the first national German guideline on the treatment of posttraumatic stress disorder (PTSD). Since 2011, the guideline follows the GRADE approach and is based on the best available evidence in the field. In the last years, an update of the guideline was performed that will be published in 2019. *Objective*: The aim of the guideline process was to update the recommendations according to potential new evidence on the treatment of PTSD. Moreover, several new aspects were covered. *Method*: A wide range of professional societies participated in the update, including psychotherapeutic, psychiatric and psychological societies, but also societies from the field of somatic medicine. The update was based on a systematic search of (1) randomized controlled trials, (2) meta-analyses and (3) existing guidelines of high methodological quality. *Results*: Several recommendations were revised including, for instance, some recommendations on the psychotherapeutic and pharmacological treatment of PTSD and on the treatment of PTSD with comorbid conditions. New recommendations regarding the treatment of complex PTSD as operationalized in ICD-11 and regarding the treatment of PTSD in children and adolescents were included. *Conclusions*: There was continuous progress in the treatment of PTSD during the last decades. In recent years, some new evidence regarding therapeutic interventions, but also regarding specific groups of patients that should benefit from these interventions, has become apparent.

Implementation and Evaluation of Trauma-Informed Care in Swiss Youth Welfare and Juvenile Justice Institutions

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Objectives: For children and adolescents in residential care, repeated interpersonal trauma is the norm, rather than exception, and over 80% have been exposed to traumatic experiences. Such experiences influence pedagogic and therapeutic alliances due to potential re-enactment of maladaptive experiences and resulting violence against staff and placement discontinuity. Professional awareness for such issues needs to be raised in order to improve interactions and self-efficacy in traumatized clients. *Method*: Management and staff of five youth welfare institutions received intensive training in trauma-informed care (16 days). In a naturalistic control group design, five institutions (N = 55 co-workers, 34 children and adolescents, 36% female) were compared to nine control institutions (n = 105 co-workers, 51 children and adolescents, 42% female) regarding burnout risk, stress and work satisfaction in staff, and psychopathology and neurobiological stress in children and adolescents. *Results*: Hair cortisol concentrations were reduced in staff and adolescents and there were also significant reductions of psychopathology and improvement in work satisfaction in the intervention group, compared to controls. The effect was stronger in younger than older and more experienced members of staff. *Conclusions*: Trauma-informed care should be implemented more as it works in different types of youth welfare institutions and helps to improve self-efficacy and work satisfaction in staff. In combination with child and adolescent psychiatric liaison services providing tf-CBT and/or EMDR, such concepts may lead to higher placement continuity and broader dissemination and application of evidence-based trauma therapy in these high-risk populations.

S2.6

Analogue Trauma Studies: Investigating Mechanisms of Symptom Development to Enhance Interventions

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Track: Intervention Research & Clinical Studies

This symposium brings together studies on mechanisms of posttraumatic stress disorder (PTSD) development that may offer clues for therapeutic interventions. Sensory-rich, intrusive trauma memories are a key symptom of PTSD. Cognitive theories posit that these intrusions result from dysfunctions in the encoding and the subsequent consolidation into memory. The studies in the current symposium examine whether sleep and tonic immobility may affect these processes. To maximize experimental control, all studies used an analogue design with aversive stimuli as a model for trauma and intrusive memories as an outcome measure. The questions addressed include whether behavioural control may mitigate detrimental effects of tonic mobility (Hagenaars and colleagues); what aspects of sleep may be important for trauma memory (Sopp and colleagues) and whether brief sleep episodes (naps)

may protect against intrusions (Kleim &Wilhelm). The symposium will be concluded with a general discussion (Hagenaars) on how the results may inform intervention strategies.

The Role of Tonic Immobility and Behavioural Control in Intrusion Development

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Background: Tonic immobility (TI; involuntary motor inhibition during threat) has been implicated in the onset of posttraumatic stress disorder (PTSD) in previous studies, using cross-sectional designs and (retrospectively measured) TI. Only one study examined spontaneous TI responses in a more controlled setting, using experimental trauma (a 'trauma film'). TI during the 'trauma film' was indeed associated with increased frequency of intrusive memories of the film (Hagenaars & Putman, 2011). Interestingly, high attentional control (the ability to focus and switch attention) buffered against this effect. Reduced controllability was indeed proposed to stimulate PTSD development. In experiments, behavioural control was related to reduced stress when anticipating threat. However, findings are less consistent or scarce for the impact period and post-threat period. *Objective*: Replicate the TI x Control interaction1 (but with behavioural control) for the impact and post-threat period. *Method*: Sixty-four participants watched an experimental trauma (negative pictures) while being allowed to close their eyes or not. Spontaneous TI was measured after picture viewing; intrusions were recorded in a diary in the subsequent week. Informative hypotheses were tested with Bayesian analyses. *Results*: TI predicted intrusion development. Moderation (TI x Control) and non-moderation (main effect of TI only) were both adequate models, with no preference for either. *Conclusions*: We replicated earlier cross-sectional findings regarding TI using a longitudinal trauma-analogue design. The role of behavioural control may be complicated and/or indirect.

Reference

Hagenaars, M.A., & Putman, P. (2011). Attentional control affects the relationship between tonic immobility and intrusive memories. Journal of Behavior Therapy and Experimental Psychiatry, 42, 379–383.

Associations between Trauma, Sleep and Memory Processing: Results from Two Analogue Studies

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Background: Extensive evidence indicates that sleep plays an active role in memory consolidation. Moreover, sleep has been found to preferentially enhance emotional memories and may modulate the affective tone of these memories. Based on this line of research, recent studies have examined the impact of sleep on memory-related symptoms of PTSD (i.e. intrusive re-experiencing). However, findings are inconsistent as to whether sleep alleviates or aggravates re-experiencing symptoms. *Objective*: In the present studies, we address these conflicting findings (Experiment 2) and examine how an analogue trauma affects sleep architecture (Experiment 1). *Method*: In Experiment 1 (N = 30), we investigated the effects of a 'trauma' film on subsequent sleep architecture. Participants were exposed to a 'traumatic' or neutral film before sleeping under laboratory conditions. In Experiment 2 (N = 41), we examined how sleep modulates explicit and implicit trauma memory in an analogue procedure. Participants were exposed to 'traumatic' picture stories before a night of sleep or partial sleep deprivation. In the morning, participants completed tests of explicit and implicit memory for 'trauma'-related stimuli. *Results*: Experiment 1 revealed overall sleep time to be significantly reduced in the 'trauma' film condition. Moreover, correlational analyses suggest that specific REM sleep features were linked to reduced analogue PTSD symptoms. In Experiment 2, sleep was found to enhance recollection of 'trauma'-related stimuli without affecting implicit memory. *Conclusions*: The present findings provide further insights into the role of sleep in trauma memory and PTSD. Future studies are required to further investigate the underlying processes by which sleep affects intrusive re-experiencing.

The Role of Sleep in the Development of Experimental Trauma Memories

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Background: Re-experiencing of emotional memories in form of intrusive memories is a hallmark PTSD symptom and thought to be related to dysfunctional encoding and subsequent lack of integration into existing autobiographical memory networks. Sleep is a key player in the integration of new memories. It may also, over the course of multiple nights, reactivate and consolidate memories and reduce distress. We previously demonstrated that sleep in the night after experimental trauma, compared to wake, led to fewer and less distressing intrusive emotional