the leaving of notes before self-harm presentations. We suggest all patients who have harmed themselves be asked if they left a new-media note and the intention of leaving that note, as well as if they left a paper note. While it does seem paper-note leaving is suggestive of more risk than new-media note leaving, it may well be that new-media note leaving is more risky than having left no note. **Funding:** None declared. **Keywords:** Self-harm, new media, Facebook, Twitter.

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OP06 – 3 Structured Assessment of Suicide Risk in a Crisis Service: Psychometric Evaluation of the Nurses' Global Assessment of Suicide Risk Scale (NGASR)

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Background/Objectives: Worldwide, suicide is the 10th most common cause of death, and it is highly related to psychiatric disorders. Systematic suicide risk assessment is an essential part of crisis intervention, however, no gold standard is available yet. Most risk assessment scales have limited predictive power and therefore development of new instruments is potentially relevant, but is also complicated. Earlier research showed that the Nursing Global Assessment of Suicide Risk (NGASR) is a useful instrument to show insight into suicidal thoughts and behaviour. Although widely translated and used, no proper psychometric evaluation has taken place yet, which is – given aforementioned limitations of other instruments – imperative. **Objective:** The aim of this study is to establish the psychometric properties of the Dutch version of the NGASR, and the feasibility of its use in estimating the severity of suicide risk (risk assessment). Therefore, our research questions is: what is the reliability, validity, responsiveness and interpretability of the NGASR? **Methods:** A psychometric study of acceptability, and a number of forms of reliability and validity among 252 patients making use of a concurrent instrument, the Suicide Intention Scale (SIS), and concurrent assessment by independent physicians. **Results:** Factor analysis identified five factors. Cronbach's alpha was 0.45. Intra-class correlation was 0.92 (95% CI .85-.95). Association between total NGASR and SIS was substantial and significant ($B=0.66$, $SE=0.19$, $\beta = .66$, $p=.003$). NGASR total score had a significant and moderately strong association with judgement by the psychiatrist or resident on ‘suicidal thoughts’ ($OR=1.24$, $p<.001$) or ‘suicidal thoughts or plans’ ($OR=1.35$, $p=.001$). No significant association of NGASR scores and 6 month follow-up of suicidality was found. **Discussion:** Compared to some other assessments for suicide risk, the NGASR shows low internal consistency. All instruments perform highly on inter-rater reliability. Predictive validity for all of these scales has not been established. **Conclusion:** Internal consistency of the NGASR and most of the subscales identified was low, but with risk-assessment tools with very heterogeneous factors, this may be acceptable. Other indicators of reliability of the NGASR were sufficient, although predictive validity was poor. The NGASR is easy in its use, and may contribute to identification of risk factors, as well as to a more integral assessment of suicide risk. As far as can be currently assessed the NGASR does not perform much better, nor much worse than comparable instruments for suicide assessment. **Funding:** Altrecht Mental Health Care. **Keywords:** Crisis resolution team, validity, suicidality, risk assessment.

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OP06 – 4 LAST-RD Study: Randomized Evaluation of the Effectiveness of Lithium in Subjects with Treatment-Resistant Depression and Suicide Risk

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Background/Objectives: In treatment-resistant depression (TRD), self-harm and suicidal ideation represent alarming psychopathological symptoms. These may lead to self-harm and suicide attempts and, in up to 10% of cases, to completed suicides. The intervention following non-fatal suicidal behavior is relevant to suicide prevention, because the risk of suicide following deliberate self-harm is considerable. **Objective:** The primary aim of the LAST study is to assess whether lithium is effective in reducing the risk of suicidal behavior in subjects with TRD and suicide risk. Secondary aims of the study are to assess whether lithium is effective in improving depressive symptomatology and to evaluate the tolerability profile of lithium. **Methods:** LAST is a multicentre trial that aimed to include subjects affected by treatment-resistant depression with a history of attempted suicide or deliberate self-harm in the previous 12 months. Patients meeting eligibility criteria were allocated, through a centralized randomization procedure, to lithium plus usual pharmacological and non pharmacological treatment or to usual pharmacological and non pharmacological treatment. **Results:** A total of 55 psychiatric services (single centers or departments) located throughout Italy agreed to participate and 50 of them obtained Ethics Committee approval. In April 2009 and June 2010 Investigators' Meetings were organized to present, discuss and finalize the research protocol. In June 2011 Ethics Committee approval was obtained for a 12-month recruitment extension, so patient enrolment was possible until the end of 2012. A total of 56 patients have been randomized (29 subjects allocated to lithium and 27 assigned to standard therapy). In this sample, an Axis II comorbidity was recorded in 21 subjects. Follow-up of included patients is currently ongoing and 51 subjects have completed their follow-up phase. Until now, 19 primary outcome events were recorded (18 deliberate self-harms and 1 completed suicide). Of them, 13 occurred in the standard therapy group and 6 in the lithium group. Overall, 10 patients self-harmed during the follow-up period (5 subjects randomized to the control group and 5 allocated to the experimental group). Five patients in the lithium group dropped-out of the study. Reasons for drop-out were: low compliance with the blood test related to lithium assumption (n=2), decision to move to a foreign country (n=2) and transfer to another psychiatric service (n=1). **Conclusions:** The implementation of the LAST protocol provides evidence that it is possible to create a network of psychiatric services that accept the idea of using their everyday clinical practice to produce randomised knowledge. **Funding:** LAST has been approved and financially supported by the Agenzia Italiana del Farmaco (AIFA), Cod: FARM77Z3BL. **Keywords:** Lithium, depression, suicide, deliberate self-harm.

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OP06 – 5 Suicidality in Adults with Autism – Population-based Evidence

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Background/Objectives: Autism is associated with profound social disability and increased psychiatric comorbidity in adult life. This is the first epidemiological study examining the risk of suicide in adults with autistic spectrum disorders. **Aims:** To investigate the prevalence of suicidal behaviour among adults with autism. **Methods:** The study involves analysis of the UK Adult Psychiatric Morbidity Survey 2007, comprising detailed interviews with 7403 adults living in private households in England. Sampling involved a multistage clustered sample design. Survey data were weighted to take account of study design and nonresponse so that the results were representative of the household population. A 20-item subset of the Autism-Spectrum Quotient self-completion questionnaire was used in phase 1 to select respondents for phase 2. ICD-10 diagnoses of autism were ascertained by the Autism Diagnostic Observation Schedule in phase 2. A range of suicidal behaviour was ascertained by self-report and Clinical Interview Schedule – Revised. Multiple regression models were used to examine if autism is a predictor for suicidality independent of other predictors. **Results:** Of 7403 adult participants who provided a complete phase 1 interview, 618 completed phase 2 diagnostic assessments. The weighted prevalence of autism in adults was estimated to be 9.8 per 1000 (95% CI 3.0-16.5). Autism was strongly associated with a history of suicide attempts (OR 95% CI 3.04; 1.03-8.95). Suicidal thoughts within the last week were reported by 5.5% of adults with autism (OR 95% CI 7.39; 2.86-19.13) and 11% of subjects with autism reported suicidal thoughts within the last year (OR 95% CI 2.97; 1.57-5.63). **Conclusion:** Early detection and management of suicide risk in adults with autism should be given more consideration in future policies for autism. **Funding:** None declared.

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OP07 - Addiction and substance use**OP07 – 1** Opioid use, Mortality and the Influence of Psychiatric Comorbidity and Psychological Health

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Background/Objectives: Opioid misusers have recognized high mortality and this is increased with co-existing psychiatric co-morbidity. However, patterns of influence of co-morbid psychiatric disorders on mortality in opioid use disorders (OUD) are poorly understood. **Methods:** Primary and secondary opioid use disorder patients were identified in the South London and Maudsley Case Register, which contains records on over 200,000 specialist mental healthcare service users linked to national mortality tracing. Cox Regression survival analysis for the period between 1 April 2008 and 31 December 2011 was performed and controlled for a broad range of potential confounders. **Results:** We identified 4328 OUD patients (71% male) with 127 deaths within the cohort. The presence of comorbid personality disorder (PD) was found to be associated with increased mortality in all models, including the fully adjusted model (HR 2.44, 95% CI 1.08-5.51), which controlled for age, gender, socio-economic factors, risk behaviors and physical health. We observed a significant association between psychological health and reduced mortality, which diminished when physical health was added to the model. We found no evidence of an association between serious mental illness (SMI) and mortality, and no interactions between mortality and age and gender were detected. Cause specific mortality (natural vs unnatural) based on ICD-10 codes information is presently being investigated and results will also be provided. **Discussion/Conclusions:** OUD patients with co-morbid diagnosis of PD are at more than double the risk of death. SMI and psychological health rating are not associated with mortality in opiate dependence after controlling for a broad range of covariates. The study highlights the importance of co-morbid PD to risk of death in this patient group. **Funding:** This study was funded by the NIHR Biomedical Research Centre for Mental Health (CPI theme) at South London and Maudsley NHS Foundation Trust and the National Addiction Centre at Institute of Psychiatry, King's College London. **Keywords:** Opioid addiction, psychiatric comorbidity, mortality, risk factors.

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OP07 – 2 Straightening out the J-curve of alcohol use and mortality

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Background/Objectives: Since the 1920s moderate alcohol consumers have been found to have reduced mortality compared to both heavy users and abstainers. Some or all of this effect may be because of errors: Firstly, the abstaining group has increased mortality because of other factors such as lower social class or greater age. Secondly, the inclusion of former drinkers in the abstainer group, who may have excess risk. Thirdly, there may be misreporting of alcohol consumption, particularly of abstinence. In this study we aimed to address each of these problems. **Methods:** The Health and Lifestyle Survey is a British population-based cohort study carried out in 1984-5 with a follow up in 1991-2 and mortality data up to June 2009. There were 9,003 initial participants and 5,345 at follow up. Self-report alcohol consumption in the week before the second interview was the main exposure. In addition to a question about former consumption, consumption data from 1984-5 were used to test claims of lifelong abstinence. Covariates were age, sex, socioeconomic status and ethnicity. There were complete data in 96% of those with the main exposure. The outcome was mortality from any cause. The survival analysis used Cox's proportional hazards regression which produces Hazard Ratios (HRs) as estimates of effect. **Results:** Initial results show the familiar 'J shaped curve' whereby abstainers from alcohol have increased mortality compared to those consuming safely (up to 14u per week for women and 21u per week for men). Greater consumers also had increased risk. Then the group which reported no alcohol consumed was divided into those who reported having ever consumed alcohol and those who reported being lifelong abstainers. These 'quitters' had increased mortality risk compared to those who reported lifelong abstinence. This group which reported lifelong abstinence was further divided into those who, seven years prior, reported consuming alcohol and those who consistently reported abstinence. These 'fibbers' had increased mortality risk, and the remainder had a risk very similar to the 'safe' drinkers. **Discussion/Conclusions:** The apparent protective effect of alcohol consumption appears, in this sample, to be a result of the excess mortality risk of former drinkers, both acknowledged and unacknowledged, contributing to the overall mortality risk of the non-drinking group. **Funding:** None. **Keywords:** Alcohol, mortality, reporting, UK.

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OP07 – 3 A Community-Based Peer-Led Model to Improve Smoking Cessation Outcomes among Poor and Underserved in the United States

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Background/Objectives: In the U.S. low-income urban residents have higher rates of tobacco smoking and are less likely to utilize treatment services than those in the general population. The Communities Engaged and Advocating for a Smoke-free Environment (CEASE) initiative is a randomized and participatory health promotion intervention to enhance smoking cessation services in an inner-city low-income setting in two phases. **Methods:** Trained peer-motivators local to the community, nurses, and physicians provided smoking cessation services at a community clinic as well as other community sites. During the first phase, participants were randomized into group or individual counseling with smoking cessation medication, held at a clinic. In the second phase participants were randomized into group counseling, standard incentives and nicotine replacement therapy vs. group therapy with standard incentives and non-monetary incentives. Both groups were facilitated by peer-motivators at community sites (e.g., church, school, etc.). Data for this study were collected and triangulated from the following sources: a cross-sectional household survey (n=1,441), participants in the smoking cessation interventions (n~650), street intercept surveys (n=2,555), and focus group discussions (n=42). Data were analyzed using qualitative and quantitative methodologies. **Results:** Of the total sample, more than half (55%) were current smokers. Between 36 to 50 percent of the current smokers from different surveys had tried to quit smoking without seeking any kind of help in the past year. Interventions led by Peer-motivators at community sites yielded better abstinence outcomes compared to clinic based interventions (40% vs. 10%), as well as higher participant retention (60% vs. 27%). **Discussion/Conclusions:** A Community-based participatory approach to rigorous scientific methodology is challenging yet a very effective strategy to promote and enhance treatment services among underserved populations. The CEASE intervention can be used by similar communities around the globe as an easy to implement and highly effective model. In addition, the model is specifically designed to help the poor and underserved recover from nicotine dependence with the intention to be applied to other behavioral outcomes (healthy eating, physical activity, etc.). **Funding:** National Institute on Drug Abuse, grants DA012390, DA019805; National Institute on Minority Health and Health Disparities, grants MD000217, MD002803, and MD002803-06. **Keywords:** Community based, smoking cessation, randomized controlled trial, underserved.

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OP07 – 4 Substance Use in Adult Attention Deficit Hyperactivity Disorder (ADHD)

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Background/Objectives: ADHD is a psychiatric disorder that often persists into adulthood and can considerably affect functioning across many domains over one's life span. However, many cases of adult ADHD are either not detected or not treated. In addition, studies about the prevalence of adult ADHD and its relationship with substance use have not been examined adequately. The purpose of the present study is to estimate the prevalence of adult ADHD and characteristics associated with adult ADHD using a large, representative sample of young Swiss men. The associations between ADHD and other mental health outcomes and the use of legal and illicit substances also were examined. **Methods:** The study used data from the ongoing Cohort Study on Substance Use Risk Factors (C-SURF). The participants included a sample of 5962

Swiss men (mean age: 20 years) who participated in the baseline assessment. They were recruited at three of a total of six centres that recruit men for military service, covering 21 of 26 cantons (including all French-speaking cantons) in Switzerland. All Swiss men must go through this recruitment process to determine their eligibility for military service at approximately age 19. As there is no pre-selection to army conscription, a representative sample of young Swiss men was thereby generated for the study. The present analysis used only data collected during the baseline assessment from September 2010 to March 2012. ADHD was assessed using the WHO adult ADHD Self Report Screener (ASRS). Logistic regression analyses were conducted to study the association between adult ADHD and alcohol drinking patterns, as well as the use of cigarettes, cannabis and other illicit drugs. **Results:** The prevalence of adult ADHD in young Swiss men was 4.1%. A higher prevalence was identified among men whose mothers had completed primary or high school/university, and those with a family history of alcohol or psychiatric problems. Despite having a high level of education, adults with ADHD reported impairment in their professional life, as well as considerable mental health impairment. ADHD was positively associated with risky alcohol drinking patterns, cigarette and cannabis smoking, the use of other illicit drugs, and the presence of substance use disorders. Adjusting for age, residence, linguistic region, education, financial autonomy and several childhood risk factors (e.g., maternal education, family affluence) did not alter the results, suggesting that the presence of adult ADHD at least partially predicts the use of legal and illicit substances. **Discussion /Conclusions:** Our results demonstrate that ADHD is not rare among young Swiss men and is significantly associated with different types of risky substance use patterns. However, the majority of adults with ADHD were untreated. It is important to increase awareness of adult ADHD among family doctors and other clinicians so early signs of adult ADHD are detected and further negative consequences – like risky substance use patterns and other impairments – are reduced. **Keywords:** Adult ADHD, substance use, prevalence, epidemiology.

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OP07 – 5 Alcohol consumption and symptoms as predictors of relapse of DSM-5 alcohol use disorder

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Background/Objectives: There are indications that alcohol consumption level and alcohol use disorder (AUD) symptoms may serve as easy quantifiable markers of AUD relapse after diagnostic remission. These indicators could help general practitioners and prevention workers to detect people at risk of relapse. However, information from longitudinal population-based research is limited. We examined the predictive value of past alcohol consumption level, number and type of lifetime AUD symptoms and current at-risk drinking ($\geq 8/15$ drinks weekly for women/men) on AUD relapse in individuals currently in AUD remission. **Methods:** Data are from the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2), a nationally representative face-to-face survey including 5,303 subjects aged 18-64 who were interviewed twice (2007-2009; 2010-2012). Only people in diagnostic remission from DSM-5 AUD for at least 12 months at baseline were included in the present research (n=506). AUD symptoms and drinking patterns were assessed using the Composite International Diagnostic Interview 3.0. Time since AUD remission was assessed retrospectively at baseline. Relapse of AUD was measured prospectively during the 3-year follow-up. Predictors of relapse were examined using Cox regression analyses. **Results:** Cumulative AUD relapse rate was 1.4% at 1 year, 2.9% at 2 years,

5.6% at 5 years, 9.1% at 10 years and 12.0% at 20 years. Low [$\leq 14/21$ drinks weekly for women/men], medium [15-28/22-42] and high [$\geq 29/43$] past alcohol consumption levels were each present in about one-third of the people who were in remission at baseline. Lifetime mild AUD (2-3 symptoms) was most frequent (71.6%), with only a minority reporting moderate (4-5 symptoms; 14.0%) or severe lifetime AUD (6+ symptoms; 14.4%). At baseline, 31.3% of the subjects in remission reported at-risk drinking. Relapse was predicted by both past medium and past high alcohol consumption level, by 6+ lifetime AUD symptoms, by the AUD symptom 'impaired control over use', and by current at-risk drinking. Moreover, current at-risk drinking moderated the relationship between past alcohol consumption level and relapse, as well as the relationship between number of lifetime AUD symptoms and relapse. People with either combination of risk factors had an especially high risk of relapse.

Discussion/Conclusions: Only a minority of people in remission from DSM-5 AUD relapsed. Individuals at risk of relapse are characterized by higher past alcohol consumption level, higher number of lifetime symptoms and the symptom 'impaired control over use'. Each of these factors could thus be used to target relapse prevention; however the low prevalence of 6+ lifetime AUD symptoms indicates that a focus on this risk factor may be most efficient. Special attention should be paid to the reduction of alcohol use amongst people in diagnostic remission given that this was a strong independent predictor of relapse and because current at-risk drinking intensified the effect of past alcohol consumption level and number of lifetime AUD symptoms on the risk of relapse. As information regarding current drinking patterns can easily be obtained, this may provide an adequate starting point for relapse prevention.

Funding: This research is part of a study which was funded by the Netherlands Organization for Health Research and Development (ZonMw), grant number 31160201. NEMESIS-2 is conducted by the Netherlands Institute of Mental Health and Addiction (Trimbos Institute) in Utrecht. Financial support has been received from the Ministry of Health, Welfare and Sport, with supplement support from the ZonMw and the Genetic Risk and Outcome of Psychosis (GROUP) investigators.

Keywords: Alcohol use disorder, relapse, symptoms, alcohol consumption.

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OP08 - Psychosocial Interventions

OP08 – 1 WELLFOCUS PPT - RCT of modified Positive Psychotherapy to improve well-being in psychosis

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Background/Objectives: The promotion of well-being is an important goal of recovery oriented mental health services. No structured, evidence based intervention exists that aims to increase the wellbeing in people with severe mental illness, such as psychosis. Positive psychotherapy (PPT) is a promising intervention for this goal. Standard PPT was adapted for use with people with psychosis, following the Medical Research Council framework for developing and testing complex interventions, resulting in the WELLFOCUS intervention manual and the WELLFOCUS model describing the intended impact of WELLFOCUS PPT. This study aims to test the WELLFOCUS model, by piloting the intervention, trial processes and evaluation strategy.

Methods: We conducted a non-blinded pragmatic feasibility RCT comparing WELLFOCUS PPT in addition to treatment as usual (TAU) to TAU alone. N=94 adults with a main diagnosis of psychosis were recruited from mental health services across the South London and Maudsley NHS Foundation Trust and block randomised into the trial arms. WELLFOCUS PPT was provided to groups of up to N=8 participants by specifically trained and supervised local therapists and members of the research team. Assessments were conducted before randomisation and after the group intervention. The primary outcome measure was well-being assessed by the Warwick-Edinburgh Mental

Well-being Scale. Secondary outcomes included good feelings, symptom relief, connectedness, hope, self-worth, empowerment and meaning, as well as standard measures of health and social functioning. The nested process evaluation included quantitative data collection during the groups and post-intervention using questionnaires, and qualitative data collection using individual interviews and focus groups with participants and trial therapists.

Results: Results of the study will be presented with regards to the feasibility of the intervention and its likely effectiveness in the new client group.

Discussion/Conclusions: Key implications and recommendations for research and practice arising from the findings will be discussed.

Funding: The WELLFOCUS study is funded by Guy's & St Thomas' Charity (Ref G101016). **Keywords:** Wellbeing, recovery, positive psychotherapy, psychosis.

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OP08 – 2 Adverse outcome of psychiatric interventions: Results from a systematic review

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Background/Objectives: In medicine and psychiatry adverse outcomes of biological interventions (e.g. psychopharmacological medication) are widely researched and documented. However, much less attention is paid to such outcomes of psychotherapeutic and – particularly – psychosocial interventions such as hospital admission, intensive home or community treatment, and long-term supportive care. Adverse outcomes may include, but are not limited to, physical harm to self or others, loss of social functioning, and long-term dependency on services and others. Since we know little of these outcomes, the following research questions were stated: 1) what are adverse outcomes of non-biological and non-psychotherapeutic treatments in psychiatry and mental health services, 2) what types of causes are recognized for these adverse outcomes, 3) what are the known chances (risks) of the occurrence of these adverse outcomes?

Methods: Systematic review in which search terms from three groups (adverse outcomes, psychiatric treatment, and psychiatric disorders) were combined. Additional search strategies were applied to detect specific adverse outcomes.

Results: The larger part of research on adverse outcomes is done on biological interventions, a much smaller part on psychotherapeutic interventions, and an even smaller part on psychosocial interventions. Adverse outcomes vary from minor incidents of harm to suicide and homicide, however many outcomes are less unequivocal in nature. Potential causes of these outcomes are identified – incorporating variables potentially confounding causal relations between treatments and adverse outcomes.

Discussion/Conclusions: Systematic knowledge on the potentially harmful effects or adverse outcomes of many psychosocial interventions in psychiatry and mental health services – where possible chances of such outcomes are present – is largely absent. Systematic attention for possible adverse outcomes in research designs measuring the effectiveness of such interventions also seems absent. A wealth of potentially intrusive interventions is thus carried out daily without knowledge of its effects. Methodological options, including designs and instruments, that take adverse outcomes into account more systematically are discussed.

Funding: HAN University of Applied Sciences. **Keywords:** Adverse outcome, psychosocial treatment, iatrogenesis, errors.

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OP08 – 3 A shared decision making training for inpatients with schizophrenia

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Background/Objectives: Many patients with schizophrenia have a marked desire for participation in treatment decision making. In addition, guidelines recommend shared decision making (SDM) for the treatment of these patients. However, in clinical practice SDM often does not take place. This might be due to reservations on the psychiatrists' side, because many of them see their patients, especially in acute phases of the illness, as impaired with regard to decisional capacity. However, also many patients behave passively in the medical encounter, therefore not facilitating SDM.

Methods: Randomized-controlled trial comparing the effects of a five session SDM-training for inpatients with schizophrenia with five sessions of non-specific group training. The SDM-training sessions included motivational (e.g. prospects of participation, patient rights) and behavioral aspects (e.g. role plays) and addressed important aspects of the patient-doctor-interaction such as question asking or giving feedback. There was much emphasis on interaction between moderators and patients as well as on mutual support.

Results: N=262 patients were recruited for the trial in four psychiatric hospitals. First analyses show that the SDM training increases patients' participation preferences, their wish to take over more responsibility for medical decisions and partly also their behaviour in the medical encounter.

Discussion/Conclusions: Further analyses of the ongoing study will have to show the impact of the SDM training on long-term outcomes such as adherence and readmission rates. However, to date it can already be concluded that a SDM-training, even for patients in the very acute phases of their psychotic illness, can be implemented and is highly accepted by patients. It leads to changes in patients' attitudes towards treatment with many of them being more interested in actively participating in treatment decision making. It has become apparent that preparing for ward rounds of consultation is one of the most important aspects of a deeper participation of patients.

Funding: German Ministry for Research and Education (BMBF).

Keywords: Schizophrenia, shared decision making, adherence, patient autonomy.

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OP08 – 4 Evaluation of Anti-Stigma Interventions with Sixth Grade Students: A 2 x 2 x 2 Pre-Post-Test Factorial Randomized Controlled Study

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Background/Objectives: Stigmatizing attitudes and behaviors toward individuals experiencing mental health problems result in serious consequences including social isolation, discrimination, and delay of treatment. Research suggests that these negative attitudes about mental illness are formulated during childhood and endure into adulthood. This gives rise to the importance of a widely disseminated, effective intervention targeted to this critical time of development. We developed and tested such an intervention. This study is part of a larger, four year stigma study designed to evaluate the short and long term effectiveness of three interventions: a classroom curriculum, contact with individuals with mental illness, and printed materials in the classroom.

Methods: We utilized a 2 x 2 x 2 pre post-test factorial randomized controlled design. The uniquely diverse sample, consisting of 721 sixth graders, was derived from 16 schools matched based on SES and standardized test scores and randomly assigned to one of eight conditions comprising three factors. We assembled a comprehensive assessment package consisting of open-ended questions, vignettes, and self-report measures adapted from established instruments and measures newly developed for the study.

Results: A significant effect of curriculum only was found on increased help-seeking ($p = 0.016$) and talking about mental health problems ($p = .013$). Curriculum plus contact showed a stronger, significant effect on help-seeking and talking about mental health problems than did curriculum alone ($p = .013$, $p < 0.001$). Contact significantly reduced social distance in response to a vignette depicting anxiety, but not for a vignette depicting bipolar illness. No significant effects of interventions on negative attitudes were found.

Discussion/Conclusions: The curriculum and contact interventions both show promise. We are currently following students for two years to further evaluate changes in attitude, social distance, help-seeking and other behavioral changes. scents, mental-health help-seeking.

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OP08 – 5 Social Network Interventions and Severe Mental Illness: A Systematic Review

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Background/Objectives: There is strong evidence that people with severe mental illness have few social contacts and experience a lack of social support. Nonetheless, treatment for people with severe mental illness often does not include social network interventions that may increase the number of social contacts and the level of social support. In case social network interventions are integrated in treatment practice, changing the characteristics of social networks (by befriending interventions and facilitating social support) has proven difficult. Furthermore, sound randomized clinical trial studies in which the effectiveness of social network interventions is examined are scarce. The following research questions were examined: 1) what are the barriers related to the integration of social network interventions in treatment practice, 2) what type of causes are recognized for the experienced difficulty in changing characteristics of social networks, and 3) what is the effectiveness of different types of social network interventions for persons with severe mental illness?

Methods: Systematic review in which all studies investigating social network interventions in severe mental illness samples were identified by conducting systematic searches of electronic databases using pre-defined search terms and criteria.

Results: Barriers related to implementing social network interventions range from obstacles related to client/family (lack of motivation and skills, unwilling and burned out family members etc.) to obstacles related to the professional/mental health system (lack of knowledge, time and interest, high caseloads, bureaucracy etc.), and the community (stigma/bias, lack of resources etc.). One of the reasons for the experienced difficulty in changing characteristics of social networks of people with severe mental illness is that they may not be motivated to maintain or increase their social contacts because of perceptions related to social support. Relatively few controlled studies were found in which the effectiveness of social network interventions for persons with severe mental illness was demonstrated.

Discussion/Conclusions: Systematic knowledge on the barriers related to the implementation of social network interventions and the causes for the experienced difficulty in changing characteristics of social networks is largely absent. Strategies to address identified barriers to the implementation of social network interventions are discussed, as well as solutions for targeting the right problems of persons with severe mental illness in social network interventions. In conclusion, an overview is provided of (characteristics of) different types of social network interventions that were found to be effective.

Funding: HAN University of Applied Sciences. **Keywords:** Social network interventions, severe mental illness, systematic review, effectiveness.

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OP08 – 6 Peer to Peer - Support in severe mental illness: Affective Disorders, Psychosis and Personality disorder – acceptance and resonance

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Introduction: Severe mental illness like affective disorders, psychoses and personality disorders is accompanied by the phenomena of cyclic hospital re-admission, heavy losses in quality of life and high suicidal rates and stigmatization. In these diagnoses, a refinement of intervention is still required for patients themselves and their relatives. In mental health services there is an international trend toward recovery-orientated interventions, like peer-support. In countries like England, Australia and even Switzerland this alternative approach for patients is already researched and partially implemented in mental health services. The former studies revealed that mental health customers had higher adherence to medical services and service engagement when receiving additional peer-Support. In Germany this is the first attempt to implement area-wide peer-support in a metropolis in order to provide a low-threshold service. It is expected to increase self-efficacy, global functioning and health status. After a one-year-qualification at “Experienced Involvement”, people with their own experiences of mental disorders support others with aforementioned diagnoses, additional to their “treatment as usual”, supplying individual self-help at eye-level. In addition, relatives support relatives. Both interventions can be attended for six months. This project forms a part of “psychnet – Hamburger Netz psychische Gesundheit”, a project supported by the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung BMBF) during 2011 - 2014. **Methods:** In both a randomized controlled multi-centre-trial and an effectiveness study – involving 10 psychiatry clinics in Hamburg – 200 in- and outpatients in each condition suffering from affective disorders, psychoses or personality disorders receive additional peer-support, as required, for up to a maximum of 6 months. Subjects complete questionnaires (SWE-Selbstwirksamkeitserwartung, EQ-5D-Allgemeine Gesundheit) and are rated by clinicians (CGI Clinical Global Impression, GAF Global Assessment of Functioning) at three points of measurement: Entry to the half year intervention, after the intervention and in a six month follow up. In and outpatient days are documented. **Results:** We will present first findings on request, service satisfaction and attendance in patients and relatives. **Funding:** None declared.

OP09 - Depression and anxiety

OP09 – 1 Affective Disorders in the Elderly in Different European Countries: Results from the MentDis_ICF65+ study

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Background/Objectives: Despite ongoing demographic change, representative data on the prevalence of mental disorders in the European elderly is lacking. At the same time, affective disorders appear to be among the most prevalent disorders in the elderly. Therefore, the present study aims to estimate 12-month prevalence rates of Major Depressive Disorder (MDD) and dysthymia and their sociodemographic and clinical correlates in different European and Associated countries using standardised interview techniques. **Methods:** The MentDis_ICF65+ study is a cross-sectional survey (N = 3,142) conducted in six different European and Associated countries (Germany, Italy, Spain, Switzerland, England and Israel). DSM-IV diagnoses were obtained by an age-sensitive version of the Composite International Diagnostic Interview. In addition, the following questionnaires were used: HoNOS65+, WHO-QoI-BREF, WHO-DAS II. Mixed linear and logistic regression models were calculated. **Results:** Overall, the adjusted and weighted 12-month prevalence rate for any depressive disorder was 13.01%, although prevalence rates varied significantly across centres. Sociodemographic correlates with MDD and dysthymia were female gender and younger age; clinical correlates were PTSD, anxiety disorders and somatoform disorders. Past-year major depression and past-year dysthymia are associated with increased functional impairment and symptom severity and a significant decrease in health-related quality of life. **Discussion/Conclusions:** This is the first study that used a standardized and structured clinical interview for mental disorders adapted to the needs of the elderly to report 12-month prevalence rates and relationships with sociodemographic and clinical characteristics for affective disorders across different European and European Associated countries. Our study found higher prevalence for affective disorders than previous studies for the elderly. Furthermore clinical markers for depression risk in the elderly were identified. There is an urgent need to imply specialized mental health care for this old age group. **Funding:** European Commission. **Keywords:** Depressive disorder, old age, prevalence, Europe.

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OP09 – 2 Disability in Anxiety Disorders

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Background/Objectives: Anxiety disorders are the most common mental disorders and are associated with severe disability. Disability has been very well investigated in depressive disorders but not in anxiety disorders. This study compares disability levels between subjects with social anxiety disorder (SAD), panic disorder with agoraphobia (PDA), panic disorder without agoraphobia (PD), generalized anxiety disorder (GAD) and multiple anxiety disorder (multiple AD) and healthy controls. We further investigate the role of anxiety arousal and avoidance behaviour in disability, and whether differences in these symptom patterns contribute to disability differences between specific anxiety disorders.

Methods: Data were used from subjects with no psychiatric diagnosis (healthy controls, n=647) and with a current anxiety disorder (SAD, n=266; PDA, n=150; PD, n=122; GAD, n=174; multiple AD, n=467) from the Netherlands Study of Depression and Anxiety (NESDA). The Composite Interview Diagnostic Instrument was used to diagnose anxiety disorders. The World Health Organization Disability Assessment Schedule II was used to measure disability. Severity of anxiety arousal and avoidance behaviour symptoms was measured using the Beck Anxiety Inventory and the Fear Questionnaire, respectively.

Results: All anxiety disorders were associated with higher disability compared to healthy controls. Disability was highest in multiple AD and SAD, followed by GAD and PDA, and lowest in PD. Anxiety arousal was more associated with disability in life activities and participation, whereas avoidance behaviour was more associated with disability in cognition and social interaction. Although different disability patterns between anxiety disorders were found, these disability differences were not completely explained by anxiety arousal and avoidance behaviour.

Conclusions: Disability is highest in subjects with SAD and multiple AD. Both anxiety arousal and avoidance behaviour are associated with higher disability levels but do not fully explain the differences across anxiety disorders. Acknowledgements and financial support: The infrastructure for the NESDA study (www.nesda.nl) is funded through the Geestkracht program of the Netherlands Organisation for Health Research and Development (zon-Mw, grant number 10-000-1002) and is supported by participating universities and mental health care organisations (VU University Medical Center, GGZ inGeest, Arkin, Leiden University Medical Center, GGZ Rivierduinen, University Medical Center Groningen, Lentis, GGZ Friesland, GGZ Drenthe, Scientific Institute for Quality of Healthcare (IQ healthcare), Netherlands Institute for Health Services Research (NIVEL) and Netherlands Institute of Mental Health and Addiction (Trimbos Institute)). All authors had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Keywords: Anxiety disorder, disability, anxiety arousal, avoidance behaviour.

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OP09 – 3 Anxiety disorders are associated with infectious diseases: A cross-sectional community study

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Background/Objectives: Research has shown that affective disorders are associated with infectious diseases in the community, leading to important conclusions concerning etiological mechanisms related to affective disorders. As with affective disorders, anxiety disorders are highly prevalent in the community and are associated with an increased use of the health care system. Therefore identifying possible etiological mechanisms related to anxiety disorders is of high importance too. Nevertheless, up to date no study has examined the association of specific types of infections and anxiety disorders in an adult community sample. We, therefore, evaluated the association of specific infectious diseases and anxiety disorders in the general population as well as quality of life associated with this comorbidity.

Methods: We used data from the 1998 German Mental Health survey with 4181 subjects aged 18-65. Anxiety disorders (12-month prevalence of panic disorder, agoraphobia, simple phobia, phobic disorder not otherwise specified, social phobia, generalized anxiety disorder, obsessive compulsive disorder and panic attacks) were diagnosed using M-CIDI interviews; lifetime prevalence of different infectious diseases were assessed through a self-report questionnaire. Health-related quality of life was measured by the well validated SF-36 questionnaire. We calculated logistic regression analyses to evaluate the association of anxiety disorders and infectious diseases. Additionally, a general linear model was used to examine the association of comorbidity and quality of life.

Results: Higher prevalence rates of whooping cough were found in subjects with agoraphobia, simple phobia, generalized anxiety disorder and panic attacks. A higher prevalence rate of mumps was found in agoraphobia. An increased rate of scarlet fever was found in agoraphobia. A higher prevalence rate of tuberculosis was found in subjects with agoraphobia; diphtheria was found to be more prevalent in subjects with panic attack and in subjects with panic disorder. Having any anxiety disorder was associated with an increased risk of having whooping cough, scarlet fever and diphtheria. Subjects with both infectious diseases and anxiety disorders reported lower scores in domains of health-related quality of life than subjects with only one condition or with neither condition.

Discussion/Conclusions: Specific infectious diseases are associated with specific anxiety disorders in the community. Different possible pathways will be discussed. This study extends prior research by reporting associations of specific infectious diseases and anxiety disorders in an adult community sample. This knowledge might initiate research detecting etiological mechanisms related to subtypes of anxiety disorders.

Funding: The German Health Survey (GHS) was supported by grant 01EH970/8 (German Federal Ministry of Research, Education and Science; BMBF).

Keywords: Comorbidity, anxiety disorder, infectious diseases, quality of life.

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OP09 – 4 First-incidence of DSM-IV mood, anxiety and substance use disorders and its determinants: results from the Netherlands Mental Health Survey and Incidence Study-2

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Background/Objectives: Prospective studies measuring first-incidence of DSM-IV mood, anxiety and substance use disorders in the general population are rare. We assessed these incidence rates in the Dutch population and identified baseline sociodemographic, physical and psychopathological variables, as well as negative changes in sociodemographics and physical health between baseline and follow-up, as determinants of disorder first-onset. **Methods:** Data are from the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2), a nationally representative face-to-face survey of 5,303 subjects aged 18-64 who were interviewed twice (2007-2009; 2010-2012). Mental disorders were assessed with the lifetime Composite International Diagnostic Interview 3.0 at baseline and a three-year version at follow-up. The response rate was 65.1% at baseline and 80.4% at follow-up. **Results:** In three years, 8.86% of adults without prior psychopathology experienced any mental disorder, corresponding with 3.09 cases per 100 person-years. Incidence was highest for anxiety (1.69 per 100 person-years) and mood disorders (1.65), and lowest for substance use disorders (0.97). For the separate disorders, incidence was highest for major depression (1.58), specific phobia (0.79) and alcohol abuse (0.73). For mood and anxiety disorders, incidence rates were higher among women, and for substance use disorders, it was higher among men. Age was inversely related to all disorder categories. Lower educational level and lower income were both associated with incident mood and substance use disorders. Presence of any physical disorder increased the likelihood of incident anxiety disorder. Changes in sociodemographics - like no longer living with a partner, no longer being employed, decrease in income, and onset of a physical disorder between baseline and follow-up - were stronger determinants than the corresponding sociodemographics. With regard to psychiatric history, it was found that incident mood disorder was predicted by baseline 12-month anxiety and substance use disorder, incident anxiety disorder was predicted by baseline 12-month mood and substance use disorder, and incident substance use disorder by adult ADHD only. **Discussion/Conclusions:** First-onset of mental disorders in a 3-year period is not an uncommon phenomenon. Results about determinants of incident disorders are important for prevention and early intervention initiatives aimed at reducing the burden of mental disorders for patients, their family members, communities and the health care system. These activities should be focused on younger cohorts (especially for substance use disorders), those lower educated and people experiencing economic decline, divorce or death of their partner, or onset of physical disorders. In the light of the current economic crisis in European and other countries, these findings about determinants of incidence are of importance; they suggest higher incidence rates of mental disorders - especially mood disorders - when unemployment rates rise and income decreases substantially among part of the population. This study also shows that prevention of psychiatric comorbidity is important because the risk of secondary disorders is high. Therefore, in clinical practice, patients with a mental disorder should be monitored for emerging symptoms of other disorders, as intervention could prevent the onset of a secondary disorder. **Funding:** NEMESIS-2 is conducted by the Netherlands Institute of Mental Health and Addiction (Trimbos Institute) in Utrecht. Financial support has been received from the Ministry of Health, Welfare and Sport, with supplement support from the Netherlands Organization for Health Research and Development (ZonMw) and the Genetic Risk and Outcome of Psychosis (GROUP) investigators. **Keywords:** Incidence, common mental disorders, prospective, population study.

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OP09 – 5 Psychiatric history of women who have had an abortion

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Background/Objectives: Prior research has focused primarily on the mental health consequences of abortion; little is known about mental health status before the abortion took place. In this study, the psychiatric history of women who have had an abortion is investigated. **Methods:** 325 Women who recently had an abortion were compared with 1,902 women from the population-based Netherlands Mental Health Survey and Incidence Study (NEMESIS-2). Lifetime prevalence estimates of mood, anxiety, substance use and impulse control disorders were measured using the Composite International Diagnostic Interview 3.0. **Results:** Lifetime prevalence of any axis-1 mental disorder was significantly higher for the abortion sample (68.3%) than for the reference sample (42.2%). Compared to the reference sample, women in the abortion sample were three times more likely to report a history of any mental disorder (OR = 3.06, 95% CI = 2.36-3.98). For all disorder groups and most individual disorders women in the abortion group had significantly higher prevalence estimates and odds ratios ranging from almost 2 to almost 7. The highest odds were found for conduct disorder (OR = 6.97, 95% CI = 4.41-11.01) and drug dependence (OR = 4.96, 95% CI = 2.55-9.66). Similar results were found for lifetime-minus-last-year prevalence estimates and for women who had first-time abortions only. **Discussion/Conclusions:** The results clearly demonstrate that women who have had an abortion are more likely to have a history of mental disorders than women who have not had an abortion. This could reflect either an increased chance of unintended pregnancy among women with a history of mental disorders compared to controls, or that women with a history of mental health problems more often choose to terminate unintended pregnancies compared to controls, or both. Our results support the notion that psychiatric history may explain associations that have been found between abortion and mental health in previous research. Psychiatric history should therefore be taken into account when investigating the mental health consequences of abortion. **Funding:** Financial support has been received from the Ministry of Health, Welfare and Sport, with supplementary support from the Netherlands Organization for Health Research and Development (ZonMw); grant number 127000003. Furthermore, the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2) conducted by the Netherlands Institute of Mental Health and Addiction in Utrecht received additional financing from the Genetic Risk and Outcome of Psychosis (GROUP) Investigators and the National Institute for Public Health and Environment (RIVM). **Keywords:** Abortion, pregnancy termination, psychiatric history, general mental health.

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OP09 – 6 Depression- and anxiety-related sick leave and the risk of permanent disability and mortality in the working population in Germany: a cohort study

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Background/Objectives: Anxiety and depression are the most common psychiatric disorders and are the cause of a large and increasing amount of sick-leave in most developed countries. They are also implicated as an increasing mortality risk in community surveys. In this study we addressed whether sick leave due to anxiety, depression or comorbid anxiety and depression was associated with increased risk of retirement due to permanent disability and increased mortality in a cohort of German workers. **Methods:** 128,001 German workers with statutory health insurance were followed for a mean of 6.4 years. We examined the associations between 1) depression/anxiety-related sick leave managed on an outpatient basis and 2) anxiety/depression-related psychiatric inpatient treatment, and later permanent disability/mortality using Cox proportional hazard regression models (stratified by sex and disorder) adjusted for age, education and job code classification. **Results:** Outpatient-managed depression/anxiety-related sick leave was significantly associated with higher permanent disability (hazard ratio (95% confidence interval)) 1.48 (1.30, 1.69) due to depression, 1.25 (1.07, 1.45), anxiety, 1.91 (1.56, 2.35) and due to both). Among outpatients, comorbidly ill men (2.59 (1.97, 3.41)) were more likely to retire early than women (1.42 (1.04, 1.93)). Retirement rates were higher for depressive and comorbidly ill patients who needed inpatient treatment (depression 3.13 (2.51, 3.92), both 3.54 (2.80, 4.48)). Inpatient-treated depression was also associated with elevated mortality (2.50 (1.80, 3.48)). Those with anxiety (0.53 (0.38, 0.73)) and female outpatients with depression (0.61 (0.38, 0.97)) had reduced mortality compared to controls. **Conclusions:** Depression/anxiety diagnoses increase the risk of early retirement; comorbidity and severity further increase that risk, depression more strikingly than anxiety. Sickness-absence diagnoses of anxiety/depression identified a population at high risk of retiring early due to ill health, suggesting a target group for the development of interventions. **Funding:** Hannover Life Re. **Keywords:** Anxiety, depression, invalidity, mortality.

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OP10 - Mental health service provision

OP10 – 1 Globalization and Mental Health: A Review of the Literature

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Background/Objectives: It has been suggested that globalization could affect public health in different ways. The aim of this study was to examine the relationship between globalization and mental health. **Methods:** A descriptive review of the literature was undertaken of all the full publications in the English language biomedical journals up to 2012 using several search engines including Medline, Science citation index, Scopus, Embase, and Google scholar. The search was limited to globalization and included the combination of keywords 'mental health', 'mental disorders' 'psychological health', 'psychological disorders', 'anxiety' and 'depression' that appeared in the titles and abstracts of the publications. A manual search was also performed to include additional papers of potential interest. The data were examined for quality and synthesized as appropriate. **Results:** In all, 244 citations were identified. After thorough examination and excluding duplicates and short communications, 21 citations on the relationship between globalization and mental health were found to be relevant and were further examined. The findings are summarized under different headings and presented in different tables including topics related to concepts and challenges in understanding the issue of globalization, geography of living area, and outcomes. With few exceptions, the findings showed that mental health, or some aspects of mental health, were affected by globalization. Depression, anxiety, identity problems, and suicide, individually or in combination, were the most important negative consequences of globalization. **Discussion/Conclusion:** This overview of the literature illustrates that globalization by itself is neither good nor bad. However, in general this review provides evidence for a negative relationship between globalization and mental health. Further studies in this emerging issue are recommended in order to indicate the epidemiology and burden of mental health due to globalization. **Funding:** None Declared. **Keywords:** Globalization, health, mental health, systematic review.

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OP10 – 2 Can we learn from Hegel to improve thinking about psychiatry?*Jan Verhaegh**Philosopher of Psychiatry, European Network of Users and Survivors of Psychiatry*

Background/Objectives: Some key concepts of the philosophy of GWF Hegel will be outlined, and contributions of Hegel's concepts which are important for use in philosophy of psychiatry will be described.

Methods: The presentation will give a narrative account of

1. life and work of Georg Wilhelm Friedrich Hegel,
2. the influence of Hegel on European thinking and the points of view of Hegel's critics,
3. the relationship between analytical philosophy and dialectical philosophy,
4. recent updates of Hegel's philosophy by, e.g. Catherine Malabou and her concept of plasticity, in philosophy and neurosciences, and
5. contributions of Hegel's central philosophical concepts to a better thinking about psychiatry.

Results: As Wikipedia says many people think about dialectics as thesis-anti-thesis-synthesis when they hear about the dialectical philosophy of Hegel. They also think about obscure philosophy which supported totalitarian regimes in the twentieth century. Although both opinions have something to do with the reality of history most scholars now say that both opinions are false and are not good interpretations of the work of Hegel. The central notion of Hegel is that all things are part of a larger whole, have plasticity and exist out of internal contradictions and conflicts which makes them historical. (In that sense Hegel is a precursor of psycho-analytical thinking.) Hegel says that in the course of history this dynamism has, in a triadic form (being-nothingness-becoming, immediate-mediate-concrete, abstract-negative-concrete as described in „Wissenschaft der Logik“), led to higher forms of life (Hegel as precursor of evolution). In the same sense the collective human mind and consciousness, in history, has led to science (Hegel as philosopher of enlightenment) as described in “Phenomenology of Spirit”. The contradictions in society have led to a history in the direction of more freedom (Hegel as philosopher of the French Revolution). But, as Catherine Malabou says, in the heart of reality, according to Hegel, there is negativity and tragedy in history and even in God (in the Christian tradition). No cheap or mechanical reconciliation or synthesis is possible although as humanity we can, with great effort, make progress.

Discussion: Reading Hegel's work can help to raise the interest in the philosophy of psychiatry, specifically the philosophy of GWF Hegel and recent updates of Hegel's concepts. These concepts could help to strengthen a first-person perspective in mental health care.

Funding: None declared.

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OP10 – 3 Mental Illness Prevention and Mental Health Promotion in Germany - an overview*Paulo Kling Lourenço, Thomas Becker**Department of Psychiatry II, Ulm University, Germany*

Background/Objectives: Mental illness prevention and the promotion of mental health have become two important areas that increasingly concentrate the efforts of German policy makers. The fact that many people are affected by mental health problems and the increasing awareness of the consequences have led to prioritising the implementation of mental health promotion and prevention laws in Germany during the last 10 years. The aim of this comprehensive research project was to generate an update of the mental health prevention and promotion systems in Germany, with a focus on the legislature, mental health services, implementation programmes and access to activities, as well as collecting data about their financing and impact on the population.

Methods: Four main sources of data were used in order to create a profile of the mental health systems and services which that are active in providing mental health promotion and prevention of mental illness in Germany. Those included a search of the relevant literature on this issue, the use of information gathered in a standardised template, an expert survey and the research on EU and WHO databases. Most of those programmes are implemented in settings like schools or workplaces and are focused on conflict management, stress reduction, eating disorders, stigma and drug and alcohol prevention. On the contrary, there was insufficient implementation of programmes and activities in long-term institutions for the elderly.

Results and conclusions: Our findings show that there is a great variety of laws, activities and programmes being implemented across all German federal states and most of those initiatives have progressed since the EU and WHO policy initiatives were launched in 2005. However, the fragmented nature of the German federal state makes a homogeneous implementation of those measures difficult, creating a huge diversity of services and different stages of development within the federal states which can be a major obstacle to the planning and evaluation of mental health services at a national level.

Funding: This project was funded by the Health Programme of the European Union in assignment of the European Executive Agency for Health and Consumers (EAHC) and was coordinated by the Institute of Mental Health Nottingham, England as part of the European Profile of Prevention and Promotion of Mental Health (EuroPoPP-MH), service contract no: 20106201-Mental Health.

Keywords: Prevention of mental illness, promotion of mental health, mental health systems.

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OP10 – 4 Pathways to Care of High Risk for Psychosis Patients Across Four European Regions

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Background/Objectives: Improving pathways to appropriate treatment services is a primary aim of indicated prevention in early psychosis. Thus, adequate prevention measures could be delivered to subjects at high risk for psychosis, possibly reducing transitions into psychosis, as well as reducing the burden of the patients and their social environments. To evaluate the pathways to care of high-risk subjects has been a major aim of the European Prediction of Psychosis Study (EPOS). **Methods:** Key parameters of pathways to care were investigated with an adapted version of the fully structured “Pathways to care” interview in a large sample (n = 233) of subjects meeting high-risk psychosis criteria from Finland, Germany, The Netherlands and the UK, most of whom were seen at Early Detection and Intervention (EDI) units. **Results:** We found, on average, 2.9 help-seeking contacts, and a duration of unrecognized risk (DUR) of more than 3 years. Actual help-seeking was influenced by subjects’ mental health and health care attitudes, the set-up of health care systems, and concerns of relevant others. Subjects later transitioning to psychosis took a significantly longer time to initiate help-seeking than subjects with no transition. **Discussion/Conclusions:** Pathways to indicated prevention of psychotic disorders could be quick if specialised professional institutions are available. Even then, delays can be still substantial. There are also substantial differences between European mental health care systems. **Funding:** Grant QLG4-CT-1081 within the 5th Framework Program „Quality of Life and Management of Living Resources“ of the European Commission. Additional funding from the Social Insurance Institution of Finland, and the Köln Fortune Program of the Medical Faculty of Cologne. Professor Birchwood and Dr Patterson were in part funded by the National Institute for Health Research (NIHR) through the Collaborations for Leadership in Applied Health Research and Care for Birmingham and Black Country (CLAHRC-BBC). **Keywords:** Early Psychosis, pathways to care, prevention of psychiatric disorders, service receipt.

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OP11 - Comorbidity

OP11 – 1 Longitudinal Patterns of Depression and Anxiety in Coronary Heart Disease. Relationship to Cardiac Outcomes and Quality of Life

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Background/Objectives: Depression and coronary heart disease (CHD) are predicted to be the two main causes of burden of disease, measured by disability-adjusted life years (DALYs), by the year 2020. In the 2004 update of the Global Burden of Disease Study, unipolar depression and CHD placed third and fourth, respectively, amongst leading causes of DALYs in the World, as well as being the two leading causes of DALYs in high and middle income countries. There is recent evidence that anxiety disorders are also associated with the presence of CHD. Additionally, anxiety symptoms in the presence of CHD relate to a higher risk of adverse cardiac events. Due to the considerable overlap between anxiety disorders and depression, as well as comorbidity between the two conditions, anxiety could also be playing a key role in the course of CHD and how it relates to depression. Despite the considerable literature on the association between these conditions, there is little longitudinal evidence on how the course of depression and anxiety changes over time in the context of coronary heart disease. The objectives of this study are to identify and describe the distinct longitudinal patterns of depression and anxiety in patients within this cohort. This also involves identifying risk factors and comorbidities associated with each pattern of depression and anxiety. After the patterns are identified, correlation to cardiac outcomes and quality of life can be assessed. **Methods:** The population to be used for this study is the cohort studied in the UPBEAT UK research programme, which aimed at studying the relationship between depression and CHD in primary care patients. This is a five-year study consisting of 803 patients on CHD registers in general practices throughout South London. The patients were assessed for depression at baseline using the Hospital Anxiety and Depression Scale (HADS), Clinical Interview Schedule-Revised (CIS-R), and Patient Health Questionnaire-9 (PHQ-9). For CHD symptoms they were assessed at baseline using the Modified Rose Angina Questionnaire. Follow-up consisted of reassessment using HADS, PHQ-9, and Modified Rose Angina Questionnaire on a 6-month basis. In total, 8 follow-up data points are available from this cohort, as well as the baseline measurements. **Results:** After initial analysis of the data (at 36 month follow-up), 33.6% of patients had at least one instance of depression (score of 8 or more on HADS-D) and, of these, 21.9% had depression in at least half of the follow-ups, while 16.3% had depression at every follow-up. In contrast, 41.7% of patients had at least one instance of anxiety during the follow-up period (score of 8 or more on HADS-A) and, of these, 31.6% had anxiety in at least half of the follow-ups, while 23.9% had anxiety during each follow-up. 50.2% of patients had either depression or anxiety at least during one follow up point. Ongoing analysis to be presented will identify and associate the different patterns of depression and anxiety to cardiac outcomes and death, as well as quality of life. **Discussion:** The UPBEAT-UK study found that anxiety was a more powerful predictor of adverse cardiac events and mortality than depression in this patient population. This study is the first to look at the longitudinal course of mood disorders in CHD, and how the different patterns of depression and anxiety correlate to disease outcomes and quality of life. This allows for further clarification of the subtle role depression and anxiety play on CHD, and helps toward the diagnosis, management, and treatment of these patients. **Funding:** This project is funded by CONACYT, a Mexican government institution. UPBEAT-UK is funded by the National Institute of Health Research (NIHR). **Keywords:** Depression, anxiety, coronary heart disease, quality of life.

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OP11 – 2 Sense of self-efficacy, empowerment and life satisfaction while choosing a career in adolescents and emergent adults with corrected congenital heart defects (JEMAH) in Germany and in Bolivia

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What's known on this subject: Patients with congenital heart diseases (CHD) undergo important neurodevelopmental, psychosocial, and physical morbidities and need a specific career development training program. What this study adds: CHD Patients from Bolivia and Germany are being considered to measure specific self-competencies during their career choice, to understand how satisfied they are, with how they handle their lives. Several aspects of CHD patients were studied to develop a self-management JobFit program for an appropriate career choice and for the activation of self-competencies so that participants are satisfied with how they handle their lives.

Objectives: This paper

1. correlates the processes and outcomes of self-efficacy, empowerment and satisfaction in German and Bolivian CHD patients during their career orientation.
2. compares the results for German and Bolivian male and female CHD patients.

Background/Objectives: Many adolescents have difficulties in defining their career and life projects, but chronically ill patients have even more difficulties due to their functional impairments or need for medical care (Seiffge-Krenke, 2006). Marino finds that the quality of life of patients with congenital heart diseases (CHD) may be affected because they undergo important neurodevelopmental, psychosocial, and physical morbidities resulting from their disease and/or its management (Marino et al., 2010). In particular patients with severe residual morbidity experience their career choice significantly more negatively (Sticker, 2013). These patients are delayed in their development, for example, in gaining autonomy from parents, building peer relations and preparing for a future profession, although these tasks are very important goals in their lives (Nurmi, 1993, 2006). Our aim is to develop an appropriate program to enhance their self-efficacy while choosing an occupation or profession because "higher levels of internal locus of control promote the completion of these tasks" (Schonpflug & Jansen, 1995). **Methods:** This study concentrates on three examination groups with congenital heart diseases. All the participants have been treated via interventional or surgical means. Experimental group (Group I): 15 Bolivian patients with severe residual CHD morbidity who participate in a structured longitudinal Self-management JobFit-Training program. Control group (Group II): 15 Bolivian patients with light residual CHD morbidity who do not participate in the JobFit-Training program. Control group (Group III): 15 German patients with severe residual criteria CHD, who do not participate in the JobFit-Training program. The subjects from Group I and II are between 16 – 26 years of age. They were identified from a database analysis from Kardiozentrum, a Bolivian reference center for pediatric cardiology that specializes on Congenital Heart Diseases (CHD) in La Paz, Bolivia. The individual participants from Group III are between 15 – 30 years old and were identified in a Career Choice Seminar in Cologne, Germany, in October 2013, organized by the National Federation for Children with Heart Diseases and the Vocational Promotion Center of Cologne (Bundesverband Herzkrankte Kinder e.V. and Berufsförderungswerk) Subjects from the three groups of patients are being tested using the following measures:

- Short form of the General Self Efficacy Scale (GSES). Beierlein C et al., 2012, designed by Schwarzer et al. (1981)
- *Quality of Life Enjoyment and Satisfaction Questionnaire* – Short Form (Q-LES-Q-SF) Tong, M. 2010 designed by Endycott, 1993
- *Empowerment Scale* (Small N et al., 2013), Mikky IF, 2006: Development of the Client *Empowerment Scale (CES)*

Repeated follow-up-measures data is collected only for Group I (pre-post test). The scores obtained are analyzed using descriptive and non-parametric methods. Results and discussion: This study has being designed to

compare the outcomes of three groups of CHD patients and use the results to develop a structured training program for chronically ill patients. The results show that patients with severe CHD morbidity in general have shortages in the sensation of self-efficacy or the sense of personal competence to deal efficiently with a variety of stressful situations. There are differences between the three groups in their perception of empowerment, with higher potential in the German sample. As expected, the category "knowledge about their illness" was evidently low in the Bolivian patients, which shows the need for information to reassure their empowerment and their commitment. In all samples, occupational choices are influenced by gender-based employment segregation. The German females were significantly better educated with 58% of them having a school graduation in comparison to only 41% of the men. This study shows that there are geographical and cultural differences between German and Bolivian patients. There are sensitive etic and emic approaches for examining different cultural dimensions and contexts (e.g., Farh, Leong, & Law, 1998). Although outcomes of patients with severe residual shunts evidence, low self-efficacy, advising their insecurity mental state. The reason could be that patients with severe chronicity perceive the fragility of life and need to counteract this view with strategies for becoming strong and taking control of their life. Recommendations: Our data helps to develop an accurate career assessment program for CHD patients in the field of developing vocational skills and choices for an inclusion of chronic patients as working citizens in society. The self-management JobFit-Training program may enhance their self-perception, self-regulation, copying strategies and decision-making skills during their career choices and job finding, allowing CHD patients to develop a sense of purpose, fulfillment and satisfaction with life.

Keywords: Career guidance program, congenital heart defects, self-management, self-efficacy, quality of life, enjoyment and satisfaction, sense of empowerment, gender occupational choices.

Funding: DAAD Fellowship A/11/96181, Budget-item 331 4 04 001.

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OP11 – 4 The Psychosocial Correlates of Chest Pain in a Community Population with Coronary Heart Disease (CHD)

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Background/Objectives: The UPBEAT programme of research was funded to examine the relationship between depression and coronary heart disease through a cluster of quantitative and qualitative studies. **Methods:** Integral, was the establishing of a cohort of 805 patients drawn from general practice coronary heart disease registers. These patients were assessed using standard measures of depression, anxiety, social problems, disability, and quality of life every six months for up to four years. The Rose angina questionnaire was administered on each occasion –serial use in this manner has not been reported before. **Results:** We recruited a largely male population with a mean age of 65, the length of time on the register was between 6 months and 45 years. 42% had suffered a myocardial infarction while 55% had a continuing diagnosis of CHD. 52% had undergone a revascularisation procedure. 44% reported currently experiencing chest pain and, using the Rose questionnaire, 23% of the population were classified as having angina according to the short form and 13% as classified by the long version. 12.5% were classed as case level depression and 26% as case level anxiety by the HADS. A multinomial regression analysis comparing three groups: no-pain, pain but not exertional in type, and exertional pain showed significant associations between pain of either type with depression and anxiety (adjusted OR between 2 and 3) and, with social problems - adjusted OR 1.36 for each additional social problem. Physical health and cardiac history variables showed no statistically significant associations in this analysis. Over the next three years, only 28% reported no chest pain during that time, 26% experienced pain but not exertional in type, while 45% reported exertional pain at some point. Baseline anxiety, rather than depression, was more powerful in predicting membership of the last group (exertional pain). A low IMD score, female gender and belonging to an ethnic minority seem also important. **Conclusions:** These findings (the longitudinal ones will be refined in the next weeks) indicate the high prevalence rate of the experience of chest pain in these long-term register patients who live at home with CHD. An important message for the general practitioners who review them at least annually is the need to assess for concurrent mood disorders and social difficulties even if they wish to refer to hospital for further angiography. This finding is concordant with reports from secondary care where normal angiograms are often found in those re-referred for chest pain with high rates of depression noted. **Funding:** for the UPBEAT programme grant was from the UK National Institute of Health Research (Grant holder Prof A Tylee).

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OP11 – 5 Psychological distress following traumatic injury

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Background/Objectives: People who suffer traumatic injury, whether from accidents or interpersonal violence, can face a range of psychosocial sequelae. Standards of surgical treatment to restore function and appearance continue to improve, but psychological problems may often be overlooked in busy wards and clinics. Psychological distress is to be expected in the immediate aftermath of traumatic events, however for some patients this can continue long after injury. As well as high levels of acute stress disorder, trauma patients are also at risk of depression and anxiety and, in the longer term, may develop post-traumatic stress disorder (PTSD). Perceived changes in appearance can exacerbate the problems by constantly reminding patients of traumatic events. Comorbidity of depression and PTSD occurs frequently in trauma patients. **Methods:** This prospective study recruited people being treated at the Royal London Hospital following injury and admitted by the major trauma team or the oral and maxillofacial team. Participants were assessed at baseline for symptoms of acute stress (ASDS: Acute Stress Disorder Scale), psychological distress (HADS: Hospital Anxiety and Depression Scale) and appearance concerns (DAS24: Derriford Appearance Scale). **Results:** Data were obtained from 172 patients, from the culturally diverse population attending an East London hospital. Twenty nine per cent of patients reported levels of symptoms indicative of acute stress disorder on the ASDS, which assesses acute stress and predicts development of PTSD. The prevalence of acute stress was higher among patients injured through interpersonal violence (41 per cent) than those injured accidentally (22 per cent). Thirty two per cent and 44 per cent respectively reported clinically significant symptoms of depression and anxiety on the HADS. Those scoring highly on the ASDS or HADS were also more likely to have concerns about their changed appearance, with a mean score of 39 on the DAS24, compared with a mean of 27 amongst those without significant distress. **Discussion/Conclusions:** There are high levels of psychological distress and unmet needs in trauma patients. Rehabilitation should aim to return people to their baseline level of psychosocial function as well as physical function and appearance. It is important to be able to identify those patients who are at the highest risk of psychiatric disorders using a simple, practical means of assessment. These conditions are treatable and appropriate interventions need to be developed allowing early intervention. **Funding:** Saving Faces, the Facial Surgery Research Foundation. **Keywords:** Trauma, acute stress, depression, violence.

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OP11 – 6 An epidemiological landscape of severe mental illness and co-morbidity in the UK (2000-2012)

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Background/Objectives: People with a serious mental illness (SMI) like schizophrenia or bipolar disorder are more likely to die younger and have poorer health than people without an SMI. In this study we compare the 12 month point prevalence of SMI across regions of the UK during the period 2000/2001-2011/2012, the prevalence rates of comorbidities in people with SMI compared to those without SMI, the number of conditions in each group, and examine how this varies between males and females, between areas of high and low deprivation and between different types of SMI diagnoses over a 5 year period (2007/8-2011/12).

Methods: In a longitudinal observational study we extracted data on 16 morbidities from the Clinical Practice Research Datalink (CPRD) covering the period 1 April 2000 to 31 March 2012. The CPRD is a large primary care database (PCD) of anonymised longitudinal medical records, linked with other relevant healthcare or socio-economic databases. We identified patients with SMI drawn from all general practices participating in the database. Each identified case was matched for age, sex and GP practice with five randomly selected control cases with no diagnosis of SMI in each respective yearly time point. The geographical distribution and size of general practices represented in the database are largely representative of the population of England, Scotland, Wales and Northern Ireland and the individuals registered on the database are representative of the whole UK population in terms of age and sex. After applying a series of inclusion criteria we selected 16 conditions for reporting: Hypertension, Diabetes, Asthma, Hypothyroidism, Osteoarthritis, Chronic Kidney Disease (CKD), Learning disability, Coronary Heart Disease, Epilepsy, Chronic obstructive pulmonary disease (COPD), Cancer, Stroke, Heart Failure, rheumatoid arthritis, Dementia and Psoriasis. Practice location deprivation, using the 2007 Index of Multiple Deprivation and quantified into country (England, NI, Scotland and Wales) quintiles, was attributed to the individuals.

Results: The prevalence of SMI rose during the study period from 0.52 in 2000/1 to 0.63 in 2011/12; this was lower than previously reported figures of 0.8 in 2009. We observed a number of changes over the 12 year period and differences between the regions of the UK. There were higher rises in prevalence in SMI in practices in areas of high deprivation and in Northern Ireland. Though prevalence rates for some conditions were higher in the SMI group compared to the controls, they were lower than some of the previous literature. The rise in prevalence over the period studied (2000/1 and 2011/12) was greater in the SMI patients for a number of conditions. For example, the rise in the recorded prevalence of hypertension in the study practices was greater for the SMI group (increased from 12.2% to 18.29%) compared to patients without SMI (increased from 14.19 to 16.11). There was a greater increase in the average number of co-morbid conditions in the SMI population over the study period (0.7 in 2000/2001 to 1.1 in 2011/2012) compared to control cases (0.6 in 2000-2001 to 0.7 in 2011-2012) from a maximum of 16 conditions. A higher proportion of males with SMI had one or more other conditions in each of the matched comparisons.

Discussion/Conclusions: The findings of this study can provide direction for future hypothesis-driven research and the regional prevalence data is helpful for commissioning/ targeting services and reducing health inequalities. Understanding the epidemiology of multi-morbidity is useful for ensuring appropriate commissioning of primary care and specialist services and targeting preventative interventions to reduce comorbidity rates and associated burden (to the individual, healthcare system and society).

Funding: NIHR School for Primary Care Research, UK. **Keywords:** Severe mental illness, health inequality, physical health, primary care database.

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OP12 - Old age mental health

OP12 – 1 Associations between life style and vascular risk factors with severe cognitive impairments in old age: Results of four cohorts of KORA-Age

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Background/Objectives: Illness prevention is based on the knowledge of modifiable risk factors. The prior epidemiological results on the influence of life style factors and vascular risk factors on cognitive impairment in old age are, however, largely inconsistent. One explanation of the inconsistencies could be that the association between risk factors and cognitive impairment in the course of a lifetime is variable and possibly dependent on age at baseline, on the length of time elapsed from baseline to the onset of cognitive impairment, or on the age at the onset of impairment. There are, for instance, indications that midlife vascular risk factors are associated with dementia in old age, whereas the associations decrease or even change directions with increasing age. In the present study the effects of risk factors collected in a standardized manner from different cohorts are analyzed in order to discover such variations in the association patterns.

Methods: Historical cohort study including four different representative samples from the population which had initially been studied in the years from 1984 to 2001. Participants who had reached the age of 65 or over in the year 2009 were followed up. The observation intervals for the individual cohorts amounted to 9, 14, 19 or 24 years, the age at baseline ranged from 41 to 74 years. The follow-up was carried out in writing and over the telephone. If the participant was not capable of an inquiry by telephone, an informant was questioned. The clinical end point “severe cognitive impairment” consisted of a performance which is typical for dementia in the telephone supported test procedure TICS or of a score which is validated for dementia in the informant interview AD8. Associations between the risk factors and the endpoint were analyzed in the total sample and separately for the four cohorts, for two age groups at baseline (41-60; 60 and over) and for two age groups in the follow-up (65-74; 75 and over) by means of multivariable logistic regression models.

Results: Complete data for 4053 participants were available in the follow-up. The mean age in the follow-up was 73.4 years (SD = 6.1) and ranged from 65 to 93 years. 341 participants (8.4%) fulfilled the criteria for severe cognitive impairment. Significant risk increasing effects were found for obesity, physical inactivity, alcohol abstinence, reduced HDL concentrations and increased LDL concentrations. Hypertension increased the risk only in participants who were younger than 60 at baseline. Smoking showed a tendency to increase the risk. Above all, obesity and physical inactivity emerged as risk factors in multivariable analyses.

Discussion/Conclusions: We were able to confirm a number of risk factors for severe cognitive impairment in old age. We found the strongest associations for obesity and physical inactivity, followed by alcohol abstinence and smoking. In the multivariable analyses hypertension and hypercholesterolemia failed to reach statistical significance. Apart from hypertension and low HDL concentrations (< 40mg/dl), which showed effects exclusively in the younger age groups, but not in those over 60, no clear association patterns were found that indicate a dependence of the effects on the age at baseline, on the age at follow-up or on the time elapsed between baseline and follow-up.

Funding: The KORA research platform (KORA, Cooperative Research in the Region of Augsburg) was initiated and financed by the Helmholtz Zentrum München – German Research Center for Environmental Health, which is funded by the German Federal Ministry of Education and Research and by the State of Bavaria. The KORA-Age project was financed by the German Federal Ministry of Education and Research (BMBF FKZ 01ET0713) as part of the “Health in old age” program. **Keywords:** Risk factor, dementia, cognitive impairment, old age.

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OP12 – 2 Use of Mental Health Services in the Elderly: MentDis_ICF65+ study*Holger Schulz, MentDis_ICF65 + study group**Department of Medical Psychology, University Medical Centre, Germany*

Background/Objectives: Given the on-going demographic changes in western societies, mental health of older people has become increasingly important in recent years. However, little is known about their use of mental health services, especially for those suffering from diagnosed as well as undiagnosed mental disorders. The aim of this study was to identify predictors and barriers of adequate mental health service utilization in the elderly population (between 65 and 85 years) in six different European and Associated countries using standardised interview techniques.

Methods: As part of the MentDis_ICF65+ study N = 3,136 community-dwelling elderly at the six study sites were interviewed with the age-sensitive CIDI65+ to assess mental disorders. Service utilization was assessed with the adapted service use section in the CIDI65+, which assesses the use of mental health services in the last 12 months and the types of received treatment (e.g. individual or group therapy sessions or medication). Furthermore, a list of items on self-perceived barriers to mental health service use, including attitudinal and structural barriers was given to participants. Participants also provided additional information on activities and participation and quality of life. Descriptive, bivariate, and multivariate analyses were conducted. In line with Andersen's (2008) Behavioural Model, predisposing, enabling, and need factors were analysed as predictors by multiple linear regression and multinomial logistic regression.

Results: Of those with a one year prevalence of any mental disorder (without dependence/abuse), 11.1% used any mental health service in the last 12 month compared to 5.5% in the group without a clinical diagnosis in the last year. Pharmacotherapy and individual therapy sessions (20mins or longer with a doctor or therapists) are the most frequent types of intervention. Significant predictors of underuse are male sex, a bad financial situation, a low symptom severity, and living in the London catchment area.

Discussion/Conclusions: Underutilization of mental health services of older people is very common and interventions are needed to improve an adequate use of services. **Funding:** EU-Commission. **Keywords:** Service utilisation, mental health, old age, Europe.

Email: jvorkert@uke.de**OP12 – 3** Aging and the WHOQOL-OLD. How the Effect of Age is Mediated*Herbert Matschinger¹, Ines Conrad¹, Carolin von Gottberg², Reinhold Kilian², Steffi Riedel-Heller¹**¹Institute of Social Medicine, Occupational Health and Public Health, University of Leipzig, Germany; ²Section Health Economics and Health Services Research, Ulm University, Germany*

Background/Objectives: The WHOQOL-OLD – an interculturally comparable WHO instrument for measuring subjective quality of life (qol) – is a 24-item, 6-facet add-on module which can be used with the WHOQOL-BREF or the WHOQOL-100 for assessment of qol in older adults. The older-specific facets are: Sensory abilities, Autonomy, Past, present and future activities, Participation, Death and Dying and Intimacy. A great number of research centres from different cultures (WHOQOL-OLD group) developed this questionnaire under the sponsorship of the WHO. The WHOQOL-OLD applies to healthy people as well as to patients with somatic or psychiatric diseases, aged 60 years and older.

Objective: It is commonly accepted that aging itself does not exert any direct effect on subjective assessments. The main goal of this study is to investigate to what extent the effect of aging on each of the six facets of the WHOQOL-OLD is mediated by several individual characteristics like DemTect, the GDS, the IADL and an index of comorbidity.

Methods: The WHOQOL-OLD was administered through face-to-face surveys to 1133 older adults (60+ yrs.) from the German general population. Participants were also screened using a measure of cognitive functioning (DemTect). Overall, 267 participants were assessed as having mild cognitive impairments, while 730 participants showed no signs of cognitive impairments. A „multiple mediator model“ was employed to shed light on the process of aging, given that aging is conveyed by different indicators of the actual ability of a respondent. This recursive path model allows, not only for the relative importance of each mediator to be estimated, but also for the relationship between the remaining direct effect of age and the total indirect paths to be estimated. Additionally, the contribution of each mediator to the total of all indirect effects can be estimated using this model. No paths are assumed between the mediators. In order to obtain full identification, the residuals for each mediator are allowed to be correlated. Since the distribution of the indirect effects are not normal, resampling methods were employed to obtain asymmetric CI's for the direct and indirect effects, and standard errors were all estimated by bootstrapping with 5000 replications. The IDE (relation of indirect and direct effect), as well as the PME (proportion of mediated effect) are estimated.

Results: It is shown that the total effect of age might be misleading, as direct and indirect effects are different for each facet.

Discussion/Conclusions: The breaking down of the total effects of age on any subjective outcome in a recursive model is vital for a better understanding of aging.

Funding: DFG (German Research Foundation), CO 900/1-1. **Keywords:** Age, WHOQOL-OLD, mediation, path model.

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OP12 – 4 How Well Does Europe Sleep? A Comparative Study of Sleeping Problems in Europe's Older Adults

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Background/Objectives: Poor sleep has been found to be strongly related to a wide range of negative health outcomes. In the association between sleep and health, it is not so much the amount of hours one sleeps, but how well one sleeps that is important. Although this highlights the importance of identifying the determinants of poor sleep quality, relatively little research has in fact paid attention to this aspect of sleep. In this study we try to provide more insight into the socio-demographic and socioeconomic determinants of suffering from sleeping problems in Europe's older adults. Using cross-national data we add to the fairly limited literature examining cross-country differences in the prevalence of sleeping problems. By specifically focussing on individuals over the age of 50, we hope to disentangle the positive association between age and trouble sleeping that has been found repeatedly.

Methods: Data from the fourth wave of the Survey of Health Ageing and Retirement in Europe (2011/2012) are used to perform logistic regression analyses, the dependent variable being whether or not one has been bothered by sleeping problems for at least six months. The dataset consists of data from 37370 individuals aged 50 and older and their current partners or spouses from 16 European countries.

Results: Preliminary results show that about 24% of respondents were bothered by sleeping problems in the past six months. This prevalence varied between the different European countries, from 16,8% in both Denmark and the Netherlands to 31,1% in Poland. Age is found to be positively associated with sleeping problems. Women are 1,7 times more likely to suffer from sleeping problems than men. Compared to married individuals, the divorced and widowed respondents reported suffering from sleeping problems significantly more often. For widowed respondents, the chance of reporting trouble sleeping was 1,3 times higher than for married individuals. No difference was found between the married and those who remained single throughout their lives. Less sleeping problems are reported by the higher educated. Another socio-economic variable that appears to be associated with the perception of sleep quality is the current job situation. Compared to the retired respondents, homemakers and the employed experience less trouble sleeping, whereas the unemployed and the permanently sick or disabled individuals experience more trouble sleeping. Retirement appears to be associated with a 1,6 times higher chance of reporting sleeping problems compared to those in employment. Additional analyses will be performed to further examine the aforementioned results, to try to disentangle the positive association between age and sleeping problems and to look into the between-country differences that seem to be present.

Discussion/Conclusion: Our study has shown that age, sex, marital status, educational level and the current job situation are factors associated with the experience of sleeping problems. In trying to disentangle the positive association between age and sleep quality, the findings that retirement compared to employment and widowhood compared to marriage related to more sleeping problems needs to be investigated further. Both retirement and widowhood are potentially stressful life events that usually occur at a later age and may influence the age-sleep association.

Funding: None Declared. **Keywords:** Sleeping problems, older adults, cross-national comparison, SHARE.

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OP12 – 5 Influence of Depression on the Diagnosis of MCI in a Cohort at Risk for Neurodegeneration: Results of the Second Follow-up of the TREND-study (Tübinger evaluation of Risk factors for Early detection of NeuroDegeneration)

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Background/Objectives: Simultaneous presence of depressive and cognitive symptoms is a common combination of psychiatric symptoms in the elderly. A mild, sometimes even severe, depression represents one of the most frequent features in early stages of an Alzheimer's Disease (AD). Therefore, depression is also described as the main psychiatric comorbidity in mild cognitive impairment (MCI), which was first characterized by Petersen in 1999. Several cohort studies have shown such a comorbidity in elderly populations. In contrast to previous cohort studies, the TREND-study is examining a no population-based cohort of 1100 individuals at risk for a neurodegenerative disease, which started in 2009 with participants at the age of 50 to 80 years. Among other questions, the TREND-study addresses the investigation of an early cognitive impairment in combination with depressive symptoms that may occur before or simultaneously with cognitive decline.

Methods: 1100 participants underwent a detailed general, neurological and psychiatric examination at three time points (baseline and two two-year follow-up). Different tests classified the participants as having one or more risk factors for a neurodegenerative disease such as an REM-sleep-behavior disorder, depression or hyposmia. To assess cognitive functioning, the neuropsychological CERADplus test battery was used. Depression was measured by a structured interview after Bech and the common self-rating questionnaires Beck's Depression Inventory and the Geriatric Depression Scale.

Results: At baseline, 7.1% of the cohort were found to have an amnesic MCI (<-1.5 SD), a further 9.0% showed a very mild MCI (-1.5<SD<-1.0), whereby after two years only half of them had an amnesic MCI (3.8 % in the MCI < -1.5 SD; 4.6 % in the very mild MCI-group). With 36.0 % (at baseline) and 40.6 % (at the first follow-up), respectively, of participants having at least mild depressive symptoms, the MCI-group was more strongly affected by depressive symptoms than the very mild MCI group or the cognitively healthy group. The last results of the second follow-up will be available in March 2014.

Conclusions: In a cohort of subjects at risk for neurodegenerative disorders, a group of elderly people with MCI showed more depressive symptoms than healthy subjects or a group with very mild MCI, both at baseline examination as well as two years later. However, the diagnosis "MCI" appeared to be independent of depression and could be interpreted as an early symptom for a cognitive decline. In spring 2014 the data of the second follow-up will be available and could provide interesting results for the interaction of cognition and depression in this cohort at risk for neurodegeneration. **Funding:** None declared. **Keywords:** Cognitive decline, depression, MCI, risk cohort.

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OP13 - Poverty and mental health**OP13 – 1** “Disease burden and service delivery“ - Identified gaps hindering access to service delivery for People living with Disabilities and Psychiatric Disorders: An example from Nigeria, West Africa

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Background/Aim of the Study: The study seeks to assess the amount of attention that is being paid to the mental health of people living with disabilities and psychiatric disorders in Nigeria, West Africa. People with a disability, especially women, experience a double stigma and are more likely to be the victim of sexual violence and abuse on the grounds of disability in Nigeria, thus leading to mental health ailments. People living with Disabilities (PWDs) are often excluded from mental health education, programmes and services, thus resulting in more health-related issues and discrimination for this population. However, inclusion in mental health services will empower PWDs and enable them to participate in broader community-based mental health programmes that help to reduce the incidence of psychiatric disorders. In many developed countries, disability statistics remain underdeveloped. Few countries collect information on disability through either censuses or surveys. To a significant extent, the dearth of socio-economic data on persons with disabilities reflects the social welfare and/or medical approach to disability that still prevails in many countries. The paucity of data on disability, as well as the wide variance of definitions, standards and methodologies used to identify the conditions of persons with disabilities constitutes an obstacle to the effective formulation of disability-inclusive policies and programmes; as well as posing an obstacle to the monitoring and evaluation of progress in achieving the Millennium Development Goals. Moreover, disability is complex and poses challenges to measurement. Approaches to measuring disability vary across countries and the differing approaches influence the results obtained. Operational measures of disability vary according to the purpose and application of the data, the conception of disability, the aspects of disability examined – impairments, activity limitations, participation restrictions, related health conditions, environmental factors – the definitions, question design, reporting sources, data collection methods, and expectations of functioning, thus further constituting an obstacle to monitoring and evaluating programmes. Method of the study design: A qualitative field survey was conducted with various organizations that undertake programmes for PWD and psychiatric disorders. Results were assessed by the four outcome measures listed below:

1. Number of programmes undertaken that target the mental health of disabled people;
2. Level of accessibility of mental health services for disabled people;
3. Inclusiveness of the mental health of disabled people in programme policies;
4. Availability of plans for addressing the mental health of disabled people within the next three years. Analysis was done using SPSS 20.0 IBM.

Results: Organizations for the blind provide significantly ($p=0.001$) less mental health support programmes than general disability organizations. More than half of all organizations surveyed ($n=91$) undertake activities for the mental health of disabled people as their point of focus. Cooperation with various organizations with an additional focus was found to be a mediator of the relationship between an organization and outcomes, while the availability of a policy was not associated with having an additional focus on mental health ($p=0.077$) nor cooperation with other organizations ($p=0.106$). Additionally, it was found that there is:

- Frequent conflict characterised by persistent and brutal sexual violence,
- High levels of trauma due to discrimination on the grounds of having a disability,
- Depression and anxiety due to low socioeconomic status of citizens, especially women,

- Weaknesses in health systems due to inadequate financing and corruption,
- Poor information systems,
- Inefficient logistics management,
- A lack of investment in health workers, with insufficient workers to meet international acceptable standards in health policy,
- Lack of engagement with special populations to improve service delivery, leading to weaknesses and gaps in health care delivery,
- Poor communication and low staff morale; which are cited repeatedly in explaining the low quality of health care in the country.
- The presence of vertical programmes undermine other service areas by creating competition for scarce skilled staff,
- A lack of reporting systems and duplication of training and tasks

Recommendation and Conclusion: Although it was found that moderate to high attention is being paid to the mental health of disabled people in Nigeria, this is likely to be an overestimation due to information and selection bias. Moreover, the proportion of activities for the mental health of disabled people is rather low, compared to the amount of attention given. The challenge for Nigeria and other African countries is the evolution from initial infrastructure-based interventions to a more inclusive-oriented approach that aims to address the underlying causes of barriers to effective service delivery and further aims to provide sufficient information to support mainstreaming disabilities into health policies and services. Advocacy for user-focused services that uphold patients' rights irrespective of disability must be the norm to enhance the quality of services offered. Addressing health system failures that militate against the inclusion of people living with disabilities would have a positive impact on improving the quality of care provided in health care services as a whole. More could be achieved if existing resources were used more effectively to promote inclusion and non-discrimination of people with disabilities. The current findings point towards the need for the training curricula of health professionals to be updated to include information on patients' rights, communication limitations and also the adoption of an integrated or inclusive approach to health care. Better organised training for personnel on the use of Cognitive Processing Therapy (CPT) in health centres is also needed to strengthen their capacity to respond to the mental health needs of PWD in an efficient, cost-effective manner that can be delivered through the primary healthcare system. This would enable greater access to services for PWDs. Additional methods of improved communication and specialist support to peripheral facilities could also be facilitated in order to improve access to mental health care for PWDs. For example, through the establishment of disability desk officers in healthcare facilities, as well as adopting technology such as mobile phones that is easily accessible to people living with disabilities facing physical and communication barriers.

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OP13 – 2 Welfare Receipt and Mental Health in Australia*Kim Kiely, Peter Butterworth**Australian National University, Australia*

Background/Objectives: Health inequalities in psychological wellbeing follow a social gradient whereby increased levels of psychological distress are disproportionately found in socially disadvantaged populations. For example, common mental disorders are more prevalent among welfare recipients relative to the broader Australian community, with increased risk particularly pronounced for recipients of disability, unemployment and single parenting payments. This presentation will report on a programme of work that examines the dynamics of welfare receipt and mental health, examining extent to which these associations reflect underlying vulnerabilities or can be attributed to processes of health selection and social causation.

Methods: We analysed 10-years of data from the Household Income and Labour Dynamics in Australia survey, a nationally representative household panel study. We defined seven mutually exclusive types of income support payments for working age Australians: Unemployment, disability, single parent, partnered parent, student, mature age and a miscellaneous payment category. Mixed effects models were used to estimate the longitudinal effects of receiving these different types of welfare payments on mental health, and tested if socioeconomic position, marital status, lifestyle, physical functioning and financial status explained the association. Multiple-spell survival analyses examined if mental health problems independently predicted increased risk of entry and re-entry to different types of income support.

Results: There was variation in the mental health profiles across the different types of welfare payment. A substantial proportion of the increased risk of mental health problems associated with welfare receipt could be attributed to financial hardship. In particular, financial status fully explained the poorer mental health among recipients of payments designed to support important social roles (e.g. studying, parenting, and providing care). However, unemployment and disability payments remained independently associated with poor mental health. Welfare recipients were found to have poorer mental health than non-recipients, even at times when they were not in receipt of payment. Mental health problems also predicted future transitions onto welfare over the short-term.

Discussion/Conclusions: There was evidence of a direct link between unemployment and disability payments with poor mental health, possibly reflecting the role of stigma and demoralising effects of welfare receipt. However, our overall results were consistent with health selection explanations, identifying poor mental health as an antecedent of welfare receipt. The strongest underlying factor that explained the poorer mental health of welfare recipients was financial hardship. This reinforces current debates about the (in) adequacy of welfare payments and resulting social exclusion.

Funding: Australian Research Council (ARC) project grant #DP120101887

Keywords: Welfare, mental health, health selection, health inequalities.

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OP13 – 3 The effectiveness of service provisions for homeless people with mental illness: A systematic review*Amy Mitchell, Tom Burns**University of Oxford, UK*

Background/Objectives: Mental health problems are disproportionately higher among homeless people. Without access to tailored treatment and services, residential stability is unlikely to be achieved. The purpose of this study is to provide a systematic overview of all literature addressing research on the effectiveness of specific interventions or treatments for mentally disordered homeless people. **Methods:** In August 2013 we searched Scopus, Medline, PsycINFO, Embase, CINAHL and Web of Knowledge databases using the following search terms: Homeless*, Mental Health/Healthcare, Mentally ill, Mental Disorder, Service, Service Provision, Service Delivery and treatment Intervention. No date restrictions were applied. Studies were included if they assessed either mental healthcare service provision for the homeless or studies on psychiatric interventions specifically modified for them. Any outcome was considered. **Results:** Overall, the search strategy yielded 315 studies that were screened at the title and abstract level. After full text examination, a total of 30 studies met inclusion criteria. Studies were found to be predominantly conducted in the USA (n=28). A range of interventions were evaluated, but a significant proportion of studies examined either the effectiveness of a case management model, Assertive Community Treatment (n=9) or a residential program, frequently referred to as Housing First which provides integrated housing combined with mental health and/or substance abuse treatment services (n=9). Primary outcomes assessed across studies included the reduction in homelessness (e.g. number settled in accommodation or nights homeless during the follow-up period), reductions in hospital use (inpatient stays or Accident and Emergency attendances) or a range of symptom, substance use, criminal justice outcomes, quality of life, employment and cost outcomes. The main results and methodological quality of these studies will be presented and critically discussed. **Discussion/Conclusions:** Despite the strong link between homelessness and mental illness there is a lack of clarity as to which interventions are most effective for homeless populations with mental illness. Studies published to date recognize the need for adequate services for this marginalized subgroup. Although the research base is still not sufficient, it provides evidence that improvement in outcomes for these individuals may be best achieved by the implementation of specialized community based mental healthcare and an integration of housing and mental health treatment services in which residential stability is not contingent on treatment compliance. **Funding:** None Declared. **Keywords:** Homelessness, mental health, effectiveness, service provision.

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OP13 – 4 Mental Health and HIV Integration in Zimbabwe: Building the Evidence for a Community-Based Intervention among Clinical, Community and Traditional Medicine Practitioners

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Background/Objectives: Prevalence of depression among people living with HIV (PLHIV) in developing countries is estimated at 72% and 76-85% of people with mental health (MH) issues in developing countries do not receive treatment. Positive MH is linked to stronger treatment adherence and retention in supportive HIV services. To test the feasibility of an integrated program for scale-up, a pilot activity was carried out that integrated MH screening with a stepped-care approach that includes therapeutic communication, and referrals for higher level MH care and psychosocial services for PLHIV at health facilities, community health sites including traditional medicine practitioners in five Zimbabwean communities. **Methods:** A mixed-methods assessment was conducted to determine the feasibility of community-wide MH/HIV integration. In September 2013, focus group discussions with health workers in five communities took place to gather information on: 1) feasibility of integrating MH screening, basic counseling, and referrals into routine HIV services; 2) what worked well and challenges; and 3) lessons learned that contribute to scale up. Data were also collected on MH and alcohol and substance use screening results and referrals. **Results:** Integrating MH screening tools assists all levels of providers to identify MH problems in clients. The pilot increased provider's awareness and comfort discussing MH problems with clients and reduced MH stigma among providers. Of 312 MH screens given at health facilities, 88 (28%) screened positive with 54 of these (61%) reporting suicidal ideation. There were 59 alcohol and substance use screens with 13 (22%) positive. Among community health workers, of 123 screens, 66 (54%) screened positive for MH problems and 35 (29%) for alcohol and substance abuse. 100% of clients who screened positive were referred for higher level MH and psychosocial services. **Discussion/Conclusions:** Comorbidity of MH problems is high among PLHIV. The data provide promising findings that integrating screening, and basic therapeutic communication, and building strong linkages between community health workers, traditional medicine practitioners, and health facilities is feasible and essential to implement community-wide MH integration and improve the level of holistic care among PLHIV in resource limited settings. **Funding:** This study was funded by the U.S. Agency for International development through the AIDS Support and Technical Assistance Resources, Sector I, Task Order 1 (AIDSTAR-One) under contract no. GHH-I-00-07-00059-00.

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OP13 – 5 Changes in mental health prevalence in returnee forced migrants after prolonged internal displacement: A follow-up study in Sri Lanka (COMRAID-R)

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Background/Objectives: The mental health impact of return migration after conflict-driven prolonged internal displacement is an important, yet critically understudied area. Longitudinal data on common mental disorder prevalence are lacking. The baseline COMRAID study findings include higher than national average prevalence of common mental disorder (CMD) and associations with unemployment, widowed/divorced marital status and food insecurity. COMRAID-R was a longitudinal study aiming to explore the changes in mental disorder prevalence and correlates following return migration in post-conflict Sri Lanka. **Methods:** Following COMRAID, a cross-sectional survey of a conflict-displaced Muslim population in Sri Lanka, COMRAID-R was conducted one year later in 2012. Participants were recruited from two sources: 1) following up the baseline cohort (n=450); 2) a supplementary random sample (n=228) of return migrants from this population. The Patient Health Questionnaire and Composite International Diagnostic Interview sub-scale (also used at baseline) were utilized to measure CMD and PTSD prevalence. **Results:** The COMRAID follow-up rate was 75.2 % and the total sample was 566. The CMD prevalence at baseline of 18.8% had reduced substantially to 8.6% (95% CI 5.6-11.7) at follow-up and 10.3% (6.5-14.1) in return-migrants. Somatoform disorder had the highest prevalence among CMD component disorders. In adjusted analyses, CMD was principally associated with social isolation in the followed sample and with female gender in return migrants. **Discussion:** This is the first longitudinal study exploring mental disorder in returning migrants after prolonged displacement. A profound decrease in CMD prevalence was found over a relatively short period which was not clearly accounted for by methodological reasons and might reflect the prospect of return migration and associated optimism. **Funding:** This work has been funded by a Wellcome Trust Masters Fellowship in Public Health and Tropical Medicine grant awarded to CS [089401/Z/09/Z]. **Keywords:** Prolonged forced migration, mental health, return migration, epidemiology.

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OP14 - Child and adolescent mental health**OP14 – 1** Ethnic differences in positive mental wellbeing and depression in adolescents in East London UK: Findings from the Olympic Regeneration in East London Study (ORIEL)

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Background/Objectives: Current understanding of the differences in mental health between ethnic minority groups is limited and has been attributed to a lack of high quality data due to under-recruitment of ethnic minorities within health surveys. The ORIEL study is uniquely placed by sampling within an ethnically diverse area of Eastern London, UK. This study aims to investigate the patterning of positive mental well-being and the prevalence of depressive symptoms within a localised Bangladeshi population, and explore the extent to which social support may mediate differences in mental health.

Methods: A cross sectional sample of 3,105 adolescent participants aged 12 to 13 were recruited across 25 schools in the London boroughs of Newham, Tower Hamlets, Hackney and Barking & Dagenham. A subtotal of 511 Bangladeshi and 596 White UK adolescents completed an anonymised questionnaire incorporating: (1.) the Warwick-Edinburgh Mental Wellbeing Scale used for assessing positive mental health, and (2.) the Short Moods and Feelings Questionnaire based on the DSM III-R criteria for assessment of depressive symptoms. Potential mediators of mental health included a self-reported assessment of household socioeconomic characteristics (the family affluence scale), parental support for school work and perceived social support (using the Multi-dimensional Scale of Perceived Social Support). A measure of cultural identity was included as a potential confounder due to known differences in ethnic minority mental health according to identity status.

Results: Overall, parental support and total social support score were significantly associated with higher levels of wellbeing and a lower likelihood of depression. Culturally integrated adolescents also had significantly higher positive wellbeing scores and were less likely to be at risk of depression than those who were assimilated or marginalised. However, there was no association between household affluence and the risk of poor mental health. Bangladeshi adolescents experienced significantly lower levels of household affluence and lower levels of parental and total social support than their White UK counterparts. Nevertheless, there were no significant ethnic differences in levels of positive wellbeing (score difference: -0.20 [-1.71, 1.31] or depressive symptoms (OR: 0.70 [0.46, 1.05]) when controlling for gender. After accounting for socioeconomic disadvantage, lower parental and lower social support, Bangladeshi adolescents were significantly less likely to be depressed (OR: 0.62 [0.39, 0.98]) than White UK adolescents.

Discussion/Conclusions: Bangladeshi children in East London have a mental health advantage over their White British counterparts. However, lower levels of social and parental support in Bangladeshi adolescents contributed to an increase in the risk of depression. Bangladeshi parents may require assistance in encouraging and supporting children in the early years of secondary school.

Funding: The ORIEL Study is funded by the UK's National Institute for Health Research Public Health Research Programme (Grant number: 09/3005/09 to SC)

Keywords: Wellbeing, ethnic, depression, social support.

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OP14 – 2 Young adults: Service use and psychiatric drug prescriptions in relation to common mental disorders; a comparison between age groups during the first decade of the twenty-first century

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Background/Objectives: Psychiatric service use appears to have increased among young people in many countries. In Sweden, the proportion of young people in the population in contact with psychiatric services is, since the mid-2000s, the largest among all age groups. The increase in service use might reflect higher occurrence of mental ill-health but also greater awareness for mental illness, changes in the perceived need for mental health care and lower threshold for help-seeking. In order to clarify this we set out to examine whether young people with and without common mental disorders (CMDs) seek and receive mental health care at the same rate as older age groups, as well as changes in help-seeking over time.

Methods: We examined levels of psychiatric and primary care service use and psychiatric drug prescriptions in relation to CMDs in different age groups during 2002-2010. Levels of primary care service use due to mental health problems were measured as any mental health diagnosis (F00-F99, Z65 and Z73 according to ICD-10) in primary care. The study population consisted of all residents in Stockholm County that participated in the 2002 (n=23,794), 2006 (n=34,707) and 2010 (n=30,767) survey waves of the Stockholm Public Health Cohort. CMDs were measured via the 12-item General Health Questionnaire. A cut-off score of ≥ 4 was used. Data on levels of service use and psychiatric drug prescriptions within six months from participating in the surveys were obtained through linkage to Swedish registers. Data on primary care service use and drug prescriptions were available for participants in the 2006 and 2010 surveys.

Results: About 10-15% of study participants with CMDs in working ages (18-64 years) received psychiatric care within six months of participating in the survey. Service use was lower among participants aged ≥ 65 years. Levels of service use increased between 2002 and 2006 among participants with CMDs aged 45-64 years but remained fairly stable in all other age groups during the study period. By contrast, levels of psychiatric service use increased markedly among young people without CMDs during the study period. Levels of primary care service use due to mental health problems were lower among young participants with CMDs, as compared to older age groups. In 2006, 2.6% (95% CI 1.3-3.9%) of participants with CMDs aged 18-24 years received a mental health diagnosis in primary care, as compared to 5.8% (95% CI 4.7-6.9%), 10.6% (95% CI 8.8-12.4%) and 7.2% (95% CI 4.8-9.6%) in the 25-44, 45-64 and ≥ 65 years age groups respectively. Levels of primary care service use increased between 2006 and 2010 among participants with CMDs aged ≥ 65 years but remained stable in other age groups. Levels of psychiatric drugs prescriptions remained stable during the study period and increased with older age. In 2010, only 10% of participants with CMDs aged 18-24 years were prescribed a psychiatric medication within six months prior to participating in the survey. Levels of psychiatric drug prescriptions were three- and fivefold higher in the 45-64 and ≥ 65 years age groups respectively.

Discussion/Conclusions: Young people with CMDs seek psychiatric services at similar levels as compared to older age groups. There was a marked increase in psychiatric service use among young people without CMDs during recent years. Young people with CMDs are less likely to be prescribed a psychiatric medication and to receive a mental health diagnosis in primary care, as compared to older age groups. Recent increases in psychiatric service use among young people in many countries might be explained by lower threshold for help-seeking among those with mild mental health problems. It may also be that primary care fails to meet the needs of the less complex mental health cases in the young age group.

Funding: Stockholm County Council. **Keywords:** Young adults, mental health service use, psychiatric drugs prescriptions, common mental disorders.

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OP14 – 3 Trajectories of Neighbourhood Cohesion Throughout Childhood and Adolescent Mental Health in a National Canadian Cohort

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Background/Objectives: The objective of this study was to identify distinct trajectories of neighbourhood cohesion throughout childhood, and to examine the associations between these trajectory groups and symptoms of adolescent mental illness in a large population-based cohort of Canadians. **Methods:** This study used data from the National Longitudinal Survey of Children and Youth (NLSCY). The sample included children aged 0-3 in 1994/95 and followed these children until the age of 12-15 in 2006/07. Perceived neighbourhood cohesiveness was repeatedly assessed based on five questions completed by the person most knowledgeable about the child (e.g., in most cases the biological mother). Several outcomes indicative of mental disorder were examined at age 12-15 years including: emotional disorder/depressive and anxious symptoms, hyperactivity, indirect and direct aggression, property offences and prosocial behaviour. Latent growth class modeling (LGCM) was used to identify trajectories of neighbourhood cohesion. Logistic regression models were used to examine the association between these trajectories and the mental health outcomes while adjusting for age, gender, household income, and neighbourhood socioeconomic status. **Results:** The following trajectories were identified: 'stable low' (4.2%), 'moderate increasing' (9.1%), 'stable moderate' (68.5%), 'high falling' (8.9%), and 'stable high' (9.3%). Relative to those living in a stable moderately cohesive neighbourhood those with improvements in neighbourhood cohesion in late childhood (moderate increasing) had significantly lower odds of hyperactivity (OR=0.67; 95%-CI: 0.46,0.98) and indirect aggression (OR=0.66; 95%-CI: 0.49,0.95). In contrast, those with a decline in neighbourhood cohesion had increased odds of hyperactivity (OR=1.66; 95%-CI: 1.21,2.78). Those in high cohesive neighbourhoods in early childhood were more likely to engage in prosocial behaviour (high falling: OR=1.91; 95%-CI: 1.37,2.66, and stable high: OR=1.92; 95%-CI: 1.38,2.68). **Discussion/Conclusions:** These results suggest that neighbourhood cohesiveness in childhood may have time-sensitive effects on several domains of adolescent mental health. **Funding:** This study was funded by the SickKids Foundation and the Canadian Institutes of Health Research (grant number SKF 116328). **Keywords:** Neighbourhoods, social capital, adolescence, mental health.

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OP14 – 4 Cumulative risk of mood episodes in children at high-risk for mood disorders in function of age of onset of parental episodes

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Background/Objectives: Two recent papers have demonstrated the strong and independent familial aggregation of the major components of mood disorders (i.e. manic and major depressive episodes). Furthermore, within bipolar disorder (BPD), recent molecular genetic studies have identified susceptibility genes specific to the subtype of BPD with an early age of onset. Up to this day, research that has also studied the specificity of the familial aggregation of the major components of mood disorders as a function of the age of onset is entirely lacking. Accordingly, using the high risk study design, the goal of the present study was to assess the cumulative risk of manic and depressive episodes in offspring as a function of the age of onset of manic and depressive episodes in parents.

Methods: As part of a family study, we have collected extensive clinical information on 81 probands with bipolar disorder (53 BP-I, 10 BP-II, 18 schizoaffective BPD), 64 probands with MDD and 62 medical controls, and their 365 children aged younger than 18 years, who had at least one baseline and one or more follow-up assessment(s) at three-year intervals. The mean age of the children at the time of enrollment into the study was 10.1 years (s.d.: 4.3). The average number of assessments in children was 4.1 (s.d.: 1.2) with a mean duration of follow-up of 9.9 years (s.d.: 3.4). Three quarters of the assessments were based on direct interviews, the remainder on information provided by parents using the FH-RDC. Probands were interviewed using the DIGS, offspring using the K-SADS. Generalized linear mixed models were computed to assess the risk of mood episodes in offspring as a function of early versus later onset of mood episodes in probands. An early onset of mood episodes in probands was defined using a 21 year cut-off. **Results:** Offspring were at a 13 times increased risk of developing manic/hypomanic episodes when the parent had an onset of mania/hypomania before the age of 21 years, but the risk was not increased when the parent had a later onset of mania/hypomania. Moreover, the risk of manic episodes in children was independent of the occurrence of depressive episodes in parents. Regarding the risk of depressive episodes in children, this risk was increased by a factor 2.9 in the offspring of parents with early onset depressive episodes, but independent of parental manic or hypomanic episodes. Finally, late onset depressive episodes in parents were not associated with the risk of depressive episodes in offspring. **Discussion/Conclusions:** First, our results corroborate those of previous research demonstrating the independent familial aggregation of manic/hypomanic and depressive episodes. Second, our data clearly show that early onset mood episodes, but not those of later onset, are associated with a highly elevated risk of the same type of episodes in their offspring. These findings also support the 21-year cut-off for distinguishing between early and later onset forms of mood episodes by providing evidence of familial aggregation in early onset mood episodes only. However, the potential familial aggregation patterns of later onset mood episodes could not be resolved using the current approach given the still young age of the offspring. Overall, our approach underscores the necessity to subdivide mood disorders into both polarity of episodes and age of onset of episodes. **Funding:** This research was supported by five grants from the Swiss National Foundation (SNF: #3200-040677, #32003B-105969, and #32003B-118326 to F. Ferrero; #3200-049746 and #3200-061974 to M. Preisig), and a grant from GlaxoSmithKline Clinical Genetics. **Keywords:** Mania/hypomania, depressive episodes, familial aggregation, age of onset.

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OP14 – 5 Conversational Skills (Pragmatics) are Associated with Mental Health

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Background/Objectives: People with language impairments are at higher risk of suffering from emotional and behavioral problems. Rates of mental health problems are reported to be at least twice as high for children who are deaf or hearing impaired; most of whom have persistent limitations in spoken, written and also signed language. **Objective:** To investigate the relationship between linguistic and communication skills and mental health parameters. **Methods:** A representative sample of 88 school children from Carinthia with a hearing loss greater than 40 decibel and nonverbal IQ higher than 70 were assessed for their vocabulary (HAWIK – vocabulary subtest), their expressive (HSET - Heidelberger Sprachentwicklungstest) and receptive grammar (TROG – Test for Reception of Grammar) A 5-item questionnaire regarding their conversational (pragmatic) skills was answered by their teachers (including questions like “Does the child respond to and elaborate the topic of the conversation?”, “Is the conversation balanced between the partners?”). Mental health problems were investigated by parents' and teachers' SDQs (Standard Strength and Difficulties Questionnaire). **Results:** High rates of mental health problems were identified in the re-

representative sample of deaf and hearing impaired children, with peer relationship problems rated three times higher by parents and teachers compared to German norms. Significant correlations between pragmatic language skills and parents' total SDQ ($\rho = -0.425$; $p < .001$) and teachers' total SDQ ($\rho = -0.420$; $p < .001$) were found. The association between parents' SDQ and pragmatic language skills was confirmed by a path analysis using ordinal regression which included linguistic aspects, age, sex, degree of hearing loss, IQ and the educational level of the mother. It could be shown that expressive, receptive grammar and vocabulary were related to conversational skills but not directly to mental health. **Discussion/Conclusion:** As pragmatic difficulties are related with problems and social adaptation later in life, the development of conversational skills rather, than a mere training of linguistic knowledge (vocabulary, grammar), has to be a central focus in family- and child-centred interventions for children who are deaf or hearing impaired. **Source of funding:** None declared. **Keywords:** Mental health, communication, pragmatic skills, hearing impairment.

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OP15 - Workplace and mental health

OP15 – 1 Exploration of the user profile of a psychosomatic consultation in the workplace by latent class analysis

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Background/Objectives: Within the vocational context, common mental disorders gain attention for societal and economic reasons. The unmet need for easily accessible and early interventions led to the implementation of a variety of offers in this area, such as the "Psychosomatic Consultation in the Workplace" (PCIW). Little is known about its user profile in contrast to care as usual (CAU). The aim is to develop a tailored service provided at the interface of company-supported and regular psychosomatic health care. Therefore, it is essential to explore whether the change in context – from CAU to company health promotion - has an impact on user profiles or not.

Methods: Users of the PCIW were recruited consecutively in three companies that established the offer in cooperation with local psychosomatic clinics. The comparison group (CAU) was recruited from two cooperating psychosomatic clinics, excluding individuals who were not employed. Latent class analysis will be used to classify individuals into distinct groups based on individual response patterns. The number of latent classes will be determined via various statistical methods (BIC, AIC, Lo-Mendel-Rubin Test). By extending this model to a conditional latent class model, the effects of covariates on the likelihood of class membership can be estimated. Data were collected by self-administered questionnaires: work ability (work ability index), quality of life (SF-12), mental health (PHQ-9-depression, PHQ-15-somatization, PHQ-7-anxiety) and work-related stress (irritation scale (is), maslach burnout inventory (mbi)).

Results: Sample description: The sample consists of $n=352$ individuals: PCIW $n=173$ / CAU $n=179$. Demographic variables that differed between the groups ($p < 0.05$) were age in years (PCIW 44.9, SD 10.1/CAU 39.4, SD 11.9), gender (PCIW 70% male/ CAU 30% male), symptom duration in months (median PCIW 12 / CAU 24) and service utilization, that is previous

contact with the psychotherapeutic-psychosomatic-psychiatric health care system (PCIW 38% / CAU 63%). These variables impact on class assignment and will be part of the conditional model. Education or marital status have no impact and are excluded. Somatic scales like SF-12 physical health and PHQ-15 somatization were excluded from the model as they discerned insufficiently. Remaining in the model are (mean, SD, $p < 0.05$) work ability (PCIW 29.5, SD 8.2 / CAU 25.8, 9.2), PHQ-9 (PCIW 11.3, 5.7 / CAU 14.2, 6.5), PHQ-7 (PCIW 10.6, 5.3/ CAU 11.8, 5.6), SF-12 mental health (PCIW 33.4, 11.0 / CAU 29.9, 10.4), mbi emotional exhaustion (PCIW 3.9, 1.3/ CAU 4.4, 1.2), and irritation, global index (PCIW 30.7, 11.9 / CAU 34.7, 12.1). Calculation and discussion of different models will be discussed. **Conclusions:** PCIW stands for an easily accessible therapeutic offer in the vocational context. Our data suggest that we reach a different type of user in regard to age, gender, utilization, disease severity, work ability, quality of life and work-related stress. The latent class analysis identifies three or four subgroups of users with different patterns of impairment; generally those with less impairment are seen in the vocational context. The final model with all relevant covariates will show in detail the user profile of the PCIW and provide us with data to tailor interventions at this interface. **Funding:** Young scientists program of the German network "Health Services Research Baden-Wuerttemberg" of the Department of Science, Research and Arts in collaboration with the Department of Employment and Social Order, Family, Women and Senior Citizens, Baden-Wuerttemberg. In addition, the company CASSIDIAN supported the evaluation in the context of company health management. The work of the Institute of Occupational and Social Medicine and Health Services Research Tuebingen is supported by an unrestricted grant of the employers' association of the metal and electric industry Baden-Wuerttemberg (Suedwestmetall). **Keywords:** Common mental disorder, work-related, outpatient care, service utilization.

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OP15 – 2 Workplace bullying, psychosocial job characteristics and mental health: findings from the PATH through Life project

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Background/Objectives: Workplace bullying is recognised as an important risk factor for common mental disorders such as anxiety and depression, and a growing concern for policy-makers given increasing compensation claims related to psychological injury in the workplace. This paper uses data from a large Australian community survey to investigate the cross-sectional association between workplace bullying and mental health, and the prospective association that other aspects of the psychosocial work environment (demands, control, insecurity) and mental health have with subsequent reports of workplace bullying.

Methods: Analysis of data from a large community survey conducted in Canberra and Queanbeyan region in south-east Australia. The PATH Through Life Study was established in 1999, using a narrow cohort design with respondents representing three birth cohorts (1975-1979; 1956-1960; 1937-1941). Respondents are reinterviewed every 4 years. The data for this analysis are drawn from four waves (covering 12 years) for approximately 5000 respondents initially aged in their early 20s and early 40s. Workplace bullying was first assessed in wave 4 using both the self-labelling and operational (scale) approaches. Other measures of the psychosocial work environment, mental health (symptoms of depression, anxiety) and other socio-demographic covariates were measured at all waves.

Results: Factor analysis revealed three dimensions of workplace bullying: person-related bullying, work-related bullying, and violent or intimidating behaviour. The cross-sectional analyses demonstrate a strong association between reports of bullying and risk of depression and anxiety. Drawing on the longitudinal data, poor mental health, including depression 12 years earlier, and other measures of the psychosocial work environment were associated with reported bullying at wave 4.

Discussion/Conclusions: Workplace bullying remained an independent predictor of depression over and above the contribution of other workplace and personal characteristics. **Funding:** Safe Work Australia, a government agency with responsibility for responsibility for improving workplace health and safety and managing workers' compensation arrangements provided funds for survey data collection in wave 4 of the PATH through Life project.

Keywords: Employment, mental health, psychosocial, bullying.

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OP15 – 3 Social Firms: a Route to Recovery for people with mental illness. The SoFARR study

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Background/Objectives: One aspect of recovery from mental illness is employment. The high unemployment rates of people with mental illness in the UK are well documented. Supported employment initiatives such as Individual Placement and Support (IPS) have a good worldwide evidence base, yet, not everyone will choose to use IPS or obtain or sustain work through it. Therefore a variety of routes to employment are required to meet a range of needs. A potential complimentary vocational service model for people with mental illness is the Social Firm, a type of social enterprise in which at least 25% of employees are at severe disadvantage in the labour market. In order to explore whether Social Firms could be part of a viable health and social care policy strategy in the UK, clinicians and service planners need to know whether Social Firms employ people with mental illness who have the greatest need; i.e. those who use secondary mental health services. The aim of this study was to examine whether the clinical profile of people with mental illness working in Social Firms is the same as patients seen in secondary mental health services.

Methods: Employees with mental health problems working in Social Firms were invited to participate in the study. Data were collected using a battery of instruments through a face-to-face interview. Areas examined were: a) Demographics, b) Clinical characteristics, c) Functional Impairment, d) Contact with mental health services, e) Quality of Life, f) Job satisfaction, g) Work characteristics. A comparison sample of people with mental health problems under the care of secondary mental health services was drawn from the Work in Supported Employment study (WISE), an investigation of IPS in seven Community Mental Health Teams. Information that was consistent with the SoFARR study collected from WISE CMHT participants was work characteristics, demographics, clinical characteristics, contact with mental health services and service use history and benefits claimed. **Results:** 80 employees of Social Firms participated in the study. Levels of symptoms were moderately low. The majority of Social Firm employees had received secondary mental health services in the past. Levels of disability were low and respondents reported moderately high quality of life. Mean job satisfaction levels were also high. 75 WISE study participants were in paid work. Initial contact with mental health services was significantly less recent for the Social Firms group compared to workers from the WISE group. More Social Firms workers had never been admitted to hospital compared to the WISE paid workers. There were statistically significant differences in diagnoses of participants between the groups. There were no significant differences between WISE paid workers and workers in Social Firms in terms of symptom levels or disability.

Discussion/Conclusions: The mental health problems and clinical characteristics of those working in Social Firms overlapped to a significant extent with people who were under the care of secondary mental health services. Our results suggest that Social Firms could form one part of the response to the challenge of unemployment and marginalization of the severely mentally ill. There is considerable scope for up scaling the number of Social Firms in the UK, increasing clinicians' knowledge about them and incorporating them into health care policy in order to improve the vocational outcomes of the mentally ill. **Funding:** This research was funded through the National Institute of Health Research: Research for Patient Benefit Programme: PB-PG-0609-19079 **Keywords:** Employment, recovery, mental illness, social firm.

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OP15 – 4 Self-assessed mental well-being and work capacity as predictors of work participation – a follow-up study of newly sick-listed individuals

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Background/Objectives: In most countries, prerequisites for sickness benefits include not only illness but also illness-related limitation of work capacity. However the latter has received much less attention in sickness absence research and both phenomena are seldom included in the same study. The aim of this study was to determine whether self-assessed mental well-being and work capacity at baseline predicted work participation a year later. **Methods:** Employed women and men (n=6140) in the Västra Götaland region, Sweden, aged 19-64 years, registered as off sick by the Swedish Social Insurance Agency between February 18th and April 15th 2008 were included. These individuals received a self-administered questionnaire covering aspects of health and work conditions (response rate 54%). For this follow-up study, employed individuals with a single sick-leave spell in 2008 were included (n=2502). Official register data on total number of days with sickness benefit in 2009 were used to determine full (0 days) and limited (≥ 1 days) work participation. Limited work participation includes 14 days of employer-paid sickness absence and thus means at least one sick-leave spell of 15 days or more in 2009. The WHO (Ten) Mental Well-Being Index and self-assessed work capacity related to knowledge, mental, collaborative and physical demands at work were tested as predictors. Logistic regression analyses were used to estimate crude and adjusted odds ratios (OR) with 95% confidence intervals (CI) for the likelihood of limited work participation. Covariates included in the analyses were age, gender, sickness absence during 2007, general self-efficacy, persistent illnesses and common (long-lasting) symptoms. **Results:** Limited work participation was found in 28% of the women and 23% of the men. Individuals reporting low mental well-being had higher likelihood of limited work participation OR 1.87 (95% CI 1.55-2.27). The association between low mental well-being and limited work participation decreased but remained significant after adjustment for all included covariates OR 1.29 (95% CI 1.01-1.65). In terms of low work capacity, all four dimensions were significantly associated with limited work participation. After adjustments for all included covariates, the likelihood of limited work participation was higher among individuals who reported low capacity to work with regard to knowledge OR 1.55 (95% CI 1.13-2.13), collaborative OR 1.36 (95% CI 1.03-1.79), and physical OR 1.50 (95% CI 1.22-1.86) demands at work. Work capacity related to mental demands at work was not associated with limited work participation in the fully adjusted model OR 0.99 (95% CI 0.76-1.27). **Discussion/Conclusions:** Low mental well-being and low self-assessed work capacity in relation to knowledge, physical and collaborative demands at work predicted work participation. While uncommon in work participation research, these measures seem to be promising predictors of work participation that might also prove useful in clinical settings. Early identification of these individuals could promote their future work participation. **Funding:** The study was funded by FORTE, Swedish Research Council for Health, Working life and Welfare, dnr: 2007-1750. **Keywords:** Mental well being, self-assessed work capacity, work participation, sickness absence.

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OP15 – 5 Is the association between work stress and depressive symptoms mediated by work family conflict in female and male employees?

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Background/Objectives: Depressive symptoms are responsible for many days absent at work and loss of productivity. The question is whether the well-known association between work stress and depressive symptoms might be partly explainable by mediating factors. The goal of this analysis was to investigate the role of work-family conflict in the association between work stress and depressive symptoms among middle aged female and male employees working in full- or part-time positions. **Methods:** This exploratory data analysis was conducted among the 6339 employees of the first wave of the lidA (leben in der Arbeit) –study, a cohort study investigating the relationship between work and health in an ageing workforce in Germany. Work stress was measured by the effort-reward imbalance ratio (ERI-Ratio), depressive symptoms by the short form of the Becks Depression Inventory (BDI-V) and work-family-conflict (WFC) by items of the COPSOQ-scale. Multiple linear regression analyses were performed with SPSS 19. Data were stratified by gender and working in full- or part-time-position. Mediation was defined by the criteria of Baron and Kenny. **Results:** Work stress was significantly associated with depressive symptoms (BDI-V) in female and male employees working in full-time ($\beta_{1\text{female}} = 6.31$ [95%-CI: 3.52; 9.10]; $\beta_{1\text{male}} = 8.17$ [95%-CI: 6.23; 10.11]) as well as for female employees working in part-time positions ($\beta_{2\text{female}} = 4.67$ [95%-CI: 1.97; 7.37]; $\beta_{2\text{male}} = 6.94$ [95%-CI: - 6.38; 20.25]) after adjustment for age, education, negative affectivity (PANAS), overcommitment and number of children at home. When controlling for work-family-conflict these effect estimates became considerably smaller in men and were nearly halved in women, both for full-time and half-time employees. As WFC was also statistically significantly associated with depressive symptoms and work stress was significantly associated with WFC, all criteria for partial mediation of WFC in the association between work stress and depressiveness according to Baron and Kenny were fulfilled for women and men in full-time positions and for women in part-time positions. **Discussion/Conclusions:** We observed a mediating effect of WFC in the association between work stress and depressive symptoms for men in full-time positions and even more distinct for women working in part- or full-time positions. The number of men in part-time positions might be too low in this data set to assess the mediating effect of WFC in the association between work stress and depressive symptoms sufficiently. The observed effects and gender specific differences have to be verified in further analyses. Gender specific differences in the mediating effect of WFC might be due to a higher load of duties and responsibilities of women at home. Strategies for reduction of WFC might help to promote mental health in women and men and reduce days absent at work and loss of productivity due to depressive symptoms. **Funding:** Jean-Baptist du Prel is funded by the German Ministry of Education and Research in the frame of the lidA-study (FKZ 01ER0827, 01ER0825, 01ER0806, 01ER0826). Richard Peter holds a permanent position as Professor at the Ulm University. **Keywords:** Work-related stress, depressive symptoms, work family conflict, mediation.

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OP15 – 6 The IPS Attitude Check List: Do attitudes represent a challenge for implementation of vocational rehabilitation schemes for severe mental illness?

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Background/Objectives: Despite growing evidence that IPS increases employment rates amongst those with severe mental illness more than traditional train-and-place approaches, implementation of IPS programs has been slow. Successful implementation requires evidence for efficacy and cost effectiveness, and the method must also be acceptable and available to patients. Availability requires staff amongst both the social security and health sector to be accepting of a new model of vocational rehabilitation. The aim of this study was to measure the attitudes of employees in the social security administration towards the eight core principles of IPS.

Methods: We developed the IPS attitude checklist for the purpose of this study, and administered this to a sample of 385 employees in the social security administration. The survey was developed around a vignette of a typical case with severe mental disorder. Eight statements focused on each of the eight IPS principles were developed and paired with eight opposing statements. Respondents were asked to indicate their attitudes on a six-point Likert scale between the opposing statements.

Results: Despite there being no current IPS activity in most of the catchment area for this survey, we found the attitudes amongst employees in the social security administration to be clearly more in favour of the IPS principles compared to current practice. Employees in an area where IPS activity is ongoing were even more positive towards the IPS principles.

Discussion/Conclusions: We believe the measurement of attitudes towards IPS is key for successful implementation. If there are negative attitudes amongst staff, implementation is unlikely to be successful. In the future we hope that the IPS attitude check list can be used to examine attitudes towards the IPS principles amongst health sector staff and to explore the prospective impact attitude variation has on the successful outcome of IPS implementation.

Funding: The Research Council of Norway (RCN) funded the study through a grant to the Norwegian Institute of Public Health. Project Nr: 227097.

Keywords: Supported employment, severe mental illness, Attitude Check List, implementation.

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OP16 - Gender, family and caregiving

OP16 – 1 A psychosocial risk factor model for female eating disorders: A European Multicentre Project

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Background/Objectives: Eating Disorders (EDs) are multifactorial disorders that may comprise various biological, psychological and social risk factors. To date, most studies have assessed predisposing, precipitating and maintaining factors for EDs in isolation. Only more recently have integrative risk models begun to test multiple factors simultaneously. However, to our knowledge the few integrative models that have been tested in clinical ED samples have generally suffered from small sample sizes and

therefore were not able to examine whether the risk factor models differed across ED subdiagnoses. In addition there are no studies looking at specific risk factor models for EDs across countries. **Aim:** The current study used multi-group structural equation model (SEM) analyses to investigate the relationship between maternal and paternal parenting styles (abusive, overprotective and warm), teasing about body weight/shape or eating by family members, internalization of the thin ideal and body dissatisfaction amongst women with EDs and healthy controls. A second aim was to assess whether the risk factor model differed across various countries (Spain, UK, Austria, Italy and Slovenia) and ED subtypes (Anorexia Nervosa, Bulimia Nervosa and EDNOS). We hypothesized that parenting styles would predict teasing about body weight/shape or eating by family members, which in turn would predict internalisation of the thin ideal. Conversely, internalization of the thin ideal would be predictive of body dissatisfaction, which subsequently would predict EDs. It was also assumed that the direct pathways of each of these variables would predict EDs directly.

Methods: The present study was part of the Fifth European Framework project on Healthy Eating, which is a collaboration of five countries with the common task to examine the individual and environmental factors related to ED. The total sample with complete data comprised 1373 participants (ED patients= 618; controls=755) from the UK (N=399), Spain (N=338), Austria (N=136), Slovenia (N=228) and Italy (N=272). ED cases were recruited from clinics across the different countries and were diagnosed using a semi-structured clinical interview based on DSM-IV criteria. Healthy controls were screened for the presence of any psychiatric disorder. The present study also assessed participants across different ED subtypes including Anorexia Nervosa (38.87%), Bulimia Nervosa (30.32%) and EDNOS (22.62%). The Cross-Cultural Questionnaire (CCQ) was used to assess the above-mentioned risk factors.

Results: SEM analyses showed that the best fitting model was one allowing risk paths to vary across countries [$\chi^2(425) = 2105.271$, $p < .0001$, RMSEA = .022, CFI = .980]. The pathways for most of our hypothesized model were significant. In all countries teasing about weight/shape or eating was associated with body dissatisfaction (directly and via internalization of the thin ideal). There was a strong significant path from body dissatisfaction to ED (standardised path coefficient across countries: 0.44-0.69, $p < 0.0001$). Teasing about weight/shape or eating also directly predicted EDs (in the UK, Spanish and Slovenian samples). In contrast to our hypothesized model, there was a weak effect of parenting on both teasing about weight/shape or eating and EDs directly. Risk models slightly varied across ED diagnoses. Detail pathway analyses for each country and each ED subdiagnosis will be presented in the presentation. **Conclusion:** Our hypothesised model of risk for ED was partially confirmed; in particular the central role of teasing about weight/shape and eating by family members on EDs both directly and mediated by internalization of the thin ideal and body dissatisfaction was shown across five European countries. Although previous research has suggested an important role of parenting in developing ED, this study suggests that the effect of parenting varies by country and might have cross-cultural effects.

Funding: None declared. **Keywords:** Eating disorders, psychosocial risk factors, structural equation modelling, cultural differences.

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OP16 – 2 New Perspectives for Families with a Parent with Mental Illness in Switzerland

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Background/Objectives: Mental illness has a major impact on parents' living conditions and thus directly influences the lives of their children. Many of these children will suffer from emotional distress; only one third demonstrate resilience and appropriate coping strategies. Private practice is usually focused on the adult patient and his/her specific disorders and needs. The environment and, notably, the care of patients' children are not sufficiently considered by clinicians. This presentation provides an overview of the various trends and services in Switzerland for families with parents with mental illness. According to diverse estimates, there are at least 20 000 to 50 000 children and adolescents in Switzerland living in a household where there is a parent with mental illness. Up to now, there are no statistical data provided by the Swiss Federal Statistical Office (BFS) concerning the situation of children and adolescents with parents suffering from mental illness. Also, the latest monitoring report relating to Mental Health in Switzerland (2012) did not report any data concerning children and adolescents below the age of fifteen. The National Health Report (2008) states that "psychiatric disorders will result in a heavy burden for the family members, adding to the harm of the directly affected person. Parents, siblings or children of mentally disordered people are mentally less balanced, complain of worsened general health and more often consult their physician". This statement illustrates that neither the medical and public health communities, nor the public in general consider the child's or adolescent's perspective. Children with a parent with a mental or physical disorder or addiction require our special attention and our specific support in order to have the best possible starting conditions. Despite this lack of consideration of the needs of children of a parent with a mental illness in clinical practice and by the general public, over the past 20 years, children, adolescents and families of parents with a mental illness have been the subject of research attention and service-development; specifically in Switzerland, by the universities and cities of Berne, Basel, Chur and Zurich. A cross-sectional study performed in Winterthur in 2006 (wikip), for example, provided data regarding the prevalence, and describing the situation and the environment, of affected children, adolescents and parents. Concurrently various services for children and parents were developed, based on the requirements of everyday life. It is often not recommended to treat children, adolescents and parents based only on the perspective of the treating clinician; instead a transdisciplinary approach is required. For this reason, various institutions and organisations have developed and evaluated services for families of parents with a mental illness. Such services have included a visiting day for parents, brochures for parents, family members and children, psychoeducation groups, mother-childwards, and social pedagogic counselling for parents. Information provision, especially for children and adolescents in schools, and also in some specialized therapeutic services have also been established to supplement existing counselling services that are provided on a community or private basis. This presentation provides an overview of the various trends and services available in Switzerland. The participants are invited to share their knowledge in order to improve the international networking and the know-how of professionals, politicians and society concerning the needs of children of parents with mental illness. As a further result, the developmental and living conditions of children, adolescents and families a parent with mental illness may be improved. In addition, we anticipate a long-term reduction in costs to the health care system and the social assistance system through improving children's wellbeing. **Funding:** We'd like to thank the Lotteriefonds Kt. Zürich (Grant number: 201000778), Infodrog, Hilfsgesellschaft Winterthur and further sponsoring-partners for their financial support. **Keywords:** Mental illness, parents, children, adolescents, families.

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OP16 – 3 Risk indicators of mood and anxiety disorders among informal caregivers

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Background/Objectives: Health care costs are increasing as a result of the development of expensive treatment methods and rapid population aging with associated health problems. Reduction of costs is desirable; therefore policy makers seek solutions from the community. That is, people are encouraged to arrange care and support from their family and friends, which may result in an increase of informal caregiving in the future. Knowledge regarding the effect of informal caregiving on the mental health of caregivers is therefore desirable. This study examines 1) characteristics of informal caregivers; 2) whether mood and anxiety disorders occur more frequently in informal caregivers; and 3) which informal caregivers are at increased risk of mood or anxiety disorders. **Methods:** Cross-sectional data were used from the second wave of the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2), a nationally representative face-to-face survey including 5,303 subjects aged 21-67 interviewed at the second wave (2010-2012). Informal caregiving was broadly defined as providing any informal care to a relative or close friend in the past 12 months. 12-Month mood and anxiety disorders were assessed using the Composite International Diagnostic Interview 3.0. **Results:** One third of the respondents provided informal care (31.1%). They were more often female, older, without a partner and worked less hours per week than people not providing informal care. There was no association between informal caregiving and the presence of a mood or anxiety disorder, even when using stricter definitions (>8 hours informal caregiving per week or for more than a year). A mood or anxiety disorder among informal caregivers was associated with younger age, working less hours per week, living without a partner, and limited social support of the informal caregiver from family, partner or friends. In addition, it was related to caregiving characteristics such as to whom the care was provided (caring for a first-degree relative, partner, or close friend but not caring for a second-degree relative was related with a mood or anxiety disorder), the kind of care that was provided (emotional support but not practical care was related with a mood or anxiety disorder), and providing care for more than a year. **Discussion/Conclusions:** Informal caregiving is common (31%) in the general population, but is not associated with a higher risk of a mood or anxiety disorder, not even when stricter forms of informal caregiving were considered. This might be explained by the fact that informal caregivers could portray a relatively healthy subgroup of the general population. Still, the risk of a mood or anxiety disorder was increased when one or more of the risk indicators, including characteristics related to the informal care giving, was present. Generally, this risk was increased when informal caregivers had a small social network themselves, like no partner or limited social support, and when the care situation was close to the caregiver and possibly more intense; that is, when care was given to a first-degree relative, partner or close friend or emotional support was provided. These indicators can be used for prevention programs focusing at informal caregivers vulnerable for mental problems. **Funding:** NEMESIS-2 is conducted by the Netherlands Institute of Mental Health and Addiction (Trimbos Institute) in Utrecht. Financial support has been received from the Ministry of Health, Welfare and Sport, with supplement support from the ZonMw and the Genetic Risk and Outcome of Psychosis (GROUP) investigators. **Keywords:** Informal caregiving, mood and anxiety disorders, population study.

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OP16 – 4 What Does the Label “Lack of Maternal Cooperation” Tell us About Childbearing Women? Descriptive Study Based on Routinely Collected Perinatal Data

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Background/Objectives: “Lack of cooperation of the mother” is recorded in the perinatal survey as one of the risks for problems during childbirth and as an indication for operative vaginal delivery. First, we explored whether the prevalence of the label of an “uncooperative mother” varies over time. Second, we tested whether the prevalence of this label is associated with maternal socio-demographic and behavioral characteristics. **Methods:** Data on singletons born in the Federal State of Lower Saxony, Germany, (1990–1999; n=720,052), were routinely collected by gynecologists and midwives prospectively during pregnancy and after childbirth. Chi-squared tests, bivariate and multivariable logistic regression models were performed to? **Results:** Between 1990 and 1991, the prevalence of the label “uncooperative mother” fell from 1.6% to 0.7% in terms of risk for childbirth and from 0.8% to 0.5% for indication for operative delivery. In bivariate regression analyses, “lack of cooperation of the mother” as a risk for childbirth was associated with teenage pregnancy (OR=2.39;95%-CI=2.03,2.82), primiparity (OR=1.79;95%-CI=1.52, 2.10), smoking (OR=1.61;95%-CI=1.53,1.70), non-German nationality (OR=1.84;95%-CI=1.74,1.94), occupational status (unemployed OR=3.27;95%-CI=2.83,3.77, manual worker (OR=2.20;95%-CI=1.95,2.50, reference group = highest occupational status), and single mother status (OR=0.59;95%-CI=0.54,0.64). In multivariable regression analyses, adjusted for each other, all sociodemographic variables and smoking remained significantly associated with the label “uncooperative mother” as a risk for childbirth. In bivariate regression analyses, “lack of cooperation of the mother” as an indication for operative vaginal delivery was associated with teenage pregnancy (OR=2.39;95%-CI=2.03,2.83), primiparity (OR=4.44;95%-CI=3.29, 5.97), smoking (OR=1.48;95%-CI=1.39,1.59), non-German nationality (OR=1.61;95%-CI=1.50,1.73), occupational status (unemployed OR=2.50;95%-CI=2.09,2.99, manual worker OR=2.02;95%-CI=1.74,2.34, reference group = highest occupational status), and single mother status (OR=0.65;95%-CI=0.59,0.73). In multivariable regression analyses, adjusted for each other, only marital status was not associated with the label “uncooperative mother” as an indication for operative vaginal delivery. **Discussion/Conclusions:** The data in our study show a steep decline in reporting about “uncooperative mothers” between 1990-1999. However, current data (2009-10) from the entire perinatal registry in Germany report that the prevalence of the label “uncooperative mother” as an indication for cesarean section and for operative delivery still is higher than 2.0%. In our study, non-German nationality (especially Turkish, Asian and African origin), young maternal age, low occupational status and smoking were related to a higher prevalence of this label for risk of childbirth and as an indication for operative vaginal deliveries. In the absence of similar studies from industrial countries, interpretation of these results would be speculative. Further studies are needed that will illuminate the reasons for the associations we found. In the meantime, screening for mental health problems such as anxiety should be improved in childbearing women. **Funding:** None declared.

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OP16 – 5 Does Low Parental Warmth and Monitoring Predict Disordered Eating in Australian Male and Female Adolescents?

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Background/Objectives: Maladaptive parental practices may predict the developmental trajectory of disordered eating (DE) and unhealthy body image perceptions. However, to our knowledge there is a dearth of longitudinal studies looking at deficiencies of positive parenting styles in the development of eating pathology. The present study used a large Australian epidemiological sample to investigate the prospective predictive power of low parental warmth and monitoring at age 13-14 years, individually and in combination, on DE and body dissatisfaction outcomes at age 15-16 years. **Methods:** The present study was part of the Australian Temperament Project (ATP), which is a 30-year longitudinal study that has followed the social and emotional development of a large population-based cohort from infancy (4-8 months) to adulthood (27-28-years) across 15 waves starting in 1983. The findings presented in this paper were derived from the 1,391 (707 males and 684 females) adolescents and parents who completed the 10th and 11th surveys, when the child participant was 13-14 years (1996) and 15-16 years (1998), respectively. Data on parenting style and practices (primary exposure - using the Parenting Practices Questionnaire devised especially for the ATP project) were drawn from parent reports at the 10th wave. Data on DE (primary outcome - using the EDI-2 Drive for Thinness, Body Dissatisfaction and Bulimia subscales) were drawn from child reports at the 11th wave. **Results:** Binary variables representing low parental warmth and low monitoring were combined to define four empirical conditions: (Group 0) neither risk (reference group), (Group 1) low monitoring only, (Group 2) low warmth only, and (Group 3) low warmth and low monitoring (joint effects). These four conditions were then stratified by a binary classification (top quintile) of each EDI-2 dimension to create a 2 x 4 table format. This allowed comparison of risk estimates between levels of warmth and monitoring on presence or absence of DE symptomatology. Results for body dissatisfaction suggest that neither low monitoring (Group 1) nor low warmth (Group 2) increased the odds of reporting body dissatisfaction for both males and females. However, for females, exposure to both risk factors (Group 3) was associated with a 4-fold increase in the odds of reporting body dissatisfaction, 80% of which was attributable to the joint action of both risk factors (additive interaction). There was no evidence of additive interaction for boys. As regards to drive for thinness, results suggest that neither low monitoring (Group 1) nor low warmth (Group 2) are associated with drive for thinness in either males or females. However, for females, exposure to both risk factors (Group 3) was associated with a substantial 6-fold increase in the odds of reporting drive for thinness, 74% of which was attributable to the joint action of both risk factors. Again, there was no evidence of an additive interaction for boys. Finally, findings show that low monitoring doubled the risk of reporting bulimia in females (Group 1). However, low monitoring did not increase the odds of reporting bulimic behaviours in males and low warmth did not have an effect for either sex (Group 2). Furthermore, for males and females, exposure to both risk factors (Group 3) was associated with a 2-fold and a 6-fold increase in the odds of bulimic behaviour, respectively; 41% (for males) and 59% (for females) of which was attributable to the joint action of both risk factors. **Conclusions:** The current findings suggest that especially females that received a neglectful-disengaging parenting style (low warmth and low monitoring) revealed increased body dissatisfaction and eating pathology. Preventative approaches should target parents and emphasise the benefits of a positive, stable, emotional bond. **Keywords:** Parental practices, adolescence, disordered eating, longitudinal.

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Posters

(in order of appearance in the program)

P01 - Child and adolescent mental health

P01 – 1 The impact of perinatal depression on child development in Turkey

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Background/Objectives: Common mental disorders have a high prevalence in women, particularly of childbearing age. It is increasingly recognised that many, if not the majority of cases of perinatal depression begin in the antenatal period and persist after childbirth. Perinatal depression and its effect on child development is one of the major problems in low and low-middle income countries. The aim is to evaluate the effect of perinatal depression on child development in a cohort study. The hypothesis of this study was that antenatal and postnatal depression have negative effects on child development. **Methods:** Women attending antenatal clinics in their third trimester were recruited from urban and rural settings in Ankara, Turkey. Depression was ascertained using the Edinburgh Postnatal Depression Scale (cut-offpoint \geq 13) at 4 perinatal examinations: third trimester, and 4, 12, and 20 months postnatal. Computer Assisted Personal Interview CAPI derived from Millenium Cohort Survey items was used to assess child motor and emotional development around one year old. In this study, the analysis of child development at 12 months and antenatal and postnatal (at 4 and 12 months) depression was presented. **Results:** Of 730 women recruited antenatally, 478 were followed up for one year. Depression prevalence was 33.3%, 26.1%, and 26.2%, at the 3 examinations. CAPI development score was correlated with age of child (Beta -0.32, $p < 0.01$) and reported past history of mental distress (Beta 1.02, $p < 0.01$), whereas CAPI temperament scores were only correlated with age of child (Beta 0.46, $p < 0.01$). Regarding correlations between antenatal depression and postnatal depression at 4, 12 months and child development, there was not any correlation (all r less than 0.1 and $p = 0.05$) **Discussion/Conclusions:** Prevalence of depression were high throughout all assessments. There was not any correlation between perinatal depression and child development at 1 year old. This might be related with the assessment time which may be early. **Funding:** None declared. **Keywords:** Perinatal depression, child development, EPDS, CAPI.

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P01 – 2 Psychopathological predictors of antipsychotic medication use in childhood Autism Spectrum Disorders

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Background/Objectives: Autism Spectrum Disorders (ASDs) affect 1% of children and are associated with lifelong psychosocial impairments. The majority of children with ASD will experience co-occurring psychiatric disorders. In the UK, antipsychotics remain unlicensed for use in ASDs, however 10% of children with ASD receive antipsychotic treatment. The co-occurring disorders being targeted by these medications remains unclear. To examine rates of antipsychotic medication use and identify associated co-occurring disorders among children with ASD receiving psychiatric care. **Methods:** The sample consisted of 2844 children aged 5 to 17 with a NHS clinician recorded ICD-10 diagnoses for ASD between 2008-2013. Clinical variables extracted from their anonymised electronic patient records included disorder severity, medication use, co-occurring ICD-10 diagnoses, family characteristics, demographics and antipsychotic use. **Results:** Of the 2844 children (79% male), the majority (57%) had co-occurring psychiatric diagnoses. 313 (11%) received antipsychotic medication. The proportion of children aged 13 to 17 years and 6 to 12 years prescribed antipsychotics was 19% and 7% respectively. After controlling for socio-demographic factors, disorder severity, specialist treatment, inpatient duration, risk of self-harm, violence to others, self-injurious behaviour, maltreatment history, parental mental illness, caregiver anxiety, and neighbourhood deprivation, multivariate regression analysis revealed only hyperactivity disorders (OR 1.94, 95%-CI 1.32-2.86), psychotic disorders (OR 5.12 95%-CI 2.6-10.1), mood disorders (OR 2.02, 95%-CI 1.04-3.92) and intellectual disability (OR 2.89 95%-CI 1.89-4.71) were associated with anti-psychotic use. **Conclusions:** The prescription of antipsychotic medications in this UK ASD clinical sample is strongly associated with older age, intellectual disability and specific co-occurring psychiatric disorders including hyperactivity disorders and mood disorders. UK NICE guidelines do not recommend children with ASD receive antipsychotic treatment for co-occurring hyperactive or non-psychotic depressive disorders. For treatment of co-occurring conditions in children with ASD, the evidence base remains underdeveloped. Trials are needed to evaluate the safety and effectiveness of antipsychotic medications in treating the co-occurring conditions for which they are commonly prescribed. **Source of funding:** This study was supported by the Clinical Records Interactive Search (CRIS) system funded and developed by the National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity. We appreciated the technical support from informatics personnel in the Biomedical Research Centre. RH is funded by a Medical Research Council (MRC) Population Health Scientist Fellowship. JD, RJ, HS and RS are funded by the National Institute for Health Research (NIHR) Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London.

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P01 – 3 Associations between Social Networking Site Use and Adolescent Mental Health

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Background/Objectives: Increased adolescent use of social media raises important questions about its impact on adolescent mental health. Focusing on social networking site (SNS) use and instant messaging (IM), the research evidence is conflicting. Some studies suggest that SNS and IM use are associated with increased depressive symptoms and declines in subjective well-being, while others suggest that SNS and IM use enhance adolescent well-being. Research has focused primarily on mental illness rather than mental well-being (MWB) which is a distinct (though related) dimension. This gap is addressed by exploring MWB and mental illness (depressive symptoms) as separate outcomes in relation to adolescent SNS and IM use, hypothesising that high and low levels of SNS and IM use would be associated with increased depressive symptoms and lower MWB.

Methods: This study is part of the longitudinal Olympic Regeneration in East London (ORIEL) study. Paper-based surveys were collected from 3220 Year 8 students (aged 12-13) in 25 schools in East London from January to July 2013. Passive parental consent and informed adolescent assent was obtained. Measures of mental well-being (Warwick Edinburgh Mental Well-Being Scale (WEMWBS)), depressive symptoms (Short Mood and Feelings Questionnaire (SMFQ)) and SNS and IM use (items from the EU Kids Online surveys) were included. Initial analyses examined the prevalence of SNS and IM use then cross-sectional regression analyses were performed to test hypotheses, adjusting for gender and socioeconomic status.

Results: Rates of SNS use varied, with 22.0% reporting use several times a day, 25.0% every day or almost every day, 19.9% once or twice a week, 13.7% less than once a week, and 19.4% never. IM use was also measured according to five categories: Several times a day (39.8%), every day or almost every day (30.2%), once or twice a week (11.0%), less than once a week (7.5%), never (11.5%). Mean mental well-being scores of 51.3 (SD=9.6) were reported, 21.6% reported significant depressive symptoms and 43.2% were female. After adjustment for gender and SES, there was a significant association between IM use and depressive symptoms with increased odds for depression for those using IM several times a day (OR=1.52, 95% CI [1.16, 2.01]) and those never using IM (OR=1.66, 95% CI [1.12, 2.45]) compared to those using IM once a day or almost every day. IM was also associated with well-being: after adjustment for gender and SES, respondents reporting never using IM had significantly lower wellbeing scores (Coef.= -1.57, 95% CI [-3.07, -0.08]) compared with those reporting using IM several times a day. After adjusting for gender and SES, SNS use was also associated with depressive symptoms. Those who used SNS less than once a week were significantly less likely to report depressive symptoms than those who used SNS several times a day (OR=0.622, 95% CI [0.42, 0.93]), as were those who never used SNS (OR=0.64, 95% CI [0.45, 0.92]). SNS use was not associated with well-being before or after adjusting for gender and SES.

Discussion/conclusions: The results suggest that SNS and IM use in adolescence may play an important role in mental health. Only IM use was associated with mental well-being. While SNS and IM use both involve connecting with peers, the findings suggest that IM use has stronger links with mental well-being. This may occur via social connections and may be attributable to the different communication functions of social networking site use compared to instant messaging. Next steps include investigating the role of perceived social support in associations between IM use and mental well-being. Longitudinal associations between social media use and adolescent mental health will be explored once the next wave of ORIEL data is collected.

Funding: The ORIEL study is funded by the NIHR Public Health Research Programme (Grant number: 09/3005/09 to SC). **Keywords:** Mental well-being, mental illness, social networking site use, instant messaging use.

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P01 – 4 A Longitudinal Study of Disordered Eating in Australian Adolescents: Modelling Psychosocial and Individual Risk Factors

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Background/Objectives: Disordered eating (DE) and body dissatisfaction generally emerge in adolescence, and may, if not treated on time, even develop into full-blown eating disorders by early adulthood. Various psychosocial and individual risk factors have been implicated in the development of DE, however there are hardly any studies looking prospectively at the interrelationship of several risk factors.

Objective: The present study used a large Australian adolescent sample to test whether sociocultural pressures to diet, thin-ideal internalization, negative appearance comparisons and body dissatisfaction were predictive of a) DE behaviour concurrently (Time 1 [T1]; 1995: age 12-13) and b) DE behaviour longitudinally at age 15-16 (Time 2 [T2]; 1998). A further aim was to assess whether each of the risk factors included in the final model was moderated by negative emotionality.

Methods: The participants in the current study were part of the Australian Temperament Project (ATP), a large-scale 30 year old longitudinal study assessing the psychosocial development of Victorian children from infancy into parenthood. Participants were 508 adolescent girls who were assessed for DE at age 12-13 years [T1] and again at age 15-16 years [T2]. Predictor variables (i.e., sociocultural pressure, thin-ideal internalisation, negative comparisons and body dissatisfaction) were drawn from parent and self-reported questionnaires at T1. Data on DE (assessed through the EDI-2 subscales drive for thinness and bulimia) was taken from self-reports at both T1 and T2.

Results: Structural equation modeling (SEM), with manifest (thin-ideal internalization and body dissatisfaction) and latent variables (sociocultural pressure to diet, negative appearance comparisons and DE), was conducted using AMOS. Moderation analyses were tested in SPSS in conjunction with the Johnson and Neyman technique. The model fit for the final SEM model provided an acceptable fit, $\chi^2(28) = 105.88$, $p < .001$, RMSEA = .07, CFI = .95, SRMR = .05. Path analysis revealed sociocultural pressures to diet increased concurrent body dissatisfaction ($\beta = .70$; $p < 0.05$) and DE at T1 ($\beta = .56$; $p < 0.05$). Internalisation of the thin-ideal and negative appearance comparisons partially mediated the effect of sociocultural pressures on body dissatisfaction ($\beta = .06$, $p < 0.05$). This path, however, was only a partial mediator of this relationship as there was still a significant direct path between sociocultural pressure and body dissatisfaction. The variance explained by this mediational path demonstrated 66% of the variance in body dissatisfaction, whereas without the variables of thin-ideal internalisation and negative appearance comparisons, sociocultural pressure explained only 33% of the variation in body dissatisfaction. Prospectively none of these risk factors predicted later adolescent DE at T2. Moderation analyses revealed that negative emotionality did not moderate the effect of any of the risk factors assessed in the current study.

Conclusions: The results suggest that initial experiences with DE sets the stage for increases in DE at 15-16 years [T2]. The results highlight the importance of longitudinal and multiple risk factor research for informing the development of intervention programs. The current model provides an important framework for future eating pathology research and should be tested in variants of the current sample to enable generalisation of the risk factor interrelationships beyond Australian early adolescent females.

Keywords: Disordered eating, risk factors, adolescence, longitudinal.

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P01 – 5 Externalizing, Anxiety and Depressive Disorders: Co-morbidity, Prospective Associations, Correlates and Risk Factors in Youth

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Background/Objectives: Investigating the co-morbidity within anxiety disorders and between anxiety and depressive and substance use disorders widely contributed to our knowledge about their structure, etiology and nosology. Notably, the co-morbidity of early-onset externalizing disorders (ODD, CD, ADHD) and childhood/adolescent-onset anxiety disorders has been studied less systematically. The aims of this work were to prospectively examine the comorbidity of externalizing and anxiety disorders, their temporal relationships and predictors of co-occurrence. **Methods:** Data are based on a subsample of N=1,053 adolescents from the Early- Developmental Stages of Psychopathology Study. Parents were interviewed about core symptoms and onset age of offspring's externalizing disorders. Anxiety and other mental disorders were assessed at baseline and 2, 4 and 10 year follow-up using the DIA-X/M-CIDI which was supplemented by comprehensive respond lists and questionnaires to assess putative correlates and risk factors for mental disorders. Regression and Kaplan-Meier-Survival analyses reveal cross-sectional and longitudinal associations between the disorders and their predictors. **Results:** Rates of core symptoms of an externalizing disorder were 8.3% and 6.3% among those with and without an anxiety disorder. Except for specific phobias, ADHD, CD and ODD were positively related to anxiety disorders, even after adjusting for gender and comorbid conditions. Given that externalizing disorders preceded anxiety disorders in the majority of cases, the risk for incident anxiety disorders was increased by prior externalizing disorders. Although parental anxiety and depressive disorders, behavioral inhibition, and volitional components were related to ADHD and anxiety disorders, only higher parental rejection, lower volitional inhibition and higher volitional avoidance predicted incident anxiety disorders. **Discussion and Conclusions:** Findings point to the notable co-morbidity of externalizing and anxiety disorders in adolescence. As anxiety disorders are associated with an increased risk for a cascade of later psychopathology, externalizing disorders in childhood appear to be useful targets for prevention and early intervention. **Funding:** This work is part of the Early Developmental Stages of Psychopathology (EDSP) Study and is funded by the German Federal Ministry of Education and Research (BMBF) project no. 01EB9405/6, 01EB9901/6, EB01016200, 01EB0140, and 01EB0440. Part of the fieldwork and analyses were also additionally supported by grants of the Deutsche Forschungsgemeinschaft (DFG) LA1148/1-1, WI2246/1-1, WI 709/7-1, and WI 709/8-1. **Keywords:** Anxiety disorders, externalizing disorders, course, adolescents.

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P01 – 6 Evaluating Oral Health Status of Children with Cognitive Disabilities

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Background/Objectives: Advocating oral and dental health programs to children with cognitive disabilities has as its main objective the evaluation of the study group before the onset of any teaching campaign. The aim of this study was to investigate caries prevalence and oral hygiene status for children with cognitive disabilities in order to further create strategies, adapted to the age and perception levels of the target group that integrate information to motivate the adoption of prophylactic measures. **Methods:** 104 institutionalized children, aged between 4-18 years, with mild cognitive retard (IQ 50-70), randomly selected from a special school in Timis County, Romania, have been investigated. The study was made according declaration of Helsinki and with the approval of the local ethic committee. The kappa statistics results were been above 0.75 denoting excellent agreement. Caries examination was carried out according to World Health Organization criteria and oral hygiene status was evaluated by visually assessing the presence of plaque on teeth (Sillness-Loe Plaque Index). Children were divided into three groups according to age: n1= 30 children aged between 4-6 years (mean age 5.05±0.57), n2= 50 children aged between 7-11 years (mean age 8.67±1.22), n3= 24 children aged between 12-18 years (mean age 14.17±1.93). **Results:** During the development of the study there have been 4 dropouts because of lack of collaboration. The mean Decayed Missing Filled Teeth Index (DMFT) for group n1 was 7.00±2.50. For group n2 mean DMFT was 7.64±3.13 and mean Decayed Missing Filled Teeth Index (DMFT) was 3.2±1.95, and DMFT for n3 was 8.66±2.57. Sillness-Loe Plaque Index had values between 1.8-2.23 for every examined patient revealing poor oral hygiene status. **Conclusions:** According to the results there is a clear need for a preventive approach and proper dental education for children with cognitive disabilities including this group in actions that will ensure mental connections for oral concepts. **Keywords:** Oral Health, education, children with mental disabilities, prophylactic means.

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P01 – 7 Sense of Coherence and the Bio-Psycho-Social Well-Being. A Study among Adolescents

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According to A. Antonovsky, people with a strong sense of coherence are characterized by an active, subjective attitude to their own health. It can be argued that people living and developing in the transaction between the requirements of their own culture acquire knowledge and the resources of subjective and environmental factors that enrich potential individual and social health. The main aim of the research, in light this theory, was to verify the admissibility of three hypotheses about the positive impact of sense of coherence on aspects of mental, somatic and social health. To assess sense of coherence (exogenous variable) in the present study a corrected version of the SOC-29 questionnaire was used, which supported the hypothesis that „sense of coherence“ may have a hierarchical form consisting of three sub-constructs: (1) “the sense of comprehensibility” as a basis for the organization of (a) multidimensional control over ongoing events, (b) social understanding and cooperation, and (c) self-protection from negative emotions; (2) “the sense of manageability” construct, which organizes (d) multi-dimensional control over the development of the situation, (e) social understanding and interaction, and (f) self-protection from negative emotions; and (3) “the sense of meaningfulness” construct, which comprises of (g) the general affirmation of life and motivation for action, (h) the general faith in the meaningfulness of the future, and (i) a general concern for the environment and the positive dynamics of changes. Confirmatory Factor Analysis allowed for a positive verification of this solution. The results of criterion tests were as follows: $\chi^2/df=1.97$; $p\leq 0.007$; RMSEA-HI=0.072; PCLOSE=0.924; AGFI=0.956; Hoelter $N(0.05)=325$. To measure the endogenous variables according to the bio-psycho-social aspects of health, the following measures were used: the Borderline Personality Organization Questionnaire (BPOQ), which was developed on the basis of the assumptions of the Kernberg’s theory allowing for the measurement of two hierarchical psychological structures: “sense of self-identity” and “sense and control of reality” (with their indicators), (2) The Giessen Physical Complaint List for Children and Adolescents (GSCL-C), which enabled the measurement of somatic symptoms experienced in the following areas: exhaustion, gastric complaints, pain, circulatory problems, and cold symptoms, and the (3) Psychological Inventory of Aggression Syndrome (Polish: IPSA-II), which was used to identify pro-social behavior. The data come from a sample of adolescents ($N=469$) aged 13 to 18 years. The sample meets the stratification criterion according gender and age range ($\chi^2=0.70$; $df=5$; $p\leq 0.983$). The estimation results for the three causal models that tested the impact of sense of coherence on aspects of bio-psycho-social well-being were as follows: (1) BPOQ: $\chi^2/df=1.82$; $p\leq 0.0001$; RMSEA-HI=0.057; PCLOSE=0.733; AGFI=0.928; Hoelter $N(0.05)=286$. (2) GSCL-C: $\chi^2/df=2.14$; $p\leq 0.0001$; RMSEA-HI=0.066; PCLOSE=0.318; AGFI=0.925; Hoelter $N(0.05)=248$. (3) IPSA-II: $\chi^2/df=1.52$; $p\leq 0.01$; RMSEA-HI=0.051; PCLOSE=0.935; AGFI=0.950; Hoelter $N(0.05)=358$. The results of the estimation support the three hypotheses regarding the causal impact of a stronger sense of coherence on aspects of bio-psycho-social well-being. However, it should be noted that the percentages of the explained variance in the endogenous part of the model by its exogenous part (sense of coherence) differed significantly (not less than 24%, from 3 to 5%, and not less than 10% for each of the hypotheses respectively). This means that psychological well-being can be explained partially explained by the influence of the „sense of coherence“ construct. [Source of Funding](#): None Declared.

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P01 – 8 Confirmation of Character Model in Terms of R. C. Cloninger as a Predictor of Somatic and Mental Health. A Study Among Adolescents

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The main thesis of the psychobiological concept of personality by R. C. Cloninger et al. is the interacting structure of temperament and character, the former being, to a large extent, explained by the influence of genetic factors and the latter by the result of socio-cultural learning and education. For their diagnosis the Temperament and Character Inventory (TCI) is used. A verification of the hypothesis of admissibility of character model consisting of three constructs: „self-directedness“, „cooperativeness“ and „self-transcendence“ along with their empirical arguments (indicators of character) was carried out using Confirmatory Factor Analysis (CFA). The empirical base matrix consisted of TCI results obtained on the stratified sample ($N=502$) of adolescents (13-18 years). On the basis of the experimental procedure a few adjustments to the model source TCI were made and the Confirmatory Factor Analysis helped to verify some positive solutions, of which the best in tests of goodness of fit of empirical covariance matrix (S) in relation to implied by the theoretical model (Σ), in the test criterion obtained the following values: $\chi^2/df=1.29$; $p\leq 0.0001$; RMSEA-HI=0.043; PCLOSE=0.991; AGFI=0.978; Hoelter $N(0.05)=557$. To measure the endogenous variables adequately for the somatic and mental aspects of well-being, the following were used: (1) Borderline Personality Organization Questionnaire (BPOQ), based on O. Kernberg’s theory and developed by Januszewska, which allows measurement of two hierarchical psychological structures: “a weak sense of self-identity” which consists of: (a) the defense mechanism of splitting, (b) impaired subject - object relations, (c) generalized anxiety tension, and “inadequate sense and control of reality” which comprises: (a) insufficient control of impulsivity, (b) primary forms of thinking (c) and defense mechanisms of primitive idealization and projection; and (2) The Giessen Physical Complaint List for Children and Adolescents (GSCL-C) developed by Brähler and Scheer, which allowed for the measurement of somatic symptoms experienced in the following areas: exhaustion, gastric complaints, pains in limbs, circulatory problems, and cold symptoms. The estimation results of two Causal Models which tested the relevance of the impact of character structure on the mental and somatic well-being were as follows: (1) BPOQ: $\chi^2/df=2.20$; $p\leq 0.0001$; RMSEA-HI=0.057; PCLOSE=0.573; AGFI=0.917; Hoelter $N(0.05)=275$. (2) GSCL-C: $\chi^2/df=2.24$; $p\leq 0.0001$; RMSEA-HI=0.059; PCLOSE=0.509; AGFI=0.953; Hoelter $N(0.05)=281$. The results of estimation are essential to confirm the two hypotheses on the causal impact of character (controlled by TCI) on mental and somatic well-being. It is worth noting that the percentages of the explained variance in the endogenous part of the model by the exogenous part (structure of character) differed significantly: in the first case - it is not less than 36 %, in the second - not less than 12%. The results of this research point out the value of the theoretical relevance of TCI, which enables the measurement of latent personal constructs (within the meaning of L. Cronbach and P. Meehl), which is the sphere of character composed of three subconstructs: „self-directedness“, „cooperativeness“ and „self-transcendence“. In addition, the result of Causal Modeling (CM) showed that such understanding of the sphere of character has predictive validity. [Source of Funding](#): None Declared.

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P02 - Mental health across the lifespan

P02 – 1 Nationwide increasing incidence and diagnostic variation in adult ADHD from 1995-2012

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Background/Objectives: The attention towards ADHD in adults has increased over the past decades. A high co-occurrence of other psychiatric disorders has been reported in these patients. Even though the diagnostic criteria for ADHD are not fully validated in adults the use of pharmaceutical stimulants in treating adult ADHD is increasing. The aim is to analyse the incidence of adult ADHD in Denmark 1995-2012 and the variations within diagnoses given to the patients throughout the period including diagnoses contraindicating treatment with stimulants.

Methods: A nationwide register based study of all patients diagnosed with ADHD aged 18 years or above in 1995-2012.

Results: The study included 6,701 patients from The Danish Psychiatric Central Research Register. An exponential increase in the incidence is seen throughout nearly two decades regarding both men and women. Variations in diagnoses were seen as 40.4% of all patients had another psychiatric main diagnosis before the ADHD diagnosis was given. Following the ADHD diagnosis 17.4% of all patients received other main diagnoses. When studying the ADHD patients with more than one contact to the psychiatric hospital based system, an overlap between patients diagnosed with ADHD and diagnoses contraindicating treatment with stimulants was found for 25.8% and 40% of the patients with other diagnoses before or after the ADHD diagnosis respectively.

Discussion: There has been an exponential increase in the incidence of adult ADHD throughout nearly two decades. Variation is seen within diagnoses given to the patients. Especially interesting is the rate of disorders such as schizophrenia and bipolar disorder which are not reported in previous studies. The present study finds a number of patients with both adult ADHD and diagnoses where treatment with stimulants is contraindicated. The number of patients with diagnoses contraindicating the treatment with stimulants is higher after the ADHD diagnosis is given compared to before.

Conclusion: The variations in diagnoses given to the adult ADHD patients and the number of patients who receives diagnoses contraindicating treatment with stimulants along with the increasing incidence of ADHD in adults calls for attention concerning diagnosing as well as treating these patients.

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P02 – 2 Quality of life in the German population aged 60+ depending on Cognitive Status - No cognitive impairments vs. mild cognitive impairments

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Background/Objectives: The objective of the present study was to assess the Quality of Life (qol) of elderly persons with mild cognitive impairments, compared to healthy elderly persons. Epidemiological studies estimate the prevalence of mild cognitive impairments in persons 65+ years old at 3 to 19%.

Methods: We carried out a population representative survey with 997 participants (60 years and older) on their subjective quality of life. The WHOQOL-BREF and the WHOQOL-OLD, which was especially developed for older people (older-specific facets: sensory abilities, autonomy, past, present and future activities, participation, death and dying and intimacy), served as instruments. The assessed results for quality of life were additionally put in socio-demographic and health-related contexts to identify potentially influencing factors, like age, gender, education, marital status, number of co-morbid conditions and IADL. The DemTect was used to assess cognitive skills. Participants with mild cognitive impairments were included. The results of the DemTect allowed allocating the participants to the respective group (MCI vs. healthy). Overall, 267 participants were assigned to the group with mild cognitive impairments, while 730 participants showed no signs of cognitive impairments.

Results: Compared to the healthy participants, the questioned elderly participants with mild cognitive impairments estimated their quality of life to be lower in all dimensions of the WHOQOL-BREF (physical wellbeing, psychological wellbeing, level of independence, social relationships, environment, spirituality/religion and overall qol) and in all facets of the WHOQOL-OLD (except "death and dying"). Regarding socio-demographic and health-related influencing factors, quality of life decreased with an increasing age and number of co-morbid conditions. Decline of instrumental activities of daily living (IADL) led to a reduced quality of life in general. People with higher education assessed their qol better than people with no school-leaving qualifications.

Discussion/Conclusions: It has been shown that already mild cognitive impairments have substantial effects on subjective quality of life.

Funding: DFG (German Research Foundation), CO 900/1-1.

Keywords: Quality of life, older people, WHOQOL-OLD, MCI.

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P02 – 3 The Impact of Changes in Population Projections on the Number of People suffering from Dementia in Europe

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Background/Objectives: Europe is one of the major regions of the world where population ageing is most advanced. The estimated increase of the elderly population in the next decades might lead to a considerable rise of people suffering from dementia in Europe. Since several of the projections published 10 years ago raised questions about the accuracy of such calculations over periods of more than 10 years, we recalculated the former projections with the most recent data. **Methods:** Population projections of the United Nations population division (main projection, constant-mortality and the zero-migration variant) for Europe from 2000 and 2010 were used to calculate the number of people suffering from dementia in 2020, 2030, 2040 and 2050. In order to avoid the bias resulting from single surveys, we decided to use only data from meta-analyses. For this purpose, results of meta-analyses of population surveys were used. Additionally we calculated the ratio of people in working-age per one demented person to estimate future financial consequences and emotional burden. **Results:** UN population projections (main variant) of 2010 would lead to an increase of 1.7 million additional people suffering from dementia in 2050 compared to predictions in 2000 (predictions of 2000 vs. 2010 in million for the year 2020: 10.1 vs. 10.7; year 2030: 11.9 vs. 12.7; year 2040: 14.4 vs. 15.6; year 2050: 16.2 vs. 17.9 millions). The decrease of the working age population is estimated to be smaller than expected before. Thus, the ratio of people in working-age per one demented person will overall be similar (22.9) to the projections based on the data of the year 2000. **Discussion/Conclusions:** Calculations on the basis of the latest population projections estimate an even higher increase of people suffering from dementia within the next decades in Europe than previously expected. These results have multiple and far reaching consequences for health care and its appropriate future planning especially as dementia is known to be the main reason for extensive nursing care. The higher financial and emotional burden placed by dementia on the working-age population will be roughly the same as earlier predicted. Since dementia is one of the most important risk factors for needing nursing care and permanent supervision, we can assume that dementia will place enormous demands on the social and health care system. **Keywords:** Dementia, epidemiology, population projections, health care.

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P02 – 4 Prevalence, incidence and factors associated with cognitive impairment among elderly from São Paulo city (Brazil) – the SABE (Health, Wellness and Aging) Study – 2010

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Background/Objectives: This is a subproject of the SABE Study (Health, Wellness and Aging), a cross-sectional and longitudinal analysis that aimed to estimate the prevalence and incidence of cognitive impairment (CI) in the elderly living in São Paulo (SP- BRAZIL), and to study the factors associated with these outcomes. **Methods:** The SABE Study began in 2000, with a two-stage probability sample, representative of the urban population of individuals aged 60 years and over in São Paulo, the biggest city of BRAZIL. This process was repeated in 2006 and 2010, when new cohorts of individuals aged 60-64 years were included. The samples for the prevalence study of CI were 989 individuals aged 65 years or more. Of these, 67.1 % were from the 2000 cohort and 241, 32.9 % of the cohort, included in 2006. To study the incidence of CI the initial sample was composed of individuals who were 65 years and over in 2000 (N = 1707), but who did not present with CI (N = 1362) at that time; of these, 457 participants were reassessed in 2010. In this household survey, subjects were evaluated using the Mini-Mental State Examination as well as the primary instrument of the SABE study, which investigates early living and health conditions. The Rao-Scott test was used in the bivariate analysis and, in the multivariate analysis, logistic regression analyses were conducted, based on the calculation of odds ratios (OR), adjusted for all covariates that integrated each model. These models included, besides sex and age, variables related to early living and health conditions (model 1), social variables (model 2), health and lifestyle (model 3), and self-evaluation of health and memory, and performance in basic and instrumental activities of daily living (model 4) **Results:** The prevalence of CI was 14.1% (95%CI 11.7-16.9%) The incidence of CI was 22.0/1,000 person-year (95%CI 17.9-27.1). The variables that remained independently associated with the prevalence of CI were: more advanced age and non-Caucasian ethnicity (risk factors, RF), four to seven years of schooling and self-evaluation of memory as very good (protective factors, PF). Concerning the incidence of CI, the independent factors were age, non-Caucasian ethnicity, poor health before age 15 (RF), eight or more years of schooling, being able to read and write a message, and good economic situation before age 15 (PF). **Funding:** Fapesp nº 2009/53778-3 (SP- BRAZIL). **Keywords:** Cognitive impairment, prevalence, elderly, incidence.

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P02 – 5 Obsessive-Compulsive Symptoms in Medical Students: Prevalence, Severity and Correlates

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Background/Objectives: The vast majority of studies on mental health of medical students focus on common mental disorders and depression. The aim of the present study was to estimate the prevalence, severity and correlates of symptoms suggestive of obsessive-compulsive disorder (OCD) among medical students at a public university in Brazil.

Methods: This is a cross-sectional study with 476 medical students (response rate: 86.5%), who were assessed using the Obsessive-Compulsive Inventory-Revised (OCI-R). This scale has 18 self-report items that evaluates six OCS dimensions: checking, cleaning, ordering, hoarding, obsessing and neutralizing. The main outcomes were 'probable OCD' (OCI-R score >27) and overall/dimensional OCI-R scores. Sociodemographic data, depressive symptoms (Beck Depression Inventory) and several aspects of academic life were also investigated. Bivariate analyses were followed by regression models.

Results: Eighteen (3.8%) participants presented with probable OCD, which was associated with depression. The mean OCI-R score was 8.9 and greater overall severity was associated with being a freshman, difficulty making friends, feelings of rejection and depressive symptoms. Higher scores in the 'checking' and 'cleaning' dimensions were associated with being a freshman, whereas the 'neutralization', 'ordering' and 'hoarding' dimensions were associated with adaptation difficulties. The 'obsession' dimension was associated with being a freshman, depressive symptoms, difficulty making friends and psychological/psychiatric treatment.

Discussion/Conclusions: Probable OCD is more frequent in medical students than in the general population and is associated with depressive symptoms. Efforts are required to identify OCS in this population, particularly among first-year students, and to provide treatment, when necessary. For institutional programs that properly receive freshmen, enhancing their integration with other colleagues and their adaptation to the city may decrease the level of stress and anxiety and, consequently, OCS severity.

Funding: This study has received financial support from the São Paulo Research Foundation (FAPESP, grant number 21832-9, 2011) - Brazil. The student BLC received a one-year scholarship from the National Council for Scientific and Technological Development (CNPq - Institutional Program for Undergraduate Research Grants, PIBIC) - Brazil.

Keywords: Obsessive-compulsive disorder, medical students, obsessive-compulsive symptoms, mental health.

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P02 – 6 Substance abuse patterns among university students: regional and gender differences

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Background/Objectives: University students are at particular risk for substance abuse behaviours because of reduced parental support and changes in life style. In substance abuse disorders, gender and region are determinants that have been shown to affect help-seeking behaviour, age at onset, use patterns, and progression of disease course. Epidemiological data on regional and gender differences in substance abuse patterns among this population is limited.

Methods: Urban students at the University of Vienna (N = 1025, mean age:21.03y, 62,7% female) were compared to a University of Innsbruck rural student sample (N = 873, mean age:22,14y, 65,9% female) on substance use parameters. Assessment was conducted using self-report instruments including the substance consumption history questionnaire, Fagerström test, CAGE test, SF-36 Health Survey, Beck Depression Inventory, and the Zerssen-Beschwerdeliste. Standardized sets of questionnaires were distributed in lectures of several faculties.

Results: The most striking result was the high prevalence of nicotine consumption (38,2%), at which rural students had a significantly higher rate of daily nicotine use ($p \leq 0.001$). Significant differences between sites were found for alcohol ($p \leq 0.001$), THC ($p = 0.002$) and benzodiazepines ($p = 0.006$), in all cases higher rates for the Viennese population. Males had a significantly higher rate of daily alcohol ($p \leq 0.001$) and cannabis consumption ($p = 0.007$), whereas females dominated in consumption of analgesics ($p \leq 0.001$).

Discussion/Conclusions: The magnitude of alcohol and nicotine abuse among this population is profound. Gender differences were significant, especially for alcohol and cannabis use. Students should receive preventive interventional health care measures addressing problematic nicotine and alcohol consumption. Education on long-term effects of nonmedical prescription use should be provided using gender sensitive approaches.

Funding: none declared 6,2% of students reported taking benzodiazepines, 35,4% reported taking analgesics. **Keywords:** Substance abuse, university students, nicotine, alcohol.

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P02 – 7 Quality of Life among the Elderly – Comparison of Subgroups containing Persons with Depression, Somatic Illnesses or Relatives Caring for Persons with Dementia

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Background/Objectives: Subjective quality of life (QoL) is one of the central criteria for measuring the quality of medical and care provision. The WHO-QoL questionnaire was developed as an internationally applicable questionnaire to measure QoL in the general population aged 18 to 60. The WHO-QoL-OLD, which was developed between 1999 and 2003 in an international study group, focuses on persons being older than 60 years. An insight on the QoL of subgroups of the older population with additional burdens in life is still missing though. One study goal was to analyse the difference between the QoL of persons with depression, persons with somatic illnesses (cardiovascular diseases and diabetes) and persons caring for relatives with dementia. **Methods:** Persons were recruited in Germany. All participants received a set of questionnaires, including the WHOQoL-BREF, the WHO-QoL-OLD, the GDS-15, a questionnaire about nursing ill family members, a questionnaire about morbidity, the SF-12 and the IADL. Somatic persons and people with depression were tested for dementia with the DemTect. Persons caring for relatives with dementia received a more detailed questionnaire about the subjective burden of nursing an ill family member. Differences of QoL dimensions between study groups were analysed by means of multivariate regression models, controlling for socio-demographic characteristics and “activity of daily living” capacity. **Results:** As indicated by the results of the regression analyses, patients with depression reported a significantly lower QoL across all dimensions of the WHOQoL-BREF and the WHOQoL-OLD than patients with CVD or diabetes. In contrast, persons caring for a relative with dementia reported a better QoL than patients with depression on the physical and the psychological dimension of the WHOQoL-BREF and on the sensibility dimension of the WHOQoL-OLD, but a significantly lower QoL on the social dimension of the WHOQoL-BREF and on the intimacy dimension of the WHOQoL-OLD. **Conclusion:** Depressive disorders have a more negative impact on the QoL of older people than chronic physical diseases. Caring for a relative with dementia is related to a strong loss of QoL with regard to social and intimate relationships. **Funding:** DFG (German Research Foundation; CO 900/1-1; KI 792/2-1). **Keywords:** Quality of life, depression, somatic illness, caring relatives.

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P02 – 8 Burnout, Depression and Anxiety among Medical Students

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Background/Objectives: In the last couple of years, mental health problems among students have received increasing attention. The level of burnout, depression and anxiety can indicate the general (psychic) burden students have to bear and give hints regarding which, and how, students can be assisted. Previous experience and research tells us that the academic environment can be highly stressful. Physic, mental and emotional exhaustion as a result of chronic work load suggest that medical students are vulnerable for mental health problems. In this study, we focused on burnout, depression and anxiety among medical students in their pre-clinical and clinical terms. Additionally, gender effects were analyzed. **Methods:** The study examines burnout, depression and anxiety in medical students. The presented results are part of a large longitudinal online survey including all students of the University of Ulm that explores students' satisfaction, work load and the balance between family and career. We present results of the first test interval containing all medical students. Our questionnaire consists of well-established and high-quality psychometric questionnaires as well as demographic questions (e.g. gender, age, relationship, field of study), such as the Four-Item Patient Health Questionnaire (PHQ-4) to assess the core criteria of depression and anxiety (4 point Likert scale ranging from 0 = not at all to 3 = every day) and the Maslach-Burnout-Student-Survey (MBI-SS), which focuses on the three dimensions: Emotional Exhaustion, Cynicism and Academic Efficacy (7 point Likert scale ranging from 0 = never to 6 = daily). In total, N = 716 medical students completed the questionnaire (65.4% female, 34.6% male). 61 % of the students were in their pre-clinical term, 39% in their clinical term. **Results:** For the PHQ-4, a cut-off value of 2.5 is defined to indicate a clinically relevant depression or anxiety disorder. This cut-off value is the mean value of the four given answers. In our sample, 10.3% of all interviewed medical students had scores that exceeded this value. For depression, the mean value of the total sample is M = 1.72 (SD = 0.69), this means that, on average, students feel depressed on few up to more than half of the days. T-Tests indicate a significant (p = .027) gender difference with female students scoring higher in PHQ-4 (M = 1.76, SD = 0.76) than males (M = 1.64, SD = 0.66), but no difference between pre-clinic and clinic term. For the factor anxiety we found a mean value of M = 1.73 (SD = 0.74) for the total sample. Anxiety and tension are symptoms that the interviewed students feel on few up to more than half of the days. Here as well, female medical students had significant higher scores (p = .001; M = 1.79, SD = 0.76) than male students (M = 1.60, SD = 0.68). Additionally, medical students in their pre-clinic terms had significantly higher levels of anxiety (p = .001; M = 1.84, SD = 0.77) than in their clinic term (M = 1.64, SD = 0.71). The interviewed medical students scored low in two of the burnout dimensions (Emotional Exhaustion: M = 1.67, SD = 1.36; Cynicism: M = 2.53, SD = .78). On the dimension Academic Efficacy however, mean values were clearly higher (M = 4.02, SD = .79). No significant gender differences were found for any of the three burnout dimensions, but there were some significant differences in study progress for Emotional Exhaustion und Academic Efficacy. Emotional Exhaustion increases significantly (p = .02) from pre-clinic (M = 1.47, SD = 1.4) to the clinical period (M = 1.8, SD = 1.3), Academic Efficacy decreases significantly (p = .001) from pre-clinic (M = 4.20, SD = 0.80) to clinic (M = 3.40, SD = 0.77). **Conclusions:** The presented results show a clear need for action in the field of prevention, counseling and individual guidance through study time for medical students. **Funding:** No funding was received for this project. **Keywords:** Medical Students, Burnout, Depression, Anxiety.

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P03 - Treatment modalities and outcome

P03 – 1 Can the circle of intensive use of and drop-outs from treatment among personality disordered patients be stopped? SCID-II and clinical epidemiology

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Background/Objectives: The high prevalence and the impact that personality disorders have on treatment of mental disorders are widely discussed and supported by a growing body of research. Personality disordered patients can use psychiatric care in intensive, nevertheless inadequate ways, mostly because of symptoms of a comorbid mental disorder. This is the first Polish study concerning adherence to therapeutic procedures and dropping out from treatment from the perspective of concurrent personality disorders. The question is, if we can use the SCID-II and its methods (including proper training) to predict dropping out from treatment and plan more adequate and helpful treatment proceedings?

Methods: This was a prospective study. 124 patients during their hospitalizations in 3 psychiatric units were observed (two general psychiatric units: stationary and day-care unit and one for neurosis treatment - with psychodynamic group psychotherapy). Mental state, demographic factors, prior history of treatment, aspects of personality (including personality disorders - Structured Clinical Interview for DSM-IV-TR Axis II Personality Disorders: SCID-II) and adherence to current treatment were assessed (at admission or the end of hospitalization). Among exclusion criteria were: psychosis or mental retardation. Primary psychiatric diagnoses were controlled.

Results: Aspects of personality (e.g. borderline personality disorder and personality dimensions) measured by SCID-II were connected with intensive use of psychiatric care and dropping out of treatment. Those were studied by registering duration of hospitalization and the form of dropping out: on one's own demand or because of violation of unit's rules.

Discussion: The authors will discuss the extent to which SCID-II can be used in predicting adherence to treatment (with drop-outs). If viable, more adequate treatment proceedings could be implemented.

Funding: Present study was financed by the Polish National Science Center (decision number DEC-2011/01/N/NZ5/05364). **Keywords:** Personality disorders, clinical epidemiology, psychiatric care, co-occurrence.

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P03 – 2 Comparison of patients with similar main diagnoses across different treatment settings in Germany – results from the Psychiatric and Psychosomatic Treatment for Anxiety and Depression Study (PfAD)

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Background/Objectives: In Germany, people with affective disorders and anxiety, stress-related, and somatoform disorders (ICD-10 F3 and F4 diagnoses) receive treatment in different settings such as psychiatric hospitals, psychosomatic hospitals, rehabilitation hospitals, and day clinics. Although there are different in-patient services for treating similar psychiatric disorders, comparisons across these services are little researched. There is a lack of knowledge about who is admitted where and why. Data on persons admitted with similar main diagnoses to different treatment settings is important for the further development of service delivery.

Methods: Within a larger naturalistic longitudinal study, we investigated cohorts of patients with main diagnoses of the depression and anxiety spectrum (ICD-10 F3 and F4) admitted to four different clinical settings: psychiatric ward for depression treatment, psychiatric ward for crisis intervention, psychiatric day hospitals, and psychosomatic hospital. Patients were assigned to one of the four different groups of clinical setting corresponding to the sector at the index admission. Data were collected by trained research workers by means of structured diagnostic interviews and questionnaires. Results presented here refer to the time of index admission. The patient groups will be compared regarding sociodemographic, clinical (e.g. psychiatric diagnoses and comorbidity, psychopathological symptoms), and other relevant treatment-related baseline characteristics. Between-group differences will be evaluated using analysis of variance (ANOVA) for continuous variables and the chi-square test for categorical variables.

Results: Data collection started at the beginning of 2012. To date (October 2013), 279 patients have been consecutively included in the study: 69 from the psychiatric ward for depression treatment, 65 from the psychiatric ward for crisis intervention, 80 from psychiatric day hospitals, and 77 from psychosomatic hospital. Recruitment continues until the recruitment goal of 80 participants per treatment setting will be reached. Recruitment is planned to be finished in the end of 2013. The results of the comparisons between groups related to the above-mentioned areas will be presented.

Funding: none declared. **Keywords:** Depressive and anxiety disorders, psychiatric and psychosomatic treatment, clinical settings, between-group differences.

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P03 – 3 Contiguity of Self-efficacy with Decision Making and Satisfaction with Mental Health Services among Patients with Schizophrenia and Depression

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Background/Objectives: Assessment of patients' satisfaction with mental health services could help to identify the strengths and weaknesses of the health care system and give a valuable information for further development. Research studies show the importance of patients' opinion in evaluating health care systems; but can personality characteristics, such as self-efficacy, have an effect on satisfaction with mental health service? Also, how actively do people with mental illness participate in medical decision making? The aims of the current study are answer the following questions: 1) how self-efficacy forecasts patients' involvement in decision making 2) how self-efficacy forecasts patients' satisfaction with mental health service and 3) what kind of differences are there between self-efficacy, involvement in decision making and satisfaction with mental health service for patients with schizophrenia and depression?

Methods: Participants are ~100 people with schizophrenia and ~100 people with depression. All of them are adults (age 25 - 65), using local mental health inpatient and outpatient services. Patients were interviewed with Generalized Self-Efficacy Scale, Verona Service Satisfaction Scale – EU and Autonomy Preferences Index scale; socio-demographic data were also collected.

Results: The hypothesis is: patients' involvement in decision making is a mediator between self-efficacy and satisfaction with mental health service. The higher self-efficacy could promote higher involvement in decision making and this active participation could result in higher satisfaction with health care services (position „we“ not „me and they“).

Discussion/Conclusions: Preliminary results are expected to show low self-efficacy among participants with schizophrenia and depression, low participation in decision making and low satisfaction with health care service. However, in service satisfaction the role of cultural and socio-economic factors also should be considerable. This research study will help to evaluate the local mental health care system and compare results with international data; to check how individual personality characteristic (self-efficacy) relate to service satisfaction and involvement in medical decision making and to check differences between two groups of patients.

Funding: None Declared. **Keywords:** Self-efficacy, decision making, satisfaction with services, mental health.

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P03 – 4 Rehabilitation and self-management for chronic anxiety and depression, first results from the ZemCAD study

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Background/Objectives: Anxiety and depressive disorders are among the most common mental disorders worldwide. Epidemiological data show a lifetime prevalence of 19.6% (anxiety) and 20.1% (depression) in the Netherlands. Also in specialized mental health these disorders are highly frequent. Figures show that 22.2% of outpatients have an anxiety disorder, and 37.4% a depressive disorder. In 51.5% patients with anxiety disorders and 30.3% with depressive disorders, the course is chronic. These patients have not responded to several evidence based treatments. The current care for these patients usually consists of supporting contacts with a community psychiatric nurse and medical treatment by a psychiatrist. This form of care is expensive and data on the effectiveness of these treatments is lacking. There is a need for specific rehabilitation strategies for these patients. The aim of this study is to investigate whether a 6 month course of rehabilitation and self-management for outpatients with chronic anxiety and depression is feasible and

effective in improving quality of life and enabling a change of care setting.

Methods: In a nationwide randomized clinical trial with 141 patients the rehabilitation intervention was compared to care as usual with follow-up assessments at 6, 12 and 18 months. Outcome measurements were WHOQol-Bref, BAI and PHQ-9.

Results: Mean age was 47.6 ± 5.6 years, 66.4% was female, 26.1% had a depressive disorder, 17.0% an anxiety disorder and 43.0% a comorbid disorder. At T1 response was 88%. There was no difference in both conditions on the PHQ-9 and BAI measurements but a nearly significant difference on the WHOQol-Bref.

Discussion/Conclusions: A course of rehabilitation and self-management for patients with chronic anxiety and depression is feasible in specialized mental health care and acceptable for patients. There is an increase on quality of life at T1. The next follow-up results will show if these effects remain and if there are more pronounced differences between these groups.

Funding: Funded by the Dutch organization Innovatiefonds Zorgverzekeraars. **Keywords:** Anxiety, depression, rehabilitation, self-management.

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P03 – 5 Association between Temporary Legal Inadmissibility of Involuntary Medication and Coercive Measures in Psychiatric Patients: A Longitudinal Analysis

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Background/Objectives: In the German federal state, Baden-Wuerttemberg, involuntary medical treatment of detained psychiatric inpatients was unlawful, except for emergency situations, during eight months from July 2012 until February 2013 due to a decision of the Federal Constitutional Court. We examined whether, during the period of inadmissibility of involuntary medication, severity of illness at admission, length of hospital stay, number and severity of aggressive incidents and number and duration of mechanical coercive measures such as seclusion and restraint increased.

Methods: Electronically collected routine data of patients with schizophrenic and manic disorders in seven psychiatric hospitals were analysed by a longitudinal analysis for the relevant time period from July 2012 until February 2013 when involuntary medication was unlawful, and the corresponding period of the preceding year. Only patients with admissions in both periods were included. This applied for 218 patients with 337 admissions between July 2011 and February 2012 and 370 admission between July 2012 and February 2013.. Severity of illness was assessed by the Clinical Global Impression Index of Severity (CGI-S), aggressive incidents were registered and rated by the Staff Observation of Aggression Scale-Revised (SOAS-R).

Results: The mean number of mechanical coercive measures per admission increased significantly by 106% (0.47 ±1.60 vs. 0.97 ±3.88, p < .001). The increase in the mean number of aggressive incidents per admission was by 112% (0.26 ±1.04 vs. 0.55 ±2.68, p < .001). No significant changes were observed regarding length of hospital stay, severity of illness at admission, duration of coercive measures and severity of aggressive incidents.

Discussion/Conclusions: The temporary inadmissibility of involuntary medication was associated with a significant increase of seclusion and mechanical restraint, as well as with an increase of aggressive incidents. Thus the legal situation resulted in an increase of freedom-restricting measures for some patients, though this concerned only a small minority of total admissions. The clinical staff on the other hand was confronted with a substantially higher risk of aggressive assaults.

Funding: None declared. **Keywords:** Involuntary medication, seclusion, restraint, violence.

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P03 – 6 Poor mental health and psychotropic treatment in relation to occupational position amongst adult Danes

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Background/Objectives: Previous studies indicate that the risk of both poor mental health and mental health service use are related to occupational position. In particular, concerns have been raised regarding the possible under treatment of individuals of a lower socioeconomic position suffering from poor mental health. We examined the associations between occupational position, poor mental health and psychotropic treatment amongst adult Danes, including both gainfully employed individuals and individuals not working.

Methods: We used data from a randomly drawn population survey of adult Danes from 2005, the Danish Work Environment Cohort Study (DWECS 2005), linked with National register data on purchases of psychotropics (ATC-codes N05 and N06). After excluding participants with missing data on key variables, the study population consisted of 11,413 participants (52% female, mean age=43 years). Mental health was measured by a 5 item self-rating scale, the Mental Health Inventory (MHI-5), and poor mental health defined as a mean MHI-5 score under 52. Prevalent psychotropic treatment was defined by any purchase of psychotropics during 1 year before baseline and incident psychotropic treatment defined by any purchase during 2 years after baseline in participants without prevalent treatment. Occupational position was self-reported and classified into 10 groups: self-employed, employed executive/academic, employed middle manager/≥3 years of further education, other white collar worker, skilled blue collar worker, semi- or unskilled blue collar worker, student, unemployed, on long term sickness absence or retired. The rate ratios for psychotropic treatment were estimated by Poisson regression, adjusting for gender, age, cohabitation status, and survey mode.

Results: Poor mental health was statistically significantly related to occupational position. The lowest risk of poor mental health was seen in employed executives/academics (3.7%) and the highest risk in participants not gainfully employed, i.e. who were unemployed (16.3%), sickness absent (28.7%) or retired (10.4%). Patterns were similar in men and women but the risk of poor mental health was greater in women (8.2%) than men (5.5%). Prevalent psychotropic treatment was at least twice as likely in participants who were unemployed, sick-listed or retired, compared to employed executives/academics. Amongst participants with poor mental health but no prevalent treatment, incident psychotropic treatment was over 4 times more likely in sickness absent participants compared to executives/academics. However, all rate ratios for incident treatment in blue-collar workers compared to executives/academics were greater than 1, also after adjusting for baseline mental health.

Discussion/Conclusions: Our findings confirm that occupational position is associated with poor mental health and mental health service use. This association was mainly related to an increased risk of poor mental health and greater psychotropic treatment rates in participants not working, i.e. individuals who were unemployed, sickness absent or retired. We found no indication of reduced treatment of blue-collar workers with poor mental health compared to white-collar workers. It should be noted, though, that we could not account for non-medicinal treatments during follow-up, e.g. psychological counseling, which may be more common amongst individuals of a higher socioeconomic position.

Funding: This work was funded by The Danish Working Environment Research Fund (grant #9-2011-03). **Keywords:** Psychotropics, mental health, Denmark, socioeconomic position.

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P03 – 7 First contact with psychiatric services: What do relatives caring for schizophrenia patients need?

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Background/Objectives: Relatives of individuals with schizophrenia have an essential role in informal caregiving and patients' help seeking behaviour, making them key allies in therapeutic efforts and the consolidation of treatment adherence. Professional efforts should thus always involve the consideration of informal caregivers' problems and needs in order to optimize outcomes for patients with schizophrenia. The aim of the present study was to investigate the problem areas and needs for interventions among caregivers of patients with schizophrenia who were in contact with psychiatric services for the first time and compare them to the problems and needs of caregivers who had previously been in contact with psychiatric health services.

Methods: 93 family caregivers of patients with schizophrenia were investigated by means of the "Carer's Needs Assessment for Schizophrenia" (CNA-S) within 2 years after onset of illness. Relative frequencies of problems and needs were then compared between caregivers during their first contact with psychiatric health services and those who had been in contact with psychiatric services before.

Results: The most frequent problem areas of caregivers of first contact schizophrenia patients were insufficient information on their relative's mental illness as well as concerns about the patient's future. Individual psychoeducation was needed significantly more often among caregivers of first contact patients than among those having previously been in contact with psychiatric services.

Conclusion: Caregivers in first contact with psychiatric services differ from caregivers with a history of previous contacts. They have specific problems and needs with respect to the acquirement of information on the disease/the communication with the patient and need some specific interventions significantly more often than later.

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Keywords: Schizophrenia, caregivers, first contact, needs.

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P03 – 8 Inpatient Traumatherapy – A Central Link in Supplying Specialized Care in General Psychiatry

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Background/Objectives: In- and outpatient services play a central role in acute psychiatric service models. Patients with severe mental illness are to a large extent treated in inpatient departments of psychiatric hospitals, since entering complementary or outpatient psychiatric services is regularly accompanied with difficulties for them. At the same time patients with severe mental illness show a high prevalence of traumatizing events in childhood or early adolescence, often including comorbid PTSD. Concerning these correlations in an important subgroup of mental health patients it is mostly unknown to which extent specialized diagnostic procedures or treatments are necessary or realized in general psychiatry in Germany.

Methods: In the Department of Psychiatry and Psychotherapy of the General Hospital in Kalrsbad-Langensteinbach, Germany, 513 patients consecutively admitted between January 2011 and March 2013 with different psychiatric diagnoses have been examined with the CTQ independent of previous diagnostic or anamnestic exploration. All patients have then been tested with the IES-R and structured interviews, if relevant current post-traumatic symptoms are present. After first line descriptive statistics, a change in treatment procedures has been discussed in order to meet the

specific needs of severely ill patients with current posttraumatic symptoms. **Results:** 323 patients showed significantly increased values in at least one CTQ subscale, showing that more than half of all patients examined report relevant abuse and/or neglect in their personal history. In 77 of these patients no specific trauma could be found, while 246 showed criteria of specific traumatizing events. All of those patients showed acute or chronic posttraumatic symptoms, often mixed with multiple other psychopathologic symptoms causing repeated hospitalizations without sufficient symptom remission. Even in an adapted treatment setting, considering specific diagnostic and treatment procedures, duration of hospitalization for those patients proved to be longer on average (over 63 days) than for patients without relevant traumatic event. **Discussion/Conclusions:** With 48 percent of all examined patients a large number showed relevant traumatizing events in their history. Since almost all of these patients had a history of repeated hospitalizations without acknowledging this aspect, although the course of their illness was severe, the conclusion can be made, that specific diagnostic and therapeutic procedures can be helpful to change the course of disease in patients with a history of traumatization. Unsolved is the question of treatment duration in in- and out-patient settings **Funding:** Source of **Funding:** None Declared. **Keywords:** Traumatherapy, severe mental illness, re-hospitalizations, diagnostic procedures.

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P04 - Caregiving, social integration and stigma

P04 – 1 Suicide completion in patients with Serious Mental Illness: Preliminary analysis investigating the role of Ethnic Density

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Background/Objectives: Higher own-group ethnic density has been suggested to have a protective effect on suicide but this has not been evaluated in serious mental illness (SMI), such as Schizophrenia, Major Depression and Substance Use. The objective of this study was to ascertain the association between ethnic density and suicide in serious mental illness taking ethnicity and area-level social deprivation into consideration. **Methods:** Age- and gender- standardised mortality ratios (SMRs) were used to obtain the risk of suicide compared to the general population. These were then categorised in high- and low- ethnic densities among different ethnicities. **Results:** SMI was associated with a nine-fold higher risk of suicide compared to the general population, with risk twice as high in females (SMR 12.8; 95% CI 10.1 – 16.0) compared to males (SMR 7.82; 95% CI 6.66 – 9.12). Patients who lived in areas of least deprivation had suicide risks twice as high (SMR 12.9; 95% CI 10.4 – 15.8) compared to those in more deprived areas (SMR 7.7; 95% CI 5.4 – 9.01). Patients of Asian and Black origin were at lower risk to suicide if they were living in areas of high own-group ethnic density (SMR 3.34 and 5.21, respectively) compared to those living in areas of low own-group ethnic density (SMRs 7.21 and 6.90, respectively); however the results were not significant. The converse was found among White SMI patients, where a higher risk of suicide was found among those living in areas of high ethnic density and in areas of least deprivation (15.6; 95% CI 11.7 – 20.2) in comparison to White SMI patients living in areas of low ethnic density and in areas of high deprivation (7.6; 95% CI 4.83 – 11.23). **Discussion/Conclusion:** For those diagnosed with SMI living in areas of least deprivation seems to put them at higher risk of suicide than patients living in areas of most deprivation. In line with the existing literature, the Ethnic Density effect is apparent in Black minority groups but not in the White patient population. To date, this is the first study to show the effect of ethnic density on suicide among those diagnosed with a Serious Mental Illness. The study is limited by low sample size to investigate suicide among ethnic

minority groups and hence the findings need to be treated with caution. Further studies are required with larger sample sizes to confirm findings. **Funding:** Guy's and St Thomas' Trustees and the South London and Maudsley Trustees. **Keywords:** Suicide, own-group ethnic density, serious mental illness, mental health epidemiology.

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P04 – 2 Informal caregiving in schizophrenia: risk factors for burden among relatives

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Background/Objectives: Schizophrenia has far reaching detrimental effects, not only for affected individuals, but also for those who care for them. Relatives of patients with schizophrenia have an essential role in informal caregiving. Studies show, that caregiving may lead to a high level of burden among this group. The aim of the present study was to investigate if unmet needs among caring relatives of schizophrenia patients increases the risk for burden among these relatives. **Methods:** For the investigation of 135 caring relatives of patients with schizophrenia or schizoaffective disorders the „Carer's Needs Assessment for Schizophrenia“ (CNA-S) and the „Involvement Evaluation Questionnaire“ (IEQ) were used. Further, the „Positive and Negative Syndrome Scale“ (PANSS) was used to investigate psychopathological aspects of the patients. The study was approved by the ethical committee of the Medical University of Vienna. **Results:** Multiple linear regression analyses show a positive association between the frequency of caregivers' unmet needs and the IEQ-subscores “tension” and “worrying”. Further, the IEQ-subscore “worrying” was significantly lower among caregivers of outpatients than among caregivers of inpatients or day hospital patients. Furthermore, the patient's negative symptoms were significantly associated with the IEQ-subscore “urging”. **Discussion/Conclusions:** Results presented here show that unmet needs among caregiving relatives have negative effects on their burden. In addition, the patients' type of treatment setting (inpatient, outpatient, day hospital) seems to have an impact on caregivers' burden. By shifting the focus from hospital based to community based care, caregiving relatives of mentally ill people have become an integral part of the care system. Therefore, further studies are needed on an international level to analyse and compare the role of risk factors for burden among relatives of schizophrenia patients. **Funding:** The study was supported by Elli Lilly through an „unrestricted grant“ **Keywords:** Caregiving, schizophrenia, burden, relatives.

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P04 – 3 Changes in autonomy and social integration in the course of schizophrenia – and what patients think would improve the quality of their lives

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Background/Objectives: The main target in the treatment of schizophrenia is symptomatic and functional remission. Persons concerned are at high risk of losing basic functions necessary for leading the “normal” life that their healthy contemporaries do. Problems of coping with the daily routine often lead to social isolation, inoccupation, and loss of independent living. Our study aimed at exploring the course of social integration, participation and autonomy in people with schizophrenia after discharge from hospital. Are there different groups with a different development? And if so, what predicts a better or worse social outcome? How do the group members see their situation? What do they think would improve the quality of their lives?

Methods: The data were collected within the context of a multicenter observational study on the effects of long-term treatment with second generation antipsychotics (ELAN study). Participants were recruited during an in-patient stay and followed up for two years with half-yearly assessments. Participants had been diagnosed with schizophrenia or schizoaffective disorder. Autonomy and integration was assessed by the Objective Social Outcomes Index (SIX). It is composed of ratings in three areas: work, living, and contact with family and friends. In our case, the necessary information was extracted from the Lancashire Quality of Life Profile (LQoLP-EU). Covariates or possible predictors of the development of SIX were psychopathology (PANSS), functioning (GAF), cognitive processing (Digit-Symbol Substitution Test). Additionally, sociodemographic characteristics and illness history were assessed. We performed latent class growth analyses (LCGA) of the SIX scores at the five measure points. By the means of LCGA, the diversity of response patterns in a mixed distribution can be reduced to a finite number of classes of patterns that represent the data just as well. Latent classes were defined by initial level, linear slope, and a quadratic growth term. Participants were assigned to the classes according to the highest posterior membership probability. Associations between class membership and sociodemographic or illness related characteristics were examined cross-sectionally and longitudinally. The LQoLP-EU contains an open ended question about what participants think would improve the quality of their life. These responses were also related to the results. **Results:** A three class solution with linear and quadratic growth parameters represented the data adequately, implicating three groups of patients with characteristically different SIX trajectories: A group that started at a high level and improved significantly, a medium group, and a small group that already started at a low level and still decreased by tendency. Predictors of class membership were number and length of previous hospitalizations, history of suicide attempt, age and achieved educational and professional level. Course of symptom severity, functioning and general cognitive performance over time varied in the participants corresponding to their class membership. Aspirations and losses during the progress of the disease are reflected in the participants' statements about what would improve their lives.

Discussion/Conclusions: Autonomy and social integration are highly vulnerable in the course of schizophrenia. Different prototypical developments can be identified that are correlated to illness history, illness severity and cognitive performance but also to premorbid resources.

Funding: The ELAN study was funded as an investigator-initiated research project by a grant from AstraZeneca Deutschland to the University of Tübingen (Project Nr. 229/2004V – Version 2, 27.09.04). AstraZeneca had no role in the development of the research questions, the design of the study, the collection, analyses and interpretation of data, and the publication of the results.

Keywords: Schizophrenia, social integration, autonomy, participation.

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P04 – 4 The Diagnostic Pattern of Psychiatric Patients with Borderline Personality Disorder. A Nationwide study from 1995 through 2012

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Background/Objectives: Borderline personality disorder (BPD) is a mental disorder of instability in affect regulation, impulse control, interpersonal relationships and self-image. The complexity in the symptomatology and a high tendency to comorbidity can make it difficult to distinguish it from other diagnoses in a hospital setting. Comorbidity is common both with other personality disorders and other psychiatric disorders. Other studies suggest the most frequent to be mood disorders, anxiety disorders, and disorders associated with substance misuse and, in terms of personality disorders, studies suggest avoidant, dependent, and paranoid are the most frequently diagnosed comorbid conditions. The Danish Psychiatric Central Research Register (DPCRR) is nationwide and makes it possible to follow psychiatric in- and outpatients over long periods. Thus the DPCRR can bring in new understandings of comorbidity in BPD patients and their former and future morbidity. **Aims:** To determine the diagnostic pattern of Danish psychiatric patients diagnosed with BPD from 1995 through 2012, and analyse their diagnostic stability over time. **Methods:** All first time-ever diagnoses of BPD among psychiatric in- and outpatients were identified in the DPCRR from 1995 through 2012. Information of their first-ever and last registered diagnosis were grouped in accordance with ICD-10 diagnoses. **Results:** A total of 11,450 persons diagnosed with BPD were identified in the DPCRR between 1995 and 2012, 87.1 % were female. 37.0 % of men and 31.9 % of women had BPD as their first-ever diagnosis. 41.4 % of men and 52.5 % of women had BPD as their latest registered diagnosis. In the group with BPD as their first-ever diagnosis 52.7 % also had it as their latest registered. Further we found that 85.5 % have had one or more main diagnoses additional to the BPD diagnosis. Most notable are stress-related disorders, depressive disorders, psychotic disorders and emotional unstable personality disorder. **Discussion/Conclusions:** We have found that men are more likely to get BPD as a first-ever diagnosis than women but women are more likely to have it as their last registered diagnosis. We have also shown that only about half of them who get BPD as their first-ever diagnosis will also get it as their last. This can be due to both comorbidity or misdiagnosis. The same goes for the high percentage of patients with multiple psychiatric diagnoses. **Funding:** None declared. **Keywords:** Borderline personality disorder, nationwide study, diagnostic pattern, comorbidity.

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P04 – 5 A Mental Health Evaluation Framework for the 0-24 Immigrant Population in Ontario, Canada

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Background/Objectives: Canada adopts a broad immigration policy and has one of the highest admission rates per-capita in the world. In 2010 alone over 280,000 individuals from more than 200 countries of origin immigrated to Canada, of whom 9% were refugees. During the same period, Ontario received over 118,000 or 42% of all immigrants with the majority settling in the Greater Toronto Area. Little is known about either the mental health or access to mental health services of immigrant children and youth. Our objective is to examine patterns of mental healthcare use in children and youth (aged 0-24 years) in Ontario, the most populous province in Canada with 13 million residents, by immigrant status including 1) mental health related utilization of acute care (inpatient and emergency) and 2) measures of access, such as use of and waiting times for specialist care and first mental health presentations in acute settings such as EDs and the justice system.

Methods: The cross-sectional study aimed to capture the mental health landscape of the 0-24 Ontario immigrant population in a three year period from April 1st, 2009 to March 31st, 2012. Administrative health records as well as community health survey of eligible Ontario residents were made available from the Institute for Clinical Evaluative Sciences (ICES). Health Indicators were developed to provide a snapshot of the current mental health state and system utilization pattern, as well as variants affecting access to care. For the former, we looked at rate of emergency department (ED) visits as a result of deliberate self-harm (DSH) and first time mental health ED contact, suicide, and various mental disease rates such as schizophrenia and bipolar disorders in acute care setting which are proven to be prevalent among immigrants from previous literature. In terms of mental health specialist access, we compared wait time distribution by immigrant group and looked at physician availability over the study period.

Results: Refugees presented the highest rate in treated Schizophrenia cases in hospital setting at 2.6 per 1000, which was 2.4 times higher than non-immigrants. At the same time, mental health related outpatient visit rate was the lowest among refugees, who also posed the highest percentage to have their first ED or hospital encounter associated with substance abuse, anxiety disorder and schizophrenia. According to the Canadian Community Health Survey, self-reported bipolar disorder among refugees aged 12-24 was 55 per 1000, or 2.0 and 3.6 times higher than non-refugee immigrants and Canadian-born respectively. In contrast, Canadian-born youths reported higher prevalence in suicide, depression, social disorders and any lifetime substance/alcohol abuse compared to their peers. Furthermore, they posed the highest emergency department visit rate as a result of self-harm which almost doubled those of immigrants.

Discussion/Conclusions: Administrative and health survey data provided an overview of current mental health status of children and youth across immigrant classes. Refugees are often facing mental health issues while trying to settle in the host country that is socially and culturally different than their own. Schizophrenia-related hospital admissions and self-reported bipolar disorder are the most frequent compared to their non-immigrant and Canadian-born peers. Even though the Canadian-born population self-reported a higher level of lifetime substance use, it was the refugees who posed the highest incidence in substance-related ED and hospital admissions. It confirms with previous literature that refugees are more prone to certain mental health issues, where follow-ups are critical to track their mental health development upon arrival to the Canada.

Source of Funding: MOHLTC. **Keywords:** Refugees, mental health, utilization, children and youth.

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P04 – 6 Perceived public stigma and recovery outcomes among people with mental illness: Testing mediator and moderator effects of self-stigma

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Background/Objectives: Stigmatization, which refers to a stereotyped set of negative attitudes, incorrect beliefs, and fears toward individuals with mental illness, has detrimental consequences for psychiatric patients. Persons with mental illness experience public stigma (PS) and self-stigma (SS). Although stigma has been considered a major obstacle to the detection and treatment of mental disorders, little is known the ways that PS and SS affect recovery outcomes among individuals with mental illness. This study sought to examine: (1) whether PS and SS influence the outcome variables of mental illness, such as depressive symptoms, self-esteem, self-efficacy, and quality of life (QoL); and (2) whether SS mediate or moderate a relationship between PS and these psychiatric recovery outcomes.

Methods: A total of 160 participants with (n = 103) and without (n = 57) psychotic disorders were recruited and administered questionnaires containing psychosocial information and measures of PS, SS, self-esteem, self-efficacy, depressive symptoms, and QoL. Hierarchical regression analyses and structural equation modeling (SEM) were used to examine the relationships between stigmas and psychiatric outcome variables, and test the possible mediating or moderating role of SS. Four indices on the SEM, including 2, Root Mean Square Error of Approximate (RMSEA), comparative index (CFI), and the incremental index (IFI), were chosen to assess the fit of each model. In general, a p value of 2 greater than 0.1, a RMSEA value less than 0.08, a CFI greater than 0.9, and an IFI greater than 0.9 usually indicate a good fit.

Results: After controlling for sex, age, and education, findings from hierarchical regression analyses indicated that more PS or SS exhibited associations with less self-esteem and self-efficacy, more depressive symptoms, and poorer QoL. Further, when controlling for the influence of SS on recovery outcomes, the relationship between PS and self-esteem, self-efficacy, depressive symptoms, and QoL were each reduced. These findings implied that SS might mediate the relationships of PS to these recovery outcomes. On the contrary, we did not find that SS moderated the relationships between PS and any of the psychiatric outcomes. In addition, we used SEM dissecting the relationship of PS, SS, self-esteem, self-efficacy, depression, and QoL. The determination of best-fitted SEM was based on comparison of the relative fitness of the selected models. The goodness-of-fit indices of our most fit model showed $\chi^2 = 2.8$, $df = 2$, $p = 0.25$; RMSEA = 0.049; CFI = 0.99; IFI = 0.99. Our findings indicated that more PS endorsement contributed to increased levels of SS, which resulted in a decreasing level of self-esteem and self-efficacy and, in turn, exacerbated depressive symptoms and poor QoL. Apparently, PS mainly diminished QoL on a pathway via SS.

Conclusions: Our findings suggest that awareness of the PS or SS might have an impact on recovery-related outcomes among patients with mental illness. Furthermore, we found that SS might serve as a mediator, that is, the PS might affect the psychological well-being of patients, at least in part, because it was accompanied by self-stigmatizing beliefs. The mediation effect of SS found in the present study indicated that the negative influences of PS on the patients' recovery were based on the level of patients' SS. Therefore, interventions should be addressed on SS reduction and especially on the development of personal strength to undermine the detrimental effects of PS, which would be beneficial in further improvements of recovery-related outcomes among individuals with mental illness.

Funding: None declared. **Keywords:** Public stigma, self-stigma, prognosis, mental illness.

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P04 – 7 Different biogenetic causal explanations are associated with different attitudes towards persons with schizophrenia, depression and alcohol dependence

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Background/Objectives: There is an ongoing debate whether biogenetic causal explanations improve tolerance towards persons with mental illness or not. While some studies suggest that biogenetic causal beliefs are associated with less tolerance, it is unclear whether different biogenetic causal beliefs affect stigmatization of mentally-ill patients differently. It has been argued that, in particular, believing in a “chemical imbalance” as a cause of mental disorder might be associated with more tolerant attitudes. **Methods:** In a representative population survey in Germany (n=3642), using unlabelled case vignettes of persons suffering from schizophrenia, depression or alcohol dependence, we elicited agreement with three different biogenetic explanations of the illness: ‘Chemical imbalance of the brain’, ‘brain disease’ and ‘heredity’. We further elicited emotional reactions as well as the desire for social distance. For each vignette condition we investigated the relative frequency of each biogenetic causal belief and calculated linear regressions with each biogenetic explanation as independent and emotional reactions as well as social distance as dependent variable, controlling for socio-demographic variables. **Results:** ‘Chemical imbalance of the brain’ and ‘brain disease’ were both associated with a stronger desire for social distance in schizophrenia and depression, and with more social acceptance in alcohol dependence, whereas ‘heredity’ was not significantly associated with social distance in any of the investigated illnesses. All three biogenetic causal beliefs were associated with more fear in all three illnesses, and with more anger in depression and alcohol dependence. In schizophrenia, only ‘heredity’ was associated with anger. Further, ‘chemical imbalance’ and ‘brain disease’ were associated with pro-social reactions in alcohol dependence, while no association was found with ‘heredity’. In schizophrenia or depression no association of any biogenetic causal belief with pro-social reactions was found. **Discussion/Conclusions:** Our study indicates that ‘biogenetic explanations’ constitute a heterogeneous group of causal explanations with different implications for the stigma of different mental disorders. A de-stigmatizing potential of the causal belief ‘chemical imbalance’ could not be found. Implications for useful anti-stigma messages are discussed. **Funding:** Fritz-Thyssen-Stiftung (Az. 10.11.2.175). **Keywords:** Biogenetic causal explanations, Stigma, Social distance, Population survey.

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P04 - 8 Care provision, Social Functioning and Participation in Society in an Amsterdam Cohort of Patients with Severe Mental Illness. Ad-on Studies: Victimization of patients with SMI; Pathways of care of SMI-patients prior to a psychiatric crisis

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Background/Objectives: In the late nineties it was hoped that by living more independently, SMI-patients would improve their quality of life and their social functioning and would better integrate into society. The Amsterdam SMI-study follows a cohort of patients with severe mental illness and identifies their functioning, need-for-care, use of care and living-situation, including any experiences of victimization.

Methods: Symptoms, quality-of-life, need for care, daily social functioning, victimization and discrimination were assessed in a sample of 225 SMI-patients in 2005 and 2011. Differences on the outcome variables are computed and linked to changes in living conditions and care provision. **Results:** Although patients participated more in society in terms of daily activities such as membership of an organization or work, their quality of life did not improve and their need for care remained high. However, participants remained largely satisfied with their life and the care they receive. They are, however, at high risk for discrimination and victimization. For a small group of patients, stable housing conditions are not within reach. **Discussion/Conclusion:** The creation of activity-centers, sheltered working places and projects for integration improve participation in society of SMI-patients. However, that does not mean that social functioning and quality of life improve. Therefore improvements for this group of patients on a political and societal level remain necessary. **Source of Funding:** GGZinGeest, Amsterdam, ARKIN GGZ, Amsterdam, VCVGZ Municipality of Amsterdam, HVO/Querido, Amsterdam. **Keywords:** Participation in society, daily living, satisfaction with life, care provision.

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P05 - Physical health and mental illness

P05 – 1 Incidence of Cancer among People with Serious Mental Illness

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Background/Objectives: Higher all-cause mortality and shorter life expectancies for people with severe mental illness (SMI, including schizophrenia, schizoaffective disorder, and bipolar disorder) have been frequently reported. Cancer contributes a substantial proportion of mortality (20 to 30%) as the second or third leading cause of death among people with SMI. Outcomes of cancer incidence studies in SMI were considerably heterogeneous, varying by cancer types and mental disorders. To compare the incidence of overall and each type of cancer between people with SMI in southeast London and the general population in the UK. **Methods:** Using the anonymised linkage between a regional monopoly secondary mental health service provider covering four southeast London boroughs and a population-based cancer register, we carried out the comparisons of cancer incidences between people with SMI and the general population in this region by age- and gender-standardisation in 2011. **Results:** Among SMI subjects with cancer (N=105), the most common cancer types were lung and colorectal cancer followed by breast cancer for women and prostate cancer for men in this area. Standardised incidence ratios (SIRs) for all cancers in SMI were 1.19 (95% CI: 0.97-1.44) overall, 2.43 (95% CI: 1.98-2.94) in men (n=61), and 0.98 (95% CI: 0.71-1.31) in women (n=44). Based on relatively small case numbers, raised SIRs were found for lung cancer in men (SIR=7.57, 95% CI: 3.04-15.6) and women (SIR=7.61, 95% CI: 2.79-16.6), and in women for colorectal (SIR=7.85, 95% CI: 2.55-18.32) and breast cancer (SIR=7.86, 95% CI: 4.58-12.59). **Conclusions:** Specific pattern of elevated risks of cancer incidence were found for people with SMI, especially for cancers of lung, colon/rectum, and breast. **Funding:** The study was supported by National Institute for Health Research (NIHR) Mental Health Biomedical Research Centre at South London and Maudsley NHS Foundation Trust and King's College London and a joint infrastructure grant from Guy's and St Thomas' Charity and the Maudsley Charity.

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P05 – 2 The cardiovascular diseases of severe mental illness (SMIs) in Taiwan*Shaw-Ji Chen**Department of Psychiatry, Mackay Memorial Hospital Taitung Branch, Taiwan*

Background/Objectives: Patients who suffer from severe mental illness (SMIs) such as schizophrenia, affective psychoses and other serious psychotic disorders might need to receive life-long psychotropic medications. The first is the definition of severe mental illness set forth by the U.S. Department of Health and Human Services for fiscal year 1993. "Severe mental illness is defined through diagnosis, disability and duration, and includes disorders with psychotic symptoms such as schizophrenia, schizoaffective disorder, manic depressive disorder, autism, as well as severe forms of other disorders such as major depression, panic disorder, and obsessive compulsive disorder." We knew that individuals with schizophrenia have a significantly higher rate of cardiovascular risk factors, and also higher prevalence of cardiovascular disease in comparison to the general population. Previous studies demonstrated that patients with schizophrenia had significantly higher risk of suffering from metabolic syndrome. Metabolic syndrome factors, such as smoking and diabetes play an important role in the development of cardiovascular disease and stroke. Morbidity and mortality due to cardiovascular disease are greater in patients with schizophrenia, who are at more than double the risk of CV-related mortality. Because atypical antipsychotic agents have become more prevalent in bipolar disorder, major depressive disorder and other mental illness, we are interested in metabolic syndrome and cardiovascular diseases in all severe mental illness. However, few studies were found in this area.

Methods: This study will use a national health insurance research database – NHIRD - to examine the annual incidence between 2001 to 2010 of SMI patients with cardiovascular morbidity in Taiwan. The general population without SMIs in Taiwan was used as a control group. We will use age, sex, socioeconomic status, and region as variables to calculate odds ratios and compare cardiovascular morbidity between patients with and without SMI. After reviewing the existing literature, we believe this is the first population-based, cohort and 10-year follow-up study.

Results: Previous studies have shown that patients with severe mental illness (SMIs) have a higher prevalence of cardiovascular disease than the general population. Possible etiologies might be related with lifestyle, psychotropic medications, smoking, and diet amongst other factors. Cardiovascular diseases resulted in decreased quality of life and increased burden to national medical resources.

Discussion/Conclusions: Cardiovascular diseases may be possible causes of decreased life-span in patients with SMIs. From this study, we will gain understanding of long-term incidence of cardiovascular disease in patients with schizophrenia, which will inform clinical practice regarding how to prevent cardiovascular morbidity. We will use the data and results of this study to draw implications for clinical practice. We will report the further comprehensive data in the poster.

Funding: Mackay Memorial Hospital (Taiwan). **Keywords:** Severe mental illness (SMIs), cardiovascular disease, national health insurance research database NHIRD, population.

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P05 – 3 The effect of recent serious mental illness on breast cancer survival*Ruth Cunningham, Diana Sarfati, James Stanley, Debbie Peterson, Sunny Collings**Department of Public Health, University of Otago, Wellington, New Zealand*

Background/Objectives: Each year more than thirty thousand women under 65 experience mental illness which brings them into contact with mental health services in New Zealand. Breast cancer is an important cause of premature mortality for this group, and internationally there is evidence to suggest that those using mental health services may experience worse outcomes from cancer than the general population. This study examines survival after breast cancer diagnosis comparing women who have had recent contact with mental health services in New Zealand (in the five years prior to diagnosis) with those who have not, and seeks to establish the major contributors to any differences found.

Methods: Data from New Zealand's Cancer Registry on breast cancers diagnosed between January 2006 and December 2010 were linked to specialist mental health service records (inpatient and community) from January 2001 to December 2010 and death records (2006-2010) using the National Health Index (a unique identifier). Cox proportional hazards modelling was used to compare survival between those with recent mental health service and those without, and to investigate the contribution of sociodemographic confounders and individual factors likely to be on the causal pathway. The maximum post-diagnosis follow-up time for the survival analysis was five years.

Results: 8762 women with a diagnosis of breast cancer were identified, of whom 440 had had contact with mental health services in the five years prior to cancer diagnosis. One quarter (112) of these women had a diagnosis of a functional psychotic disorder. Women with a history of mental health service use were nearly twice as likely to die from their cancer compared to other women after adjusting for confounding by age and ethnicity (adjusted hazard ratio [HR] 1.81 (95%-CI 1.31-2.50)) while women with psychosis fared even worse (adjusted HR 2.49 (95%-CI 1.46-4.25)). Women with a history of mental health service use had a less favourable distribution of stage at diagnosis and higher rates of comorbid physical conditions, but even after adjusting for these likely mediators, mental health service users still had substantially higher mortality than other women (adjusted HR mhs 1.59 (95%-CI 1.15-2.20); adjusted HR psychosis 1.72 (95%-CI 1.01-2.95)).

Discussion/Conclusions: Women with a history of recent mental health service use have poorer survival after diagnosis with breast cancer than other women under 65, even after adjusting for individual confounding and mediating factors. It is likely that inequalities in cancer care are an important factor in the remaining differences in survival, and this area requires further exploration.

Funding: This study was funded by a grant from the New Zealand Health Research Council (grant number 11/146).

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P05 – 4 Pain symptoms and their associations with affective and anxiety disorders in General Hospital patients

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Objective: It is well established in literature that pain symptoms are frequent complaints and are quite often associated with mental disorders. This study investigated the prevalence of pain symptoms among physically ill General Hospital patients in Austria and explored their associations with affective and anxiety disorders. **Methods:** Patients of non-psychiatric departments of the Vienna General Hospital (N=290) reported on seven pain symptoms by filling in a self-rated questionnaire about complaints. Psychiatric diagnosis was conducted by psychiatrists using a structured diagnostic interview (CIDI). We also used the PRIME-MD, a short interview for the identification of the most common DSM-IV mental disorders in primary care. The PQm consists of 30 yes/no items on physical and psychological complaints and symptoms reported for the last 4 weeks. In the present study only the seven items dealing with pain symptoms were included. Descriptive analysis was used to describe the frequencies of mental disorders and pain symptoms, chi-square test were performed to test the relationship between pain symptoms and mental disorder. A stepwise multiple logistic regression analysis, forward selection, controlled for age, gender and primary somatic diagnosis was conducted to determine which pain symptoms independently predict mental disorders. **Results:** About a third were diagnosed with affective and/or anxiety disorders. Physically ill patients with a mental disorder (94% vs. 80%, $p < 0.05$) suffered significantly more often from at least one of five pain symptoms (limb, back, stomach, chest pain and headache) and reported three or more pain symptoms (62% vs. 29%; $p < 0.01$) than those without a mental disorder. The stepwise multiple logistic regression analysis revealed stomach, back and chest pain as independent predictors of mental disorder. Two more stepwise multiple logistic regression analyses were performed to explore predictors of affective and anxiety disorders as well. Stomach and chest pain, as well as headache were identified as predictors for affective disorders, chest and back pain as well as female sex were risk factors for anxiety disorders. **Conclusions:** These findings highlight the significance of the number of pain symptoms reported by General Hospital patients as a possible predictor of mental disorder and point to the particular relevance of stomach, back and chest pain for the detection of mental disorder. An interdisciplinary treatment should be offered in order to improve both physical and mental health as well as quality of life. **Source of Funding:** None Declared. **Keywords:** Pain, general hospital, affective, anxiety.

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P05 – 5 Health service utilisation and self-rated health among medical inpatients in Taiwan

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Background/Objectives: Self-rated health (SRH) is a simple measure that captures multiple dimensions of health and well-being. SRH have great potential to predict future health and functional loss. Previous studies have shown a relationship between SRH and health service utilisation, although mostly in community samples. These studies suggest that SRH could serve as useful target for treatment outcome and have the potential to predict medical costs. However the relationship between SRH and health service utilisation requires further investigation. There are several socio-demographic, disease-related and psychological determinants that are common to both SRH and health service utilisation. Therefore it may be important to elicit the independent effect of SRH on medical service utilisation. In this study we investigated the factors associated with poor self-rated health and more frequent use of health services and elicited the association between SRH and health service utilisation. **Methods:** Data were collected from 230 consecutive attendees to medical departments using standardised instruments for self-rated health, chronic illnesses, depressive symptoms and outpatient service utilisation. **Results:** About half (52%) rated their health as poor or very poor. Presence of depression, life-time suicide ideation, life threatening events and metastatic cancer were associated with poor self-rated health. In our sample female gender, life-threatening event, hypertension, metastatic cancer, > 2 chronic illnesses were associated with frequent use of hospitalisation services. Lifetime suicide ideation was associated with frequent use of emergency service, while metastatic cancer and >2 chronic illnesses were associated with frequent use of medical outpatient services. Poor self-rated health was associated with frequent use of medical outpatient services, emergency services and hospitalisation services. Multivariate logistic regression revealed an independent association between poor self-rated health and medical services utilisation even after adjustment for demographic, physical and psychological factors. **Discussion/Conclusions:** There exists a robust association between poor self-rated health independent of medical or psychological status. Improved self-rated health could potentially reduce medical costs. **Funding:** National Taiwan Science Council (reference number: NSC101-2511-S-002 -005.) **Keywords:** Health service utilization, self-rated health, Taiwan, well-being.

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P05 – 6 The prevalence of depression in rheumatoid arthritis: a systematic review and meta-analysis

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Background/Objectives: There is substantial uncertainty regarding the prevalence of depression in RA. Depression has been associated with increased pain, fatigue, reduced health-related quality of life, increased levels of physical disability and increased health care costs. Depression may therefore be a useful target for interventions aimed at improving subjective health and quality of life in RA patients. However, prevalence estimates for depression in RA range between 9.5% and 41.5%, making it difficult to establish the likely impact of depression in this patient group. We conducted a systematic review aiming to (i) describe the prevalence of depression in RA; (ii) provide a summary of the methods used to define depression in RA and (iii) explore the impact of study characteristics on prevalence estimates. **Methods:** Web of Science, PsychINFO, CINAHL, Embase, Medline and PubMed were searched for cross-sectional studies reporting a prevalence estimate for depression in adult RA patients. Studies were reviewed in accordance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines and a meta-analysis was performed. **Results:** A total of 72 studies, including 13 189 patients, were eligible for inclusion in the review. Forty three methods of defining depression were reported. Meta-analyses revealed the prevalence of major depressive disorder to be 16.8% (95% CI 10%, 24%). According to the PHQ-9, the prevalence of depression was 38.8% (95% CI 34%, 43%), and prevalence levels according to the HADS with thresholds of 8 and 11 were 34.2% (95% CI 25%, 44%) and 14.8% (95% CI 12%, 18%), respectively. The main influence on depression prevalence was the mean age of the sample. **Discussion/Conclusions:** Depression is highly prevalent in RA and associated with poorer RA outcomes. This suggests that optimal care of RA patients may include the detection and management of depression. **Funding:** This work was performed on behalf of the IMPARTS Project: Integrating Mental and Physical Healthcare: Research, Training and Services. IMPARTS is funded by King's Health Partners Academic Health Science Centre, with the overall aim to improve integration of mental and physical healthcare in general hospital settings. **Keywords:** Depression, rheumatoid arthritis, prevalence, meta-analysis.

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P05 – 7 Styles of Coping with Negative Emotions and Chronic Stress in Patients with Hypertension

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Currently, it is assumed that people who are at risk of cardiovascular system diseases may manifest a type D personality, which is associated with chronic worrying, negative emotions and social inhibition. The aim of the study was to answer the question if there are and what are the specific styles of coping with negative emotions (anger, fear, sadness) and stress used by healthy individuals compared to those suffering from hypertension? The study was carried out using: (1) The Questionnaire on Emotion Regulation (FEEL) and (2) The Coping Orientations to Problems Experienced (COPE). The research was conducted on the sample of N=203 people, where the clinical group consisted of 100 sanatorium patients suffering from hypertension and the control group of 103 healthy individuals, aged between 50 and 65. It has been shown that, when experiencing negative emotions and stress, non-adaptive styles and strategies of negative emotion regulation are more characteristic of people with hypertension (resignation, withdrawal, self-humiliation, perseveration, $F=7.44$, $p=0.0001$), explaining 15.9% of the total variability of the results. Using the method of cluster analysis on the distributions of results of both groups six styles of coping with negative emotions and stress were identified: (1) defensive, (2) masochistic, (3) active, (4) mildly defensive, (5) constructive, (6) confrontational ($F=40.10$, $p=0.0001$), showing in detail ($\chi^2=33.01$, $df=5$, $p=0.0001$) that styles 2 and 4 are more characteristic of the group of people with hypertension whereas styles 3, 5 and 6 are characteristic of healthy people. It should be noted that there is a convergence between the results obtained in this study and the research findings recently cited in the literature that cardiac symptoms and associated type D personality are characterized by a high frequency and intensity of the experience of negative emotions and social inhibition, demonstrated through the tendency to inhibit the expression of emotions, thoughts and behaviors. **Source of Funding:** None Declared.

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P05 – 8 Urinary Phytoestrogens and Depression in Perimenopausal US Women: NHANES 2005-2008

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Background/Objectives: Fluctuating hormonal levels observed during the menopausal transition may increase vulnerability to depression in susceptible women. Thus, it is of interest to examine the effect of natural estrogens such as phytoestrogens on the risk of depression in perimenopausal women. The purpose of the present study was to determine whether depression in perimenopausal women is associated with urinary phytoestrogen concentrations of isoflavones, lignans, genistein, daidzein, equol, O-Desmethylan-golensin, enterolactone, and enterodiol in women aged 45 to 55 years.

Methods: Our analysis included 193 perimenopausal women of the National Health and Nutrition Survey (NHANES) 2005-2008 aged 45 to 55 years. We defined perimenopause based on women's age, because information to precisely assess perimenopausal symptoms was missing. Urinary concentrations of phytoestrogens (isoflavones and mammalian lignans) were measured by HPLC-APPI-MS/MS. Depression was assessed using the Patient Health Questionnaire-9 (PHQ-9). Logistic regression models examined the association of depression (yes/no) with concentrations of isoflavones and lignans (both creatinine-standardized and log-transformed).

Results: Unadjusted odds ratios (OR) of the associations between urinary phytoestrogen concentrations and perimenopausal depression were below 1 for all isoflavones and lignans; however, only mammalian lignans were significantly associated with depression. The latter findings were not attenuated in multivariate analysis including age, race, body mass index, poverty income ratio, smoking, alcohol consumption, cancer, diabetes, and cardiovascular disease (lignans: OR=0.66; 95% confidence intervals (CI) 0.50-0.87, enterodiol: OR = 0.63; 95% CI 0.51-0.78, enterolactone: OR = 0.75; 95% CI 0.60-0.93).

Discussion/Conclusions: Our results indicate that urinary mammalian lignans are inversely related to depression in perimenopausal US women, whereas isoflavones are not. To our knowledge, we are the first group to investigate this association. Because of medical risks associated with the use of hormone therapy, further investigation on the effect of lignans on the risk of depression in perimenopausal women is warranted, and additional studies with a prospective design are needed before firm conclusions can be reached.

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