

Reducing consequences of child maltreatment during adulthood by public health actions: a Delphi study

Aida Dias^{1,2}, Trudy Mooren^{1,3}, Rolf J. Kleber^{1,3}

1 Department of Clinical Psychology, Utrecht University, Utrecht, The Netherlands

2 Centro de Trauma, CES, University of Coimbra, Coimbra, Portugal

3 Arq Psychotrauma Expert Group, Diemen, The Netherlands

Correspondence: Aida Dias, Department of Clinical Psychology, Faculty of Social Sciences, Utrecht University, PO Box 80.140, 3508 TC, The Netherlands, Tel: (+31) 623 65 36 01, e-mail: aida.dias.21@gmail.com

Background: Child maltreatment (CM) is associated with long-lasting poor health outcomes, as well as increased levels of disability and health-services consumption across the life-span. However, less is known about how CM consequences can be reduced during adulthood. We investigated professional opinions on how to mitigate long-term consequences of CM in a public health (PH) perspective. **Methods:** Using the Delphi method in three rounds, we inquired 91 professionals, mostly European researchers and clinicians about potential PH actions to mitigate CM consequences during adulthood. **Results:** Most experts agreed that PH actions are needed. Increasing community awareness and training emotional regulation in affected adults were prioritized strategies. Enlarging curricular knowledge about CM for professionals and developing evidence-based interventions were considered preferred methods. Reducing the barriers for access to interventions for adults, such as those provided by trauma-informed services were also suggested. Participants highlighted the possibility to reduce CM consequences across generations as a significant benefit. **Conclusions:** PH programmes to reduce the burden of CM can be enhanced by specific actions to facilitate the recognition of difficulties in affected adults and to expand the availability of helpful resources. The application of these programmes could be assisted by the use of modern information-technology.

Introduction

Child maltreatment

Child maltreatment (CM) is a well-known risk factor for poor health across the life-span, which makes it a priority for intervention as stated by the *World Health Organization*.¹ Although definitions vary, it is generally defined as acts by a parent or other caregiver that results in harm, potential for harm or threat of harm to a child.² Global prevalence per 1000 inhabitants has been estimated as 127 for sexual abuse (76 for male and 180 for female), 163 for physical neglect, 184 for emotional neglect, 226 for physical abuse and 363 for emotional abuse.³

CM occurs often chronically during sensitive developmental periods, and is frequently perpetrated by emotionally important persons.⁴ In these aspects, CM differs from other adversities (e.g. single traumatic events). Through a process of cumulative psychological and biological alterations caused by exposure to chronic stress, CM exposed persons may display difficulties in various areas of functioning (e.g. sensitization of biological stress mechanisms, developmental deficits, social and emotional difficulties) that persist across the life-span.⁵ Existing diagnostic categories fail often to grasp properly emotional and social difficulties of CM exposed persons, such as those related to personality disorders.⁶ To compensate for such difficulties, CM exposed persons may resort to health risk behaviours, including substance abuse, physical inactivity and suicide attempts,⁷ that are likely to deepen existing biological, social and emotional problems.⁸

The US Centers for Disease Control and Prevention have conducted large cross-sectional and longitudinal studies about the consequences of exposure to adverse childhood experiences (ACE).⁹ Mental health disorders in adults, such as post-traumatic stress disorder, anxiety and mood disorders, are frequently associated to CM.¹⁰ It has been suggested that nearly 30% of mental health

disorders could be prevented through the eradication of childhood adversities.¹¹ For Europe, leading experts in mental health prioritized the identification of causes, risk and protective factors for poor mental health, along with the advance of PH interventions to reduce mental health related inequalities.¹²

A call for a public health approach

ACE have been associated with large disability proportions¹³ and increased risk for disease and mortality.¹⁴ Moreover, they were found to be a cause of a heightened consumption of health-services.¹⁵ Because of its chronic and enduring consequences, CM has generally been regarded as a highly expensive^{16,17} 'long-term health condition'.¹⁸ Exposure to CM was also associated with adverse mid-adulthood socioeconomic outcomes, such as unemployment and long-term sick absenteeism¹⁹ and with increased odds for early disability pension.²⁰ The disability weight associated to adversity in childhood, particularly the exposure to abuse and neglect, was larger than the one associated with all other mental health disorders.¹³ Altogether, these findings illustrate how CM can pose hardships to the adaptation of affected persons, increasing also the risk for CM among families having CM affected parents.²¹ Fortunately, not all CM exposed persons are affected.

Resilience studies suggest that factors like good self-regulation, supportive parenting and positive close relationships are protective.²² There are programmes particularly designed for clinical purposes (e.g. STAIR,²³ Component-based Psychotherapy²⁴ or Schema-Focussed Therapy²⁵) or focussed on parents/families with substantiated CM (e.g. parental training programmes or nurse-family partnership²⁶) But most users of mental health-services are scarcely asked about experiences of abuse or neglect during childhood.²⁷ To our knowledge, there is a paucity of specific PH interventions to mitigate the consequences of CM in adults in the

community. For instance, programmes to improve resilience of persons affected by interpersonal violence and CM address insufficiently these experiences and their consequences.²⁸

A public health (PH) approach has been proposed to tackle CM consequences.¹⁸ Despite the huge efforts for primary prevention of CM, less is being done to help adults to overcome its consequences.²⁹ PH actions to mitigate long-term consequences of CM targeting emotion regulation, social functioning and self-concept have been previously suggested.³⁰

A valuable strategy to investigate potential PH actions to mitigate CM is the consultation of experienced professionals. The Delphi method employs the consultation of professionals, and has been frequently used in the field of PH.^{31,32} Although consensual practice is not equivalent to evidence-based knowledge,³³ the obtained information is particularly useful to broaden PH perspectives.³⁴

In a recent Delphi study about prevention of interpersonal violence (including CM), the 'development, implementation and evaluation of interventions' have been recommended as a crucial research priority.³⁵ Similarly, an international study by Wathen and colleagues prioritized the investigation of key elements of successful programmes for prevention of CM and intimate partner violence as well.³⁶ Both studies underlined the need to examine effective strategies for prevention of CM and its consequences.

Research aims

Our aim was to analyze professional opinions on how to mitigate consequences of CM during adulthood in a PH perspective. Using a Delphi method, we gathered information on: (i) existing PH actions; (ii) the need for additional specific PH actions for adults; (iii) proposed PH actions at the levels of strategies, target groups and implementation methods; (iv) benefits and risks and (v) how to minimize potential risks of increasing awareness of CM consequences in adults.

Methods

Delphi method

The Delphi method is a structured process of communication among professionals with high levels of expertise in a given domain.³¹ Participants are invited to share their opinions anonymously through an iterative process and they receive feedback about responses from the overall group. Because of anonymity, expert standpoints are free from social conformism.

We used a Delphi version applied over three rounds. Round I consisted of a small-scale study using an exploratory interview (Supplementary material S2) with a group of 10 experts in order to generate items for a semi-structured questionnaire (Supplementary material S3). In round II, a larger group of experts filled out the questionnaire (Supplementary material S3). In round III, participants from round II were invited to comment on the results of the previous round and to fill-out a second questionnaire (Supplementary material S4). The questionnaire used in round III was elaborated according to the results of round II and complemented by information collected in a focus group with ten health care professionals external to the Delphi scrutiny. All participants were provided with a link for a webpage explaining the research initiative and definitions used in our study (<https://sites.google.com/site/mitigarcmc/home>). Figure 1 illustrates the phases of the Delphi process.

Data analysis was performed using two strategies: the count of endorsements (quantitative) and the content analysis of open questions (qualitative). Items endorsed by more than 70% of participants were suggested as a priority, as proposed by von der Gracht.³⁷

Participants

In the Delphi study 91 professionals participated who were chosen according to two criteria: they authored articles about long-term consequences of CM (including assessment and intervention) and/or they participated in projects on CM. Participants having the larger number of specific publications about CM consequences in adults were selected for round I. Participants were mostly contacted personally, and they were asked to provide the name and/or contact of potential participants for round II. Table 1 summarizes characteristics of the participants. In addition, 10 external consultants (health care professionals and post-graduates) collaborated in the development of the questionnaire for round III. Supplementary material S1 details the procedure for each round.

Ethical considerations

Because participants were not 'subjected to procedures or required to follow certain rules of behaviour', our study was exempt from ethical review, according to the Medical Research Involving Human Subjects Act (WMO, The Netherlands). The purpose of the study was explained and participation was voluntary and anonym, allowing participants to quit at any stage. The few data concerning the background of participants did not reveal their identity.

Results

Participants

A total of 91 experts from 26 European countries participated. Three experts from United States took only part in round I. We achieved a rate of participation of 90% in round I, 45% in round II and 53% in round III. Participants in round II had been working in the field of CM for about 15 years. Most were researchers and/or mental health professionals and most had an academic background in psychology or medicine. About 89% classified their own CM knowledge as five or higher in a scale ranging between 1 and 10. Table 1 includes detailed information about participants' background and work experience.

Delphi rounds I and II

Current public health initiatives

A total of 23 participants knew about current initiatives, and 22 described them (see table 2). Participants described particularly actions for primary prevention as well as treatment for at-risk families and CM exposed children. Other, less specific programmes were pointed out, aiming at preventing CM at a primary level, treatment of CM related disorders and promoting the integration of excluded groups or ethnic minorities.

Additional public health actions

Most participants supported the assumption that PH actions are needed to mitigate CM consequences in adults. In round I, strategies such as the increase of awareness, the training of emotion regulation, social skills as well as risk perception, and interventions targeting negative self-cognitions and feelings of shame and guilt, were proposed. In particular, increasing awareness and training of emotion regulation were suggested as priorities, with respectively 86 and 71% of agreement in round II. The importance of training in risk perception received less consensus (40% of agreement).

PH initiatives do best to focus at three different groups according to respondents in round I: individuals, families and organizations (see table 2). In round II, abused or neglected adults during childhood and persons in treatment for mental health problems were prioritized as target individuals, while for families were those experiencing domestic violence. Mental health care, child protection,

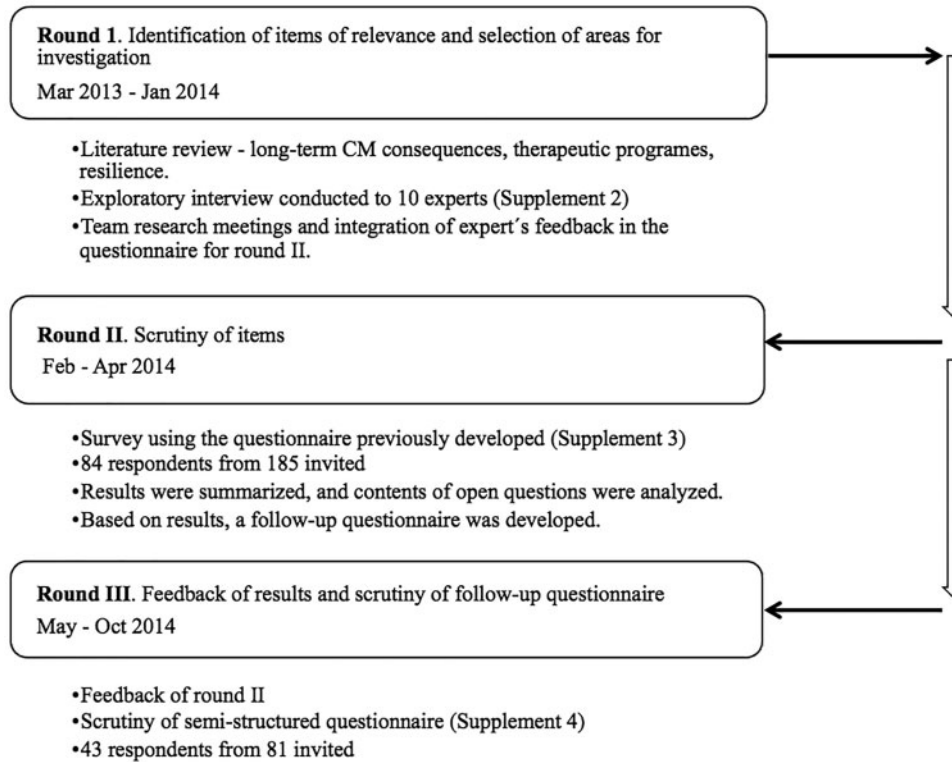


Figure 1 Delphi flowchart by Delphi study timeline

Table 1 Characteristics of Delphi participants

	Delphi rounds I	II	III
N	10 (11)	81 (185)	43 (81)
Gender			
Male	4	30	17
Female	6	51	26
Country	3 from USA, 2 from The Netherlands and Croatia, 1 from Denmark, Turkey and Poland	12 from The Netherlands, 9 from Portugal, 8 from UK, 7 from Spain, 6 from Germany, 5 from France, 4 from Italy, 3 from Belgium, Croatia and Switzerland, 2 from Austria, Denmark, Georgia, Greece, Ireland, Norway, Poland, Romania and 1 from Bulgaria, Estonia, Lithuania, Serbia, Turkey, Ukraine	5 from The Netherlands and UK, 4 from Portugal, 3 from Spain, 2 from Croatia, Georgia, Norway, Poland, Italy and Switzerland and 1 from Austria, Belgium, Bulgaria, Denmark, Estonia, France, Germany, Greece, Ireland, Lithuania, Romania and Serbia
Academic background			
Psychology	6	47	28
Medicine	3	24	11
Social work	1	4	3
Education		2	
Sociology		2	1
Criminology		1	
Professional activity	NA		
Research		35	19
Mental health care		32	16
Education/teaching		9	5
Policy		5	3
Years of work experience (mean)	NA	15	16
Self-reported level of expertise (mean, in a range between 1 and 10)	NA	7	7

Note: NA—not assessed.

Table 2 Results of the Delphi rounds I and II

Assessed items	Round I	Round II
Method	Qualitative	Quantitative (%) Qualitative
Need for public health actions		
Yes	10	96%
No		4%
Existing interventions	<ul style="list-style-type: none"> • STAIR programme • Programmes for parental training 	<ul style="list-style-type: none"> • Early identification of child maltreatment, with sensitization of health care professions about how to identify cases and to intervene in early-life stages, namely with screening for child maltreatment exposure among parents (Norway, Portugal, Romania); • Global Collaborative Initiative by the International Society for Traumatic Stress Studies to reduce the impact of child abuse and neglect; • Quad City initiatives (in USA); • Specific programmes for sexual abuse and incest (Denmark, Norway and Germany); • Prevention and treatment services (Germany, The Netherlands, UK); • Available specific interventions focused on adults were referred for The Netherlands. Initiatives such as Fyer Friesland, LCVT and CELEVT
Strategies	Increase community awareness	86%
	Emotional regulation training	71%
	Cognitive restructuring of dysfunctional beliefs	68%
	Reinforcing self-efficacy	65%
	Address feelings of shame and guilt	63%
	Training skills for risk perception	40%
		^a Other: 28%
Target groups		
Individuals	Identified during childhood as neglected or abused	78%
	In treatment for mental health problems	71%
	With addictive problems	64%
	In conflict with the law	50%
	Engaging in high risk sexual behaviors	50%
	Using primary health care services	42%
		^a Other: 14%
Families	With problems of domestic violence	86%
	With children experiencing adaptation problems in school	68%
	With family members suffering mental health disorders	60%
	With family members who are incarcerated	47%
	Young couples with children	42%
		^a Other: 4%
Organizations	Mental health care services	82%
	Agencies for protection of youth at risk	80%
	Primary health care services	76%
	Social welfare agencies	73%
	Primary/secondary education institutions	58%
	Higher education institutions	27%
		^a Other: 9%
Implementation methods	Stimulate the study of effective interventions	85%
	Develop curricular knowledge for health care professionals	77%
	Raise community awareness through public campaigns	63%
	Detect and prioritize research needs in exposed adults	62%
	Promote screening in primary care	56%
	Promote screening in mental health care	59%
	Develop self-administered instruments	54%
		^a Other: 12%
Benefits	Decrease the risk for intergenerational transmission	86%
	Increase social awareness and facilitate child-risk identification	69%
	Decrease the engagement in risk behaviours and revictimization	68%
	Reduce the risk for chronic poor physical and mental health	65%
	Foster resilience to face other traumatic or stressful events	64%
		^a Other: 8%
Risks		
No	NA	65%
Yes	NA	32%
Sort of risks	Promoting victim status	19%

(continued)

Table 2 Continued

Assessed items	Round I	Round II
Medicalization/amplification of complaints		13%
Risk for false memories		6%
Limiting spontaneous coping/recovery		4%
Interfering negatively with current social relations		4%
		^a Other: 6%

a: Described in the Results section.

Table 3 Information to increase awareness about child maltreatment for diverse target groups

Type of information	Target groups				
	General public	Adults identified as neglected or abused during childhood	Families with problems of domestic violence	Individuals in treatment for mental health problems	Professionals working in the field
Long-term consequences	89%	56%	63%	51%	80%
Resilience strategies	49%	81%	65%	84%	77%
Risk for interg. transmission	49%	60%	65%	51%	81%
Adequate parenting practices	81%	70%	81%	65%	70%
Screening for adults	33%	21%	21%	23%	86%
Narratives of exposed adults	37%	40%	30%	23%	72%
Prevalence in children and adults	74%	33%	28%	28%	86%
Available treatment resources	70%	82%	81%	74%	88%

Bold percentages refer to type of information selected by more than 70% of participants.

Note: Percentages refer to the number of participants who have chosen the type of information for each target group.

primary health care and social welfare organizations were top-ranked for the implementation of PH initiatives.

Two methods identified in round I (table 2) were preferred in Delphi round II: enhancing the study of effective interventions for long-term CM consequences and developing curricula for health care professionals. There was less support for the development of self-administered instruments (54% endorsement). Experts underlined the need to deliver specific actions for assessment and intervention in organizations for foster care. Further, a political framework was suggested to facilitate the access of CM exposed adults to, for instance, trauma-informed services.

Benefits and risks

In round I participants suggested benefits in diverse domains, as described in table 2. The significance of decreasing the risk of intergenerational transmission of CM consequences was emphasized by the participants in round II, while fostering resilience was considered crucial to a lesser extent (64% endorsements). Participants in round II added as important benefits the identification of adults at risk for poor health, offering them adequate interventions and reducing the risk for marginalization and exclusion.

Participants mentioned in round I risks such as victimization and medicalization of complaints, development of false memories and interference with current social relations. However, only 32% of participants in round II acknowledged such risks. Promoting an unnecessary victim status and medicalizing complaints were the most selected hazards. Other risks such as stigmatizing culturally accepted parenting behaviours, decreasing the responsibility to search for self-recovery and raising expectations for recovery that may not be met, were added in round II.

Delphi round III—reducing potential risks of increasing awareness

Round III aimed at providing feedback to participants about the findings of round II and at investigating how to reduce risks

associated with the increase of community awareness about CM consequences in adults. Next, we asked for which type of information could be broadcasted to increase awareness.

About 88% of professionals agreed with the general results of round II exposed in table 2, and about one third (30%) reaffirmed risks like victimizing and/or stigmatizing affected persons, that may reduce the potential for spontaneous recovery. In order to minimize risks, professionals recommended for instance, delivering health care services using anonymous self-paced low-intensity interventions (e.g. cognitive behavioural interventions for mild disorders). Information could be delivered using modern communication technologies (e.g. social media, informative web-portals) and forms of art (e.g. cinema, theatre). Further, mass media personnel should be trained in how to present and communicate about CM. Training could be provided for health professionals on how to refer clients and/or how to offer evidence-based interventions for those looking for specialized help.

To increase awareness about CM, participants agreed to provide more information about available treatment resources to all target groups (table 3). Professionals were the target group for whom all the types of information were considered important. For the general public, information about long-term consequences and adequate parenting practices were chosen most frequently, while informing about the risk for transmission of CM consequences across generations was prioritized only for professionals such as health care providers, social workers and other.

Respondents considered those working in the field of mass media, education and health care instrumental for increase of community awareness. They underlined the advantages of collaborations among organizations in order to better inform the different groups and also to offer an adequate follow-up for those looking for care.

Discussion

Main findings

Experts who participated in this Delphi study supported the assumption that PH actions are needed to mitigate consequences

of CM in adults. Although the central goal is to improve the lives of those directly affected, the likelihood to reduce CM consequences across generations emerged as well as a main benefit. When affected adults are relieved from CM consequences like poor mental health, their children will eventually have less risk to suffer CM. In addition to the existing initiatives to prevent CM or to treat its associated clinical features, Delphi participants also stressed that further PH work needs to be oriented at increasing awareness about CM long-term consequences and to offer timely and adequate care.

Evidence-based helpful resources should be made available for adults, targeting for instance emotion regulation skills. The mental health sector can contribute to develop these PH actions by assessing the needs of CM exposed persons and by adjusting clinical interventions to be applied for mild difficulties (e.g. CBT, schema-focused therapy).

Furthermore, these findings can assist health care and child protection services to improve PH programmes for CM prevention, and to reduce its associated consequences across the life-span.

Professionals in general, fundraisers and policy makers do well to acknowledge the needs for more training and more resources to generate evidence-based interventions for CM consequences. Mental health care can be improved by increasing the attention given to CM experiences among persons in treatment, and by developing more evidence-based treatment protocols. Such procedures can be assisted by available technologies of information. For instance, the increase of community awareness can be facilitated by using media resources, while the development of evidence-based interventions can be progressed by motivating professionals and clients to adhere to the monitoring of outcomes using internet-based and computational resources. Revenues of these actions are expected to outweigh the costs, as benefits can be achieved for a large number of individuals.

As suggested by experts in our study and in line with the literature,^{38,39} existing trauma-informed service systems are a valuable resource, given shared and/or overlapped features of persons exposed to CM and to other traumatic events.³⁸ It is of importance to bring other traumatic events into the concept of help for adults traumatized as children, such as the devastating conditions faced by children exposed to war scenarios and living currently as refugees in several European countries. Trauma-informed services are defined as services that are sensitive to consequences of trauma, by identifying signs and symptoms, by integrating knowledge about these consequences in their practices and by developing specific actions to avoid stigmatization. In parallel with interventions for (single and chronic) trauma exposure, these services can enrich their scope of action by training professionals for specificities of CM affected persons, such as the chronicity of difficulties, the feelings of shame and guilt and the difficult recognition of CM exposure.³⁰

The use of e-health has been proposed, as it may facilitate the access to interventions for adults not looking for help because of feelings of shame or guilt or because of difficulties of time management to attend to conventional face-to-face interventions. The use of e-health reduces the costs for application of face-to-face evidence-based interventions, and can be used for instance to target the emotional regulation of CM exposed persons.⁴⁰

Limitations and strengths

To our knowledge, this is the first study investigating professional opinions about PH actions to mitigate CM long-term consequences. We have documented perspectives of highly experienced professionals on how to reduce the societal burden of CM, by suggesting a set of actions that can be applied at large scale, using the widely available technologies of information.

Despite these strengths, limitations imply caution in generalizing our findings. Participants were mostly researchers and mental health professionals, with publications about CM. Less represented were other PH workers, such as primary health and social care. Another limitation of our study was the lack of clear specification of used terms, like *PH action*. Besides, some of the suggested actions are used particularly for clinical interventions.

Although we have been keen on a geographically spread selection of participants, the selection of responders could have been influential to the priorities. In order to overcome limitations, we used a large number of participants with different academic and cultural backgrounds. In addition, the rates of participation across the rounds in our study varied. Although low levels of response rate are frequent in Delphi studies,⁴¹ we believe the variation we realized is related to the different methods used for the data collection (face-to-face in round I versus online in round II) and with the moment of application of round III (end of academic year and holiday period).

Practical suggestions

Based on our findings, we propose a set of actions to be applied by the joint effort of professionals and stakeholders of health care, child protection and education, aiming at mitigating the consequences of CM in adults in the community:

- (1) Increasing community awareness about CM consequences in adults by developing national web-portals with information for different target groups (for instance containing specific material for the training of professionals).
- (2) Improving mental health care for CM affected children and adults by reducing barriers for access to treatment and by enlarging available treatment options (e.g. more evidence-based treatments).
- (3) Developing e-health evidence-based interventions targeting for instance emotional difficulties of adults exposed to CM.
- (4) Defining a set of basic knowledge/skills to be acquired by professionals working with CM affected clients.
- (5) Developing CM-informed services in combination with existing trauma-informed services.
- (6) Facilitating the admission for assessment and treatment to CM-informed services to clients exposed to substantiated CM or raised in foster care organizations, in treatment for mental health problems and with problems of domestic violence.
- (7) Creating a task-force of representatives to inspect the health needs of CM affected adults and to monitor the outcomes of PH programmes to mitigate CM consequences.

Supplementary data

Supplementary data are available at *EURPUB* online.

Acknowledgements

The authors wish to thank the Delphi participants list provided by the corresponding author upon request, and the institution that provided the facilities to develop this work—The Department of Clinical Psychology of Utrecht University.

Funding

This study was supported by the Fundação para a Ciência e Tecnologia, Portugal, through the research grant SFRH/BD/68995/2010 (POSI 2010 and FSE).

Conflicts of interest: None declared.

Key points

- There is a need for PH actions to mitigate consequences of CM in adults.
- Increasing community awareness and training professionals are prioritized strategies.
- Mental health care for CM affected persons should be improved.
- Evidence-based interventions targeting emotion regulation are necessary.
- The use of modern information-technologies can facilitate access to interventions for adults exposed to CM.

References

- Sethi D, Bellis M, Hughes K, et al. European Report on Preventing Child Maltreatment. Copenhagen, 2013. Available at: http://www.euro.who.int/__data/assets/pdf_file/0019/217018/European-Report-on-Preventing-Child-Maltreatment.pdf.
- Gilbert R, Widom CS, Browne K, et al. Burden and consequences of child maltreatment in high-income countries. *Lancet* 2009;373:68–81.
- Stoltenborgh M, Bakermans-Kranenburg MJ, Alink LRA, van IJzendoorn MH. The Prevalence of Child Maltreatment across the Globe: review of a Series of Meta-Analyses. *Child Abuse Rev* 2015;24:37–50.
- Messman-Moore TL, Bhuptani PH. A Review of the Long-Term Impact of Child Maltreatment on Posttraumatic Stress Disorder and Its Comorbidities: an Emotion Dysregulation Perspective. *Clin Psychol Sci Pract* 2017;24:154–69.
- Shonkoff JP, Boyce WT, McEwen BS. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *JAMA* 2009;301:2252–9.
- Schmid M, Petermann F, Fegert JM. Developmental trauma disorder: pros and cons of including formal criteria in the psychiatric diagnostic systems. *BMC Psychiatry* 2013;13:3.
- Bellis M, Hughes K, Leckenby N, et al. Adverse childhood experiences and associations with health-harming behaviours in young adults: surveys in eight eastern European countries. *Bull World Health Organ* 2014;92:641–55.
- Miller GE, Chen E, Parker KJ. Psychological stress in childhood and susceptibility to the chronic diseases of aging: moving toward a model of behavioral and biological mechanisms. *Psychol. Bull* 2011;137:959–97.
- Centers for Disease Control and Prevention. Adverse Childhood Experiences. 2016. Available at: https://www.cdc.gov/violenceprevention/acestudy/about_ace.html (26 October 2017, date last accessed).
- Scott KM, McLaughlin KA, Smith DAR, Ellis PM. Childhood maltreatment and DSM-IV adult mental disorders: comparison of prospective and retrospective findings. *Br J Psychiatry* 2012;200:469–75.
- Kessler RC, McLaughlin KA, Green JG, et al. Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. *Br J Psychiatry* 2010;197:378–85.
- Forsman AK, Wahlbeck K, Aaro LE, et al. Research priorities for public mental health in Europe: recommendations of the ROAMER project. *Eur J Public Health* 2015;25:249–54.
- Cuijpers P, Smit F, Unger F, et al. The disease burden of childhood adversities in adults: a population-based study. *Child Abuse Negl* 2011;35:937–45.
- Bellis MA, Hughes K, Leckenby N, et al. Measuring mortality and the burden of adult disease associated with adverse childhood experiences in England: a national survey. *J Public Health (Oxf)* 2015;37:445–54.
- Yanos PT, Czaja SJ, Widom CS. A prospective examination of service use by abused and neglected children followed up into adulthood. *Psychiatr Serv Washingt DC* 2010;61:796–802.
- Fang X, Brown DS, Florence CS, Mercy JA. The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse Negl* 2012;36:156–65.
- Brown DS, Fang X, Florence CS. Medical costs attributable to child maltreatment: a systematic review of short- and long-term effects. *Am J Prev Med* 2011;41:627–35.
- Taylor J, Bradbury-Jones C, Lazenbatt A, Soliman F. Child maltreatment: pathway to chronic and long-term conditions? *J Public Health (Bangkok)* 2016;38:426–31.
- Pinto Pereira SM, Li L, Power C. Child maltreatment and living standards in mid-adulthood: findings from the 1958 British birth cohort. *Snehal Pinto Pereira. Eur J Public Health* 2016;26:054.
- Björkenstam E, Hjern A, Vinnerljung B. Adverse childhood experiences and disability pension in early midlife: results from a Swedish National Cohort Study. *Eur J Public Health* 2017;27:472–77.
- Stith SM, Liu T, Davies LC, et al. Risk factors in child maltreatment: a meta-analytic review of the literature. *Aggress Violent Behav* 2009;14:13–29.
- Haskett ME, Nears K, Sabourin Ward C, McPherson AV. Diversity in adjustment of maltreated children: factors associated with resilient functioning. *Clin Psychol Rev* 2006;26:796–812.
- Cloitre M, Stovall-McClough KC, Noonan K, et al. Treatment for PTSD related to childhood abuse: a randomized controlled trial. *Am J Psychiatry* 2010;167:915–24.
- Grossman FK, Spinazzola J, Zucker M, Hopper E. Treating adult survivors of childhood emotional abuse and neglect: a new framework. *Am J Orthopsychiatry* 2017;87:86–93.
- Sempertegui GA, Karreman A, Arntz A, Bekker MHJ. Schema therapy for borderline personality disorder: a comprehensive review of its empirical foundations, effectiveness and implementation possibilities. *Clin Psychol Rev* 2013;33:426–47.
- Chen M, Chan KL. Effects of Parenting Programs on Child Maltreatment Prevention: a Meta-Analysis. *Trauma Violence Abuse* 2016;17:88–104.
- Read J, Harper D, Tucker I, Kennedy A. How do mental health services respond when child abuse or neglect become known? A literature review. *Int J Ment Health Nurs* 2018.
- Moeller-Saxone K, Davis E, Stewart DE, et al. Promoting resilience in adults with experience of intimate partner violence or child maltreatment: a narrative synthesis of evidence across settings. *J Public Health (Bangkok)* 2015;37:125–37.
- Cameron LD, Carroll P, Hamilton WK. Evaluation of an intervention promoting emotion regulation skills for adults with persisting distress due to adverse childhood experiences. *Child Abuse Negl* 2018;79:423–33.
- Dias A, Mooren T, Kleber RJ. Public Health actions to mitigate long-term consequences of child maltreatment. *J Public Health Policy* 2018;39:294–303.
- Linstone HA, Turoff M. The Delphi Method: techniques and Applications. *Technometrics* 1976;18:363.
- Iqbal S, Pipon-Young L. The Delphi method. *Psychologist* 2009;22:598–601.
- GRADE Working Group. Grading quality of evidence and strength of recommendations. *BMJ* 2004;328:1490.
- Bijl R. Delphi in a future scenario study on mental health and mental health care. *Futures* 1992;24:232–50.
- Mikton CR, Tanaka M, Tomlinson M, et al. Global research priorities for interpersonal violence prevention: a modified Delphi study. *Bull World Health Organ* 2017;95:36–48.
- Wathen CN, MacGregor JCD, Hammerton J, et al. Priorities for research in child maltreatment, intimate partner violence and resilience to violence exposures: results of an international Delphi consensus development process. *BMC Public Health* 2012;12:684–96.
- von der Gracht HA. Consensus measurement in Delphi studies. *Technol Forecast Soc Change* 2012;79:1525–36.
- Magruder KM, Kassam-Adams N, Thoresen S, Olf M. Prevention and public health approaches to trauma and traumatic stress: a rationale and a call to action. *Eur J Psychotraumatol* 2016;7:29715.
- Shonkoff JP. Capitalizing on Advances in Science to Reduce the Health Consequences of Early Childhood Adversity. *JAMA Pediatr* 2016;170:1003–7.
- Bockting CLH, Williams AD, Carswell K, Grech AE. The potential of low-intensity and online interventions for depression in low- and middle-income countries. *Glob Ment Heal* 2016;3:e25.
- Hsu C, Standford B. The Delphi Technique: making Sense Of Consensus. *Pract Assess Res Eval* 2007;12:1–8.