

ESTSS2019 Rotterdam Symposium Abstract Book

Friday June 14th 2019

Day #1

10:00 11:15 Parallel session #1

S1.1 Bereavement interventions and care in Europe

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Track: Intervention Research & Clinical Studies

In the 11th edition of the International Classification of Diseases (ICD-11) the diagnostic criteria of prolonged grief disorder (PGD) is included as a new mental disorder. Consequently, there is a growing need for high-quality mental health care for bereaved persons. This care encompasses different forms of help for different levels of grief and can be conceptualized from a stepped care perspective in which (1) low-threshold internet-based interventions, which could be appropriate for high-risk groups with subsyndromal PGD, (2) psychotherapy for patients suffering already of PGD. This symposium will describe current bereavement interventions studies for bereaved children and bereaved siblings. Further, an overview will be given of state of the field for European-based bereavement interventions. The network for Bereavement Research and Care in Europe (BRACE) will be introduced.

Launch of the BRACE Network: A network for Bereavement Research and Care in Europe and the opportunity for PGD research collaboration

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Background: Prolonged grief disorder (PGD) is a new mental health disorder included in the International Classification of Diseases (ICD-11). This raises important ethical and clinical questions that must be explored within the European context. Europe is at the forefront of research on PGD however, so far research efforts are not well connected. *Objective:* The BRACE Network brings together European scientific researchers and health care providers to join forces in coordinating initiatives toward the improvement of bereavement-related research and care. The Network aims to establish a sustainable European network of researchers, care practitioners, and other stakeholders to initiate, coordinate, and integrate research activities, promote high-quality (stepped) care for grief, educate health professionals, and create opportunities for public awareness and dissemination of information. *Method:* An overview of the proposed aims and working groups of the BRACE network will be presented along with the current state of the field for European-based PGD interventions. A proposal for a multisite European research project assessing a new scale for prolonged grief disorder International Prolonged Grief Disorder Scale will be presented. *Results:* A series of qualitative interviews with health care workers and bereaved individuals in Switzerland and Germany were conducted to develop the structure and content of the scale. Preliminary validation of the scale is planned to take place in large sample bereaved populations in Switzerland, Germany, Greece, Portugal and Turkey. *Conclusion:* The BRACE network will offer the opportunity to develop pan-European studies efficiently and to assess the applicability and acceptability of PGD across different cultural contexts.

Cognitive-behavioral intervention for bereaved siblings: A randomized controlled trial

Birgit Wagner, Nicole Rosenberg and Ulrike Maaß

Medical School Berlin, Germany

Background: Siblings who have lost a brother or sister experience psychosocial distress after bereavement, but often receive less attention and social support after their loss. Additionally, the grieving sibling has not only experienced the loss of a brother or sister but has to adapt to a changed family system as a consequence of the loss. The intensive grieving process of parents for the loss of their child influences and may hinder the bereavement process of the surviving siblings. Numerous studies indicate that the death of a sibling can result in long-term psychological impairment for those affected, especially regarding the development of PGD, depression or anxiety disorder. *Objective:* The objective of this study was to examine the effectiveness of an internet-based intervention aimed at bereaved siblings comparing the treatment group with a waiting-list control-group. *Method:* The 6-module Internet-based writing intervention for bereaved siblings was based on CBT and a systematic approach to promote the relationship and communication within the family. Primary outcome were symptoms of prolonged grief disorder, secondary outcome were depression, PTSD and posttraumatic cognitions. *Results:* The results showed a significant reduction in symptoms of prolonged grief disorder, depression and posttraumatic stress disorder at posttreatment. Further a significant difference between treatment and waiting-list group could be found.

Mechanisms of change in cognitive behavioral therapy for disturbed grief in bereaved children

Paul Boelen and Mariken Spuij

Utrecht University, the Netherlands

Background: Although few studies have examined treatments for disturbed grief in bereaved children, there are indications that cognitive behavioral interventions may be effective. An unexplored issue is what type of cognitions and coping behaviours should best be targeted to foster adjustment to loss among bereaved children. In Utrecht, the current authors developed GriefHelp, a nine-session protocolized cognitive-behavioral therapy (CBT) administered in combination with five sessions of parental counselling. *Objective:* The objective of this study was to examine the effectiveness of GriefHelp and to enhance knowledge on the nature of cognitive behavioral variables that should be targeted to yield most effective outcomes. *Method:* Data were available from over sixty children who underwent GriefHelp. They completed measures of prolonged grief, depression, and bereavement-related posttraumatic stress plus several measures tapping negative cognitions and avoidance behaviours before and after treatment. Changes in symptoms and cognitive behavioral variables were evaluated and correlated. *Results:* GriefHelp coincided with considerable reductions on disturbed grief reactions that were strongly associated with declines in negative thoughts and avoidance. Negative thoughts about the self and anxious avoidance behaviours were among the strongest correlates of symptom reduction.

S1.2 Early screening for PTSD risk following emergency department admission: clinical relevance and novel prognostic models

Mirjam van Zuiden¹, Juanita Haagsma², Katharina Schultebraucks³ and Miranda Olff^{1,4}

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Track: Biological & Medical

Experiencing a traumatic event requiring emergency department (ED) admission leads to development of PTSD in a significant percentage of patients. Early screening with prognostic models accurately and reliably discerning individuals at risk early after ED admission may provide a window for target early interventions, preventing a chronic course of PTSD. This symposium starts with a presentation outlining the relevance of early screening for PTSD in ED patients (Haagsma), by presenting largescale studies on long-term PTSD prevalence and patterns upon ED admission following injury and PTSD's consequences for physical recovery. Thereafter, two presenters discuss novel findings from diverse European (van Zuiden) and American (Schultebrucks) cohorts showing that long-term PTSD severity following ED admission can be reliably predicted by computational models using routinely collected biomedical data upon ED admission. Further directions for clinical implementation of early screening using prognostic models and implications for public health are delineated in the discussion (Olf).

Posttraumatic stress disorder following injury: prevalence, patterns, risk factors and effect on health-related quality of life

Juanita Haagsma

Erasmus MC University Medical Center Rotterdam, the Netherlands

Background: In rehabilitation of injury patients, the main focus lies in the treatment of physical injuries. Nonetheless, over the past decades the importance of posttraumatic stress disorder (PTSD) following injury continued to gain attention. To identify opportunities for prevention and early treatment, predictors and course of PTSD need to be investigated. *Objective:* The aims of this study were to 1) assess PTSD prevalence among injury patients treated at the Emergency Department (ED); 2) assess trajectories of PTSD following injury; 3) assess risk factors for developing PTSD; 4) assess the association between PTSD and health-related quality of life (HRQL). *Method:* We selected large samples of adult injury patients who attended the ED followed by either hospital admission or discharge to the home environment. Three large cohorts of injury patients received postal questionnaires at various time points up to two years post-injury. The questionnaires included items regarding socio-demographics, the Impact of Event Scale(-Revised) to measure PTSD symptoms, and EQ-5D to measure HRQL. *Results:* Among patients with minor to moderate injuries PTSD prevalence rates ranged from 9% shortly after injury to 6% one year post-injury. For injury patients who sustained major injuries these rates were 23% and 20%, respectively. Pre-existing comorbid disease and female gender were the strongest independent predictors of PTSD. PTSD was associated with a significantly decreased HRQoL. *Conclusions:* Injury patients of all severity levels suffer from PTSD symptoms, which is associated with a considerable decrease in HRQoL. This underlines the importance of prevention, early detection, and treatment of injury-related PTSD.

Multivariate routinely collected data upon Emergency Department admission due to Serious Injury predict Long-term PTSD Symptom Trajectories

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Background: Patients admitted to Emergency Departments (ED) with serious injury are at risk for posttraumatic stress disorder (PTSD). Interestingly, hospital admission provides the potential for early screening to assess individual risk for adverse outcome. *Objective:* Investigate the predictive accuracy of machine learning algorithms using a broad range of data collected around the time of ED admission for subsequent PTSD symptom severity over one year. *Method:* We included n=417 patients with

(suspected) serious injury from two Academic Level-1 Trauma Centers in Amsterdam. PTSD symptoms were repeatedly assessed up to one year post-injury using CAPS-IV and IES-R. We assessed psychophysiological and endocrine measures at ED admission, medication use within the first 48 hours and trauma and injury characteristics. Symptom trajectories were identified using latent growth mixture modeling. Multi-nominal classification of trajectory membership was performed on a random split training set (80%) and internally validated in the separate test set (20%). *Results:* Four symptom trajectories were identified, including chronic high symptoms in 5.5%. The best classifier on the training set (AdaBoost.M1 Algorithm; AUC: .80 [95%CI: .74-.84]; Cohen's Kappa: .50) predicted unseen cases well in the internal test set (multi-class AUC: .85 [95%CI: .76-.92]; Kappa .62) and correctly classified all individuals with chronic high symptoms. Features most relevant for distinguishing trajectories included acute psychophysiological and endocrine measures, early medication use and, injury characteristics. *Conclusions:* Routinely collected ED data showed good predictive accuracy for long-term PTSD symptoms after serious injury. These findings are promising for improving early risk detection and personalized early interventions for PTSD.

Predicting posttraumatic mental health risk in emergency medical settings: development and external validation of a predictive model using deep learning

Katharina Schultebrucks

New York University School of Medicine, USA

Background: Independent of the physical health status, mental well-being of Emergency Department (ED) patients may be compromised in the aftermath of post-acute trauma care. Accurate prognosis of symptoms of posttraumatic stress (PTS) symptoms enables targeted prevention strategies and offers care opportunities at the earliest occasion. *Objective:* In this talk, a deep learning approach is presented. Most important predictors of PTS including immune markers, heart rate, pulse, along with immediate stress reaction, dissociation during the event and characteristics of the traumatic event are analyzed. The talk will highlight the benefits of predicting PTS severity based on ED data garnered from electronic medical records and also discuss potentials challenges. *Method:* Latent Growth Mixture Modeling (LGMM) identified longitudinal trajectories of PTS symptom severity through 12 months after ED admission. The non-remitting PTS symptom trajectory vs. resilient ED patients served as the outcome for the Deep Super Learning algorithm written in Python. *Results:* LGMM identified trajectories of distinct PTSD symptom severity over time. Clinical prognosis of post-acute distress was achieved with good predictive accuracy (AUC=.83, precision=.86 and recall=.85, f1-score=.85). Prognostic tests on independent longitudinal cohorts of ED patients demonstrate internal and external validity. *Conclusions:* The results demonstrate that the deep learning approach is promising for implementation into emergency medical systems. This will support predictions of mental well-being in emergency medical settings based on accessible, and readily available information and may thereby improve efficacy of early prevention strategies.

S1.3 Symptom associations of posttraumatic stress disorder in children and adolescents: novel international findings from network analyses

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Track: Child Trauma

Network analysis is a new and promising statistical approach to better understand the relationships between symptoms of one or several mental disorders. Applied to posttraumatic stress disorder (PTSD) findings can help clinicians to understand how symptoms of PTSD are connected to each other, which symptoms are more or less central, and which symptoms trigger other symptoms. Findings might help to identify important targets for treatment. This symposium includes an introduction to the network analysis method, followed by three presentations of network analyses in different large international samples of traumatized children and adolescents. One of these presentations also includes adults, thus allowing to analyze symptom associations across the lifespan.

The network approach to mental disorders and its application explained by a study of posttraumatic stress symptoms in children and adolescents

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Recently, the network perspective on psychopathology has emerged as a promising alternative approach for conceptualizing mental disorders. Rather than construe symptoms as reflective indicators of an underlying latent construct, such as posttraumatic stress disorder (PTSD), the network approach assumes that syndromes are the result of sets of associations between symptoms that mutually cause and reinforce each other over time (e.g. insomnia → fatigue → rumination → insomnia). In general, networks can be directed (edges have an arrowhead indicating one-way paths between symptoms) and undirected (edges indicating interrelationships between symptoms). The current state-of-the-art method is to estimate undirected regularized partial correlation network models (the association between two symptoms is controlled for the influence of all other symptoms) and determine the most important (central) symptoms within the network, which might guide the decision which symptoms should be intervened on in therapy. Visualized in a graph, in which nodes represent observed indicators (e.g. items) of a mental disorder and edges indicate partial correlations between them, these psychological networks allow a different interpretation of the data such as the interrelationships of symptoms. Originally applied to describe the network structure in a single population, newly development tools allow to compare network structures across populations facilitating a further development towards a more comparative approach. Overall, the network approach to mental disorders offers a novel framework for conceptualizing mental disorders and might lead to a better understanding of the aetiology, maintenance and treatment of PTSD in children and adolescents.

The Symptom Representation of Posttraumatic Stress Disorder in a Sample of Unaccompanied and Accompanied Refugee Minors in Germany: A Network Analysis

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Background: Given the unprecedented number of traumatized refugee minors in Europe and the increased prevalence of mental disorders such as PTSD in this vulnerable population, new methodologies that help us to better understand their symptomatology are crucial. However, to date only a single study has applied the network analysis approach to an (adult) refugee population. Network analysis might help clinicians to understand which symptoms might trigger other symptoms on the one hand, and to identify relevant targets for treatment on the other hand. **Objective:** The aim of this study is to explore the network structure and centrality of DSM-5 PTSD symptoms in a cross-sectional clinical sample of severely traumatized refugee minors. **Method:** A total of N = 398 (Mage = 16.49; SDage = 1.69; 90.5% male) unaccompanied (83.5 %) and accompanied (16.5 %) refugee minors were recruited within four studies in Southern Germany. PTSD symptoms were assessed with the Child and Adolescent Trauma Screen (CATS). The network was estimated using state-of-the-art regularized partial correlation models using the R-package qgraph. **Results:** The most central symptoms were located within the re-experiencing and the negative alterations in cognitions and mood clusters. The strongest connections between symptoms were found for: intrusions and nightmares, psychological and physiological distress upon exposure, as well as irritability and self-destructive or reckless behaviour. **Conclusions:** The results demonstrate differential associations between specific PTSD symptoms in traumatized refugees and may therefore inform clinicians about the assessment and treatment of PTSD in young refugees.

The network structure of posttraumatic stress disorder across the lifespan and the role of the informant

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Background: Network analysis, which conceptualises mental disorders as networks of interacting symptoms, has been used to investigate the nature of PTSD in adolescents and adulthood. The DSM in its latest iteration included a sub-type of PTSD for children 6 years and younger, yet psychological treatment models of the disorder remain consistent across the age range. It therefore warrants investigation about the degree of consistency of these symptoms networks across the entire lifespan from childhood to adulthood. Furthermore, as diagnosis in children and to some extent adolescents relies on parental report, understanding how the informant influences the network architecture may provide crucial information to clinicians when making determinations around diagnosis. **Objective:** To use the network analysis approach to identify the nature of associations in PTSD symptomatology across the age range. To see how the informant influences the network architecture and understand this with respect to diagnosis. **Method:** Existing databases for very young children, adolescents and adults were compiled. Network models were computed and constructed for each age group and for the different informants. The network models were compared and the relative importance of symptoms were computed to explore these differences. **Conclusions:** Interesting developmental patterns emerged from the analysis of the data, which will be discussed. How the informant influences the network structure will also be discussed and how this can be used to inform diagnosis.

Dysfunctional posttraumatic cognitions, posttraumatic stress, and depression in children and adolescents exposed to trauma: A network analysis

Anke de Haan^{1,2}, Markus A. Landolt², Eiko I. Fried³, Kristian Kleinke⁴, Eva Alisic⁵, Richard Bryant⁶, Karen Salmon⁷, Sue-Huei Chen⁸, Shu-Tsen Liu⁸, Tim Dalgleish⁹, Anna McKinnon¹⁰, Alice Alberici¹¹, Jade

Claxton¹², Julia Diehle¹³, Ramón Lindauer¹³, Carlijn de Roos¹⁴, Sarah L. Halligan¹⁵, Rachel Hiller¹⁵, Christian H. Kristensen¹⁶, Beatriz O. M. Lobo¹⁶, Nicole M. Volkmann¹⁷, Meghan Marsac¹⁸, Lamia Barakat¹⁹, Nancy Kassam-Adams²⁰, Reginald D. V. Nixon²¹, Susan Hogan²¹, Raija-Leena Punamäki²², Esa Palosaari²², Elizabeth Schilpzand²³, Rowena Conroy⁵, Patrick Smith²⁴, William Yule²⁴ and Richard Meiser-Stedman²⁵

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Background: The latest version of the International Classification of Diseases (ICD-11) proposes a posttraumatic stress disorder (PTSD) diagnosis focusing on core PTSD symptoms such as re-experiencing, avoidance, and hyperarousal. Since children and adolescents often show a variety of internalizing and externalizing symptoms in the aftermath of traumatic events, the question arises whether such a core PTSD diagnosis is appropriate for children and adolescents. Furthermore, although dysfunctional posttraumatic cognitions (PTCs) appear to play an important role in the development and persistence of PTSD in children and adolescents, their function within diagnostic frameworks requires clarification. **Objective:** To investigate central items and relations between constructs in a network model including dysfunctional PTCs, ICD-11 PTSD core symptoms, and depression symptoms. **Method:** We compiled a large international data set of 2313 children and adolescents aged 6 to 18 years exposed to trauma. **Results:** The PTSD re-experiencing symptoms strong or overwhelming emotions and strong physical sensations and the depression symptom difficulty concentrating emerged as most central. Items from the same construct were more strongly connected with each other than with items from the other constructs. Both dysfunctional PTCs and PTSD had a stronger connection to depression than to each other. **Conclusions:** Our findings provide support that the core PTSD approach in ICD-11 could help to disentangle PTSD, depression, and dysfunctional PTCs. Investigating the role of depression longitudinally might give insight into the mechanisms and nature relating PTCs and PTSD.

S1.4 Scalable psychological interventions for refugees in Europe and the Middle East

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Track: Transcultural & Diversity

The Syrian war and other ongoing conflicts, led to a massive increase in refugees in the Middle East and Europe. As a result of exposure to war-related trauma and daily living difficulties, refugees are at risk to develop serious mental health problems such as posttraumatic stress disorder (PTSD) and depression. Among barriers to access to mental health care for refugees are stigma, costs and the lack of culture-specific therapies provided in the Arabic language. The World Health Organization has developed brief psychological interventions aimed at reducing psychological distress and improving

functioning in people living in communities affected by trauma. These interventions, including Problem Management Plus (PM+) and its app based variant Step-by-Step (SbS), are intended to be delivered by trained non-professional people, such as peer-refugees. This symposium will present the first pilot randomized controlled trial results of PM+ in the Netherlands and Switzerland and SbS in refugees Germany and Lebanon.

Results of a pilot trial to the adapted Problem Management Plus (PM+) programme for Syrian refugees in the Netherlands

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Vrije Universiteit Amsterdam, the Netherlands

Background: Since the outbreak of the Syrian civil war, 49.143 first asylum requests from Syrian citizens have been registered in the Netherlands. A high number of Syrian refugees report elevated levels of psychological distress (Dagevos et al., 2018; Gammouh et al., 2015). However, mental health care utilization among Syrians is low due to several barriers, including long waitlists, stigma and communication difficulties (Slobodin & de Jong, 2015). *Objective:* the aim of this project was to evaluate the feasibility and acceptability of the PM+ intervention among Syrian refugees in the Netherlands. *Method:* A single-blind, randomized controlled trial (RCT) was conducted among Arabic-speaking Syrian refugees of 18 years and above who reported elevated levels of psychological distress (10 item-Kessler Psychological Distress Scale >15) and impaired daily functioning (WHO Disability Assessment Schedule 2.0 >16). Sixty participants were randomized into care as usual (CAU) or CAU with PM+ (CAU/PM+). Questionnaires were administered at baseline, and at 1-week and 3-month post-intervention. The primary treatment outcome is psychological distress (Hopkins Symptom Checklist). A process evaluation was carried out using qualitative interviews with stakeholders. *Results:* Sixty participants (Age M = 38.1, SD = 12.18, 40% male) were included and randomized into CAU (n=30) or CAU/PM+ (n=30). Participants reported baseline levels of 31.5 (SD = 8.40) on the K10 and 31.1 (SD = 7.40) on the WHODAS. In the symposium, pre- and post-intervention data will be presented. *Conclusions:* The results of the pilot trial are used to inform a definite RCT among 380 Syrian refugees in the Netherlands.

Exploratory RCT: Scaling-up psychological interventions with Syrian refugees in Switzerland

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University Hospital Zurich, University of Zurich, Switzerland

Background: More than 120'000 refugees and asylum seekers are currently living in Switzerland, amongst those more than 14'000 originating from Syria since 2011. Given the high prevalence of distress in refugees and asylum seekers, there is an urgent need for appropriate interventions, which are effective and easy to deliver. *Objective:* Within the STRENGTHS project, we are testing and implementing PM+ in individuals in Switzerland. PM+ is an evidence-based, low-intensity psychological intervention and is delivered by trained lay-helpers. *Method:* Currently, we are conducting an exploratory RCT with the aim to test the feasibility and acceptability of PM+ in Syrian refugees in Switzerland. In this pilot phase, 80 participants are randomized in either the PM+ intervention (n=40) or the enhanced treatment as usual (ETAU) control condition (n=40). Participants in the treatment group receive five sessions of PM+. Participants in the control condition receive ETAU only. Twelve lay-helpers and eight assessors - all refugees and asylums seekers from Syria - have been trained and undergo supervision. Recruitment is focused in three cantons of Switzerland with the largest populations of Syrian refugees. Screening and assessments (pre, post, and 3-months follow-up) are being done online via a web-based screening tool named MAPSS. *Results and conclusions:*

Preliminary results of the exploratory RCT will be presented. Besides, issues around training and supervision of the lay-helpers will be discussed.

Step-by-Step, a guided e-mental health intervention for people living in Lebanon: Results from a pilot randomised controlled trial

Eva Heim^{1,2}, Philip Noun², Jinane Abi Ramia², Edith Van't Hof³, Sebastian Burchert⁴, Ken Carswell³, Rasha Abi Hana², Pim Cuijpers⁵, Rabih El Chammay² and Mark van Ommeren³

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Background: Lebanon has a history of armed conflicts and is among the countries with the highest number of Syrian refugees. Resources for mental health are limited despite a significant need for mental health and psychosocial support services. World Health Organization (WHO), in collaboration with other partners, has developed a guided self-help psychological intervention called Step-by-Step, which was originally based on Problem Management Plus. Step-by-Step is a mobile app and website which can be accessed through different devices. It was culturally adapted to different cultural groups in Lebanon and previously tested in an uncontrolled pilot study. *Objective:* Step-by-Step will be tested in a large-scale randomised controlled trial (RCT) among Lebanese, Syrian refugees, and other people living in Lebanon. A feasibility RCT is currently being conducted before the definitive RCT to test the research procedures. *Method:* Sixty adult participants (30 Syrian refugees and 30 other people living in Lebanon) will be randomised into the treatment and control conditions (1:1). The treatment group will receive access to Step-by-Step, which aside from the self-help programme includes 15-minutes of weekly contact with an e-helper. E-helpers are trained lay people who receive support from a clinical supervisor. The control group will receive “enhanced care as usual”, which includes basic psychoeducation and a list of primary health care services. *Results:* Results of the feasibility trial will be presented, along with experiences with e-helper training and supervision. This information will be used to adjust the procedures for the definitive RCT in Lebanon, and the Step-by-Step trials in STRENGTHS.

User-centered app adaptation of a low-intensity e-mental health intervention for Syrian refugees

Christine Knaevelsrud, Sebastian Burchert and Mohammed Salem Alkneime

Freie Universität Berlin, Germany

Background: The presentation will describe stages of an iterative and user-centered mobile mental health adaptation process. As part of the EU-funded STRENGTHS project, Step-by-Step (SbS), a modularized and originally web-based e-mental health intervention developed by the World Health Organization (WHO) was adapted for use by Syrian refugees on mobile devices. *Objective:* Using early prototyping, usability testing and identification of barriers to implementation, the study demonstrates a user-centered process of contextual adaptation to the needs and expectations of Syrian refugees. In addition, preliminary data from the project’s pilot RCT phase will be presented. *Method:* The adaptation was conducted using qualitative methods with N = 128 adult Syrian refugees residing in Germany, Sweden and Egypt. Methods such as cognitive interviewing, focus groups and prototype testing were utilized to gather user feedback and make informed adaptation decisions. On this basis, the pilot version of the app was built and will be tested in a pilot study in early 2019. *Results:* In the qualitative adaptation phase, a number of important themes were identified. Amongst these were barriers to use, such as technical literacy, acceptability, credibility and access to the internet, as well as common usability and user experience dimensions, such as flexibility and customizability, learnability and aesthetics. *Conclusions:* The findings underline the value of contextual adaptation

with a focus on usability, user experience and context specific dissemination strategies. The presentation will illustrate specific measures that were derived from the results as well as first results of the pilot RCT.

S1.5 Promoting good mental health in the high-risk workplace: Supporting professionals after work-related critical incidents

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Track: Public Health

Employees in high-risk workplaces (e.g. military, first responders) are frequently exposed to critical incidents. PTSD, depression, and anxiety have been found in approximately 10-30% of incident-exposed employees (e.g., Kleim & Westphal, 2011, Traumatology). Prevention of mental health problems is crucial considering the prevalence, burden, and potential negative impact on employee work functioning. The workplace is a vital avenue to support affected employees (early) after critical incidents. In this symposium, we will discuss the needs, preferences and development of (preventive) interventions and learn from different types of high-risk workplaces. Presentations include a general introduction from the perspective of humanitarian aid workers (Thormar, Iceland) and empirical studies on critical incident experiences and the need for support in nurses (van Buschbach, The Netherlands); Peer Support after traumatic incidents in the military (Greenberg, UK); and a smartphone app for healthcare professionals with mild PTSD symptoms (van der Meer, The Netherlands).

Critical incidents in pediatric healthcare professionals: prevalence, impact, and need for support

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Background: Healthcare professionals (HCPs) are routinely exposed to critical incidents and are at risk of developing mental health problems (De Boer et al., 2011, Soc Sci Med). Little is known about the factors that explain HCPs' needs for support at work. *Objective:* To assess the prevalence and impact of critical incidents at work and their relationship with the need for and use of support. *Method:* A cross-sectional online survey with validated questionnaires for PTSD symptoms (PCL-5) and psychological distress (PHQ-4) and single items for need for and use of support. *Results:* Participants (N=121 pediatric HCPs; 90.9% females, 81.8% nurses, mean age=42.6, SD=12.5) reported exposure to different types of critical incidents (Mpast year=6, SD=3.2). An indication for PTSD, anxiety, and depression was present in 3.8%, 4.3%, and 2.6% of HCPs, respectively. PTSD symptom level was explained by past year incident exposure (p=.026) and general work stressors (p<.001), whereas general distress (PHQ-4) was explained by work and private life stressors (p=.035; p<.001). There was a discrepancy between need for support (36.5%) and actual use of support (20.2%, p<.001). Past year incident exposure (p=.048) and PTSD symptoms (p=.017) were related to self-reported need for support, but not to actual use of support or to the gap between need and use. *Conclusions:* Exposure to incidents at work is associated with self-reported need for support. However, not all HCPs in need of support actually use support. Active outreach by trained "peer supporters" (van Buschbach et al., submitted) could partially address this unmet healthcare need.

Active Monitoring through Peer Support after traumatic incidents

Neil Greenberg and Norman Jones

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Background: The UK's National Institute for Health and Care Excellence (NICE) guidelines for the Management of PTSD was published in December 2018. It recommends the use of active monitoring for individuals exposed to traumatic events to establish if they might need treatment for PTSD. *Objective:* To provide an overview of how the Trauma Risk Management (TRiM) peer support programme might be used to achieve active monitoring within trauma-prone organisations such as the military or emergency services. *Method:* Studies of TRiM have been undertaken in UK military, emergency services and diplomatic staff exposed to a wide range of traumatic events. A key element of the TRiM process is having a trained peer speak with a colleague soon after a traumatic event and again a month later. Both quantitative and qualitative methodologies have been used to investigate whether using TRiM leads to improvements in help-seeking and better psychological and behavioural outcomes. *Results:* There have been more than 10 studies of TRiM carried out over the last 15 years. The collective results of these studies show that TRiM does no harm, is associated with decreased post-trauma sickness absence, improved post-trauma within-organization social support, improved post-trauma help-seeking and is seen to supplement rather than replace other organisational support processes. *Conclusions:* TRiM is a credible post trauma intervention which helps organisations provide managerial and collegial support after traumatic events and ensures that individuals who might benefit from professional care receive it. The available evidence supports TRiM being an effective way of delivering active monitoring.

Help in hand after traumatic events: the efficacy of the smartphone app 'SUPPORT Coach' to reduce trauma-related symptoms in health care professionals

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Background: Smartphone applications (apps) may offer self-help tools to empower health care professionals (HCPs) after work-related traumatic events. However, research on the efficacy of these tools is scarce. *Objective:* In this randomized controlled trial we examined the efficacy of the app 'SUPPORT Coach' in reducing posttraumatic stress symptoms (PTSS), negative trauma-related cognitions, lack of social support, and enhancing psychological resilience. Additionally, we evaluated the usability and user satisfaction of the app. *Method:* HCPs (i.e. ambulance workers and hospital staff) with at least one PTSS (PC-PTSD-5 score of ≥ 1) were randomized to the intervention condition (one month unlimited access to SUPPORT Coach, n = 143) or control condition (no access to SUPPORT Coach, n = 144). Online self-report assessments on PTSS (PCL-5), negative trauma-related cognitions (PTCI), psychological resilience (RES), and social support (SSL-6) were completed at baseline (T0), post-condition (T1), and one month follow-up (T2). *Results:* Of 1175 HCPs that completed the online screening, 287 (24.4%) indicated at least one posttraumatic stress symptom. The intervention condition showed a greater decline in negative trauma-related cognitions at T1 and T2, and a larger increase in psychological resilience at T2 than the control condition. There was no significant group difference in T1-T0 or T2-T0 change in PTSS and social support. The majority of intervention condition participants (89.6%, n = 103) used SUPPORT Coach; they were slightly to moderately satisfied with the app. *Conclusions:* SUPPORT Coach helps HCPs to diminish negative trauma-related cognitions, and to strengthen their sense of resilience in coping with adversities.

Chris Hoeboer^{1,2}, Agnes van Minnen^{3,4}, Nikolaus Kleindienst⁵ and Muriel Hagenaars⁶

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Track: Intervention Research & Clinical Studies

About 14 percent of the patients with Post-traumatic Stress Disorder (PTSD) suffer from dissociative symptoms (Stein et al., 2013). In the DSM-5, the dissociative subtype was added to describe these patients (APA, 2013). Patients with this subtype suffer from symptoms of depersonalization (feeling detached from one's own body) and/or derealization (feeling detached from one's surroundings), both forms of psychological dissociation. Somatoform dissociation is also frequently reported in PTSD patients which includes loss of sensory perception/motor control or involuntary perception of sensory information (Kienle et al., 2017). However, the influence of psychological and somatoform dissociation on (trauma-focused) treatment outcome for psychotherapy of PTSD is not clear. It is also not clear whether the effect of dissociation is more pronounced in treatment outcome in specific patient populations. Presentations in the current symposium, followed by a discussion, aim to contribute to information about the influence of dissociation on trauma-focused treatment of PTSD patients.

The influence of dissociation on psychotherapy outcome for PTSD: a meta-analysis

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Background: Many patients with Post-Traumatic Stress Disorder (PTSD) suffer from dissociative symptoms. There is no consensus about whether these dissociative symptoms negatively influence the effectiveness of psychotherapy for PTSD (Lanius et al., 2010; Van Minnen et al., 2012). *Objective:* To examine the impact of dissociation on psychotherapy outcome in PTSD. *Method:* A random-effects meta-analysis is used to calculate a pooled correlation coefficients between pre-treatment dissociation and change in PTSD symptoms from pre- to post-treatment. We conducted a systematic search in Cochrane, Embase, PILOTS, PsycINFO, Pubmed and Web of Science for relevant clinical trials. *Results:* Twenty-one trials with 1,711 patients were included. Pre-treatment dissociation was not related to the treatment effectiveness in patients with PTSD. Between study heterogeneity was high but was not explained by moderators such as trauma focus of the psychotherapy or risk of bias score. There was no indication for publication bias. *Conclusions:* We found no evidence that dissociation influences the effectiveness of psychotherapy for PTSD. Therefore, dissociation does not seem to be a contraindication for (trauma-focused) psychotherapy in PTSD.

Dissociation interferes with successful treatment of posttraumatic stress disorder (PTSD) related to childhood abuse. Results from a randomized controlled trial

Nikolaus Kleindienst

Central Institute of Mental Health, Mannheim, Germany

Background: Patients with posttraumatic stress disorder (PTSD) related to childhood abuse are particularly prone to dissociation (Vonderlin et al., 2018). Since dissociation is known to impede emotional learning (Ebner-Priemer, et al., 2009) dissociation has been hypothesized to interfere with trauma-focused psychotherapies of PTSD. However, empirical studies on the impact of dissociation on treatment success of major psychotherapies of PTSD are mixed. *Method:* A total of n=193 adult women with PTSD related to sexual or physical abuse during childhood were randomized to outpatient treatment with either Cognitive Processing Therapy (CPT) or Dialectical Behaviour Therapy for PTSD (DBT-PTSD). A generalized linear model controlling for symptom severity at baseline was used to

explain changes in the Clinician- Administered PTSD Scale (CAPS) from i) dissociation (DSS, Stiglmayr, et al., 2010), ii) treatment group (CPT vs DBT-PTSD), and iii) dissociation*treatment. *Results:* The improvement of CAPS-scores was more pronounced in patients randomized to DBT-PTSD than in those who received CPT (between-group effect-size $d=0.57$, $p<0.01$). The main effect of dissociation was significant ($p<0.01$), but the data yielded no indication for differential effects of dissociation in CPT vs DBT-PTSD ($p=0.65$). *Conclusions:* Dissociation may reduce success with trauma-focused therapies such as CPT and DBT-PTSD. Accordingly, clinical studies aimed at improving ways to address dissociation during trauma-treatment are necessary.

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Somatoform dissociation as predictor of trauma-focused treatment outcome

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Background: Dissociation (both psychological and somatoform) is often assumed to negatively influence the outcome of trauma-focused treatments. *Objective:* To study the influence of somatic dissociation on the outcome of an intensive 8-days trauma-focused treatment program, including Prolonged Exposure and EMDR. *Method:* Included patients suffered from severe (Complex) PTSD and high rates of comorbidities, including dissociative and somatoform disorders. Somatoform dissociation was measured at baseline and posttreatment using the Somatoform Dissociation Questionnaire-20. The dependent variable was PTSD symptom severity (CAPS). Data will be analyzed with multiple regression analysis. *Results:* Data collection is currently running, and data of 300 patients will be analyzed (current $N=138$). Hypotheses are that, somatoform dissociation at baseline is not predictive of treatment outcome. *Conclusions:* Thus far, available studies focused on the influence of psychological dissociation, while studies about the influence of somatic dissociation on trauma-focused treatment outcome is lacking. Our findings can be informative about treatment programs for PTSD-patients suffering from high levels of somatic dissociation.

11:30 12:45 Parallel session #2

S2.1 Prevalence matters: the influence of socio-demographic and loss-related variables on the development of Prolonged Grief Disorder

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Track: Assessment & Diagnosis

A meta-analysis is currently being conducted on Prolonged Grief Disorder (PGD) following unnatural losses. Preliminary results indicate a much higher prevalence than the prevalence of PGD following natural losses. In addition, other loss-related variables may be associated with PGD prevalence. This symposium aims to illustrate the clinical implications of these "prevalence matters" by presenting two studies of large help-seeking samples of bereaved individuals. The first study is based on data from 942

Western homicidally bereaved individuals. The second study examined data from 2404 Arabic speaking bereaved individuals. The third study introduces a culturally-sensitive online assessment measure of PGD for Swiss, Japanese and Chinese bereaved individuals.

Prolonged Grief Disorder in bereaved individuals following unnatural losses: preliminary findings

Manik Djelantik^{1,2}, Geert Smid², Anna Mroz¹, Rolf Kleber¹ and Paul Boelen¹

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Background: Previous research has indicated that 10% of naturally bereaved individuals develops Prolonged Grief Disorder (PGD). Less is known about the prevalence of PGD following unnatural deaths, such as accidents, disasters, suicides, or homicides. *Objective:* The aim of the current study is to compute the prevalence of PGD and to determine possible predictors. *Method:* A literature search and a meta-analysis are currently being performed to calculate the pooled prevalence rate of PGD. Multivariate meta-regression is used to explore heterogeneity among the studies. *Results:* Preliminary findings suggest that the prevalence of PGD following unnatural losses is much higher than PGD following natural losses. Loss-related variables may be associated with the prevalence rate. *Conclusions:* This study could provide valuable information which may help to identify PGD and underscores the importance of addressing PGD in individuals affected by loss and trauma.

Prevalence of Prolonged grief disorder in Arabic-speaking help-seeking populations

Birgit Wagner¹, Maria Böttche² and Christine Knaevelsrud¹

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Background: In the past 30 years, war and conflicts have led to high rates of losses among people in the Middle East. However, only few studies to date have measured prolonged grief disorder in this population. *Method:* Prevalence of prolonged grief disorder, sociodemographic characteristics, PTBS and Depression were examined in a help-seeking sample (N = 2404) of an internet-based intervention for PTBS. Grief-related symptoms were assessed with the Inventory of complicated grief, depression with the Hopkins Symptom Checklist and posttraumatic stress disorder with the Posttraumatic Diagnostic Scale at pretreatment. *Results:* The results reveal a prevalence rate of 7.4% for prolonged grief disorder. 23% of the participants experienced the killing of a family member and 93% lost a significant person under other traumatic circumstances. *Conclusions:* This study provides evidence that the prevalence of prolonged grief disorder in Arabic-speaking countries is comparable to Western samples and have substantial mental health implications for those suffering of a pathological grieving process.

Prevalence and predictors of psychiatric disorders in a large help-seeking sample of homicidally bereaved persons

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¹Arq Psychotrauma Expert Group / Foundation '45, the Netherlands; ²Utrecht University, the Netherlands; ³ASSIST Trauma Care, UK

Background: Literature on grief reactions in the aftermath of a homicide is scarce and inconclusive, often describing small and heterogenous (sub)samples, yielding varying results. *Method:* Data of 942 individuals who are bereaved due to homicide were analyzed. Data were obtained from ASSIST Trauma Care UK, a specialist Third Sector (Not-for-Profit) Organization providing specialist therapeutic intervention to homicide survivors. Measures included questionnaires assessing symptoms of PTSD, PGD, anxiety, and depression, as well as sociodemographic and homicide related characteristics.

Results: Prevalence rates of PTSD, PGD, and clinically relevant anxiety and depression were generally quite high. Status of the judicial process was one of the variables rendering people prone to elevated distress. *Conclusions:* This study provides insight into the prevalence and correlates of grief related disorders following bereavement through homicide. Information obtained can inform the improvement of treatment options.

MAPAsia - Measurement and Assessment of Prolonged Grief Disorder in Swiss, Japanese and Chinese Bereaved Adults: preliminary findings

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Background: The definition of prolonged grief disorder (PGD) for the ICD-11 is based on symptoms found in Western society and guidelines for diagnosis have been preliminarily validated in this context. The validity and acceptability of these diagnostic guidelines in Japan and China is currently unknown. The present project explores similarities and contrasts in purported symptoms associated with grief (including somatization, and the identification of cultural idioms of grief distress) in detail in Chinese, Japan and Swiss bereaved individuals. *Objective:* The overall aim of the study is to develop a culturally-sensitive online assessment measure of PGD for Swiss, Japanese and Chinese bereaved. *Method:* The study consists of two sub-studies: semi-structured interviews (= sub-study 1) explored key informants understanding of grief (N=20). The International Prolonged Grief Disorder Scale (IPGDS) was adapted accordingly. Focus groups with bereaved participants adapted the IPGDS to an online (mobile or web-based) format. The acceptability and feasibility of the online IPGDS along with preliminary psychometric validation will be examined with battery of questionnaires (N=200 participants in each culture) (= sub-study 2). *Results:* Sub-study 1: culturally sensitive versions of the IPGDS have been developed from qualitative interviews with Swiss, Japanese and Chinese health care workers. The beta draft of an online version of the IPGDS is currently piloted for feasibility, acceptability and preliminary psychometric properties. *Conclusion:* This is the first study to explore grief cross culturally in Japan, China and Switzerland and to develop a culturally sensitive measure of grief based on the new ICD-11 criteria.

S2.2 Posttraumatic stress disorder due to early childhood trauma: Research on innovative trauma-focused treatments

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Track: Child Trauma

Both national and international a strong debate is going on about the best treatment for patients with PTSD related to childhood abuse (CA-PTSD). As a result, practitioners may feel helpless: Which treatment is best for my complex patient, and which approach fits when? This symposium contributes to the answer on the first question. We present research, in different stages, on innovative applications of existing treatments for patients with CA-PTSD. More specifically, we focus on working alliance in innovative forms of trauma-focused treatment, on working elements of trauma-focused treatment from a patient perspective, and on the effect of additional skills training on Imagery rescripting. Our goal is to give practitioners better grip and to improve treatment outcome for this vulnerable patient group.

Working alliance in trauma-focused treatment for patients with childhood abuse related PTSD

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Background: Interpersonal distrust, problems in affect regulation and a negative self-concept are common in patients with childhood abuse related posttraumatic stress disorder (CA-PTSD) (Cloitre et al., 2002). The lack of affect regulation skills may compromise the formation of an effective working alliance (WA) (Cloitre et al., 2004). In the context of a clinical trial, we compared WA during exposure treatment with two variants of exposure treatment in 150 patients. One variant involves skills training (which may facilitate WA); the other is intensive treatment involving two rotating therapists (which may compromise WA). *Objective:* To compare working alliance during three variants of prolonged exposure. *Method:* Working alliance was measured with the Working Alliance Inventory (WAI, Horvath & Greenberg, 1989). Assessments were made after 4 sessions. *Results:* Analyses are ongoing. Results will be presented at the presentation. *Conclusions:* Increasing knowledge on working alliance in innovative forms of trauma-focused treatment is necessary to inform treatment decisions by therapists and patients.

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Patients' perspective on the effective working mechanisms in ImRs and EMDR treating childhood-trauma related PTSD; a qualitative study

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Background: ImRs and EMDR, two promising techniques in treatment for childhood-trauma based PTSD, were compared in a randomized controlled study, the IREM study (Boterhoven de Haan et al., 2017). For ImRs; the predominant explanation is that it works by changing the meaning of trauma events (Arntz, 2012). In the case of EMDR the most recent theory is the working memory theory (Van den Hout & Engelhard, 2012). A qualitative study was done on patients' perspectives on the working mechanisms in these two techniques. *Objective:* The study addressed the following questions: - What are the most effective elements in the followed treatment according to patients? - Is there a difference between the two treatments in this respect? *Method:* Opinions of 40 patients participating in the IREM study in Australia, Germany and the Netherlands were collected with semi structured in-depth interviews. Thematic analysis was used for analysing the interviews. *Results:* At this symposium the results of the interviews in Australia, Germany and the Netherlands will be presented. *Conclusions:* The perspective of patients will help us to improve treatments, and to instruct therapists and patients helping them to get the best results possible.

Imagery Rescripting versus STAIR/Imagery Rescripting for PTSD related to Childhood Abuse: A Randomized Controlled Trial

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¹University of Amsterdam, the Netherlands; ²Ludwig-Maximilians-University of Munich, Germany; ³Jellinek, the Netherlands

Background: In the past years Imagery Rescripting (ImRs) receives increasing attention as an alternative approach for the treatment of PTSD related to chronic early childhood trauma. The results so far with ImRS are promising (Arntz, 2012; Raabe, Ehring, Marquenie, Olff, & Kindt, 2015). However, until now, the effectiveness of this approach has not been systematically investigated yet. Therefore, we conducted a randomized controlled trial at two outpatient clinics. The results will be presented here. *Objective:* We examined two main questions: 1) what is the efficacy of Imagery Rescripting (ImRs) as stand-alone treatment for patients with complex PTSD related to childhood abuse, and 2) does the addition of skills training in emotion and interpersonal regulation (STAIR, Cloitre, Cohen, & Koenen, 2006) as a preparatory phase prior to the ImRs-treatment phase enhance the treatment effect for PTSD-symptoms. *Method:* This randomized controlled trial provides data on a comparison of ImRs as stand-alone treatment compared to the sequential treatment (STAIR/ImRs) and to a waitlist control group. Data consist of single-blind obtained interview-based measures for PTSD, and self-report measures for PTSD-symptoms, emotion regulation, and interpersonal functioning. Assessments were conducted at pre-/post and 3-month follow-up. *Results:* A linear mixed models analysis shows that both treatments are effective in reducing PTSD symptoms, but there is no evidence that STAIR/ImRs is more effective than ImRs alone. *Conclusions:* ImRs is effective in treating PTSD related to early childhood trauma. A sequential treatment may not be necessary for this type of PTSD.

S2.3 Long-term cognitive and neurobiological alterations related to childhood trauma exposure in psychotic disorders

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Track: Child Trauma

Exposure to childhood trauma is implicated in the development of a range of psychiatric conditions, including psychotic disorders. Trauma-related influence on critical neurobiological systems (stress, inflammation) can lead to changes in brain morphology/function, and their associated cognitive functions. In this symposium, early-career researchers will present empirical data on the long-term impacts of childhood trauma exposure in adults with psychotic disorders. First, Ms. Susanne Breinlinger will present her results on the impact of timing and type of childhood adversities on cognitive performance in psychosis. Then, Dr. Yann Quidé will present his recent findings on the role of trauma exposure in moderating associations between inflammation, brain morphology and cognitive performance among psychosis cases. Our last speaker, Dr. Maria Dauvermann, will describe how childhood trauma exposure is associated with functional brain alterations during cognitive performance or at rest. Finally, Prof. Melissa Green will facilitate what will likely be a lively and topical discussion.

Defining the impact of childhood adversities on cognitive deficits in psychosis: An exploratory analysis

Susanne Breinlinger

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Background: Exposure to adverse childhood experiences (ACE) and cognitive deficits are both prevalent in psychosis. While it has been repeatedly demonstrated that ACE contribute to cognitive dysfunctions, the specific nature of this contribution remains elusive. Recent evidence suggests that types of adversities during critical periods have deleterious effects on brain structures that are important for cognitive functioning. **Objective:** The present study sought to clarify which types of adversities experienced at which time during development aggravate cognitive deficits in psychosis. **Method:** Exposure to abuse and neglect during childhood and adolescence were retrospectively assessed in N = 168 adult individuals with psychotic disorder. Conditioned random forest regression was used to define the importance of type and timing of ACE for predicting domains of the MATRICS Consensus Cognitive Battery (MCCB). **Results:** Significant importance of ACE was determined for 5 out of 7 MCCB domains. Particularly abuse at age 3 contributed to dysfunctional cognitive domains attention, learning, and working memory. Social cognition was related to neglect experienced at 11–12 years, and to cumulative ACE. **Conclusions:** Abuse and neglect at periods when children spend substantial time in their families affect cognitive functioning, and hence aggravate dysfunction in psychosis. Results support the neurodevelopmental perspective on psychosis and the diagnostic value of type and timing of ACE.

Childhood trauma exposure and inflammation in psychotic disorders

Yann Quide^{1,2}, Chiara Bortolasci³, Briana Spolding³, Srisaiyini Kidnapillai³, Oliver Watkeys^{1,2}, Sarah Cohen-Woods⁴, Michael Berk^{5,6,7}, Vaughan Carr^{1,2,8}, Ken Walder³ and Melissa Geen^{1,2,1} University of New South Wales, Australia; ²Neuroscience Research Australia, Australia; ³Centre for Molecular and Medical Research, School of Medicine, Deakin University, Australia; ⁴Flinders University, Australia; ⁵University of Melbourne, Australia; ⁶Orygen, the National Centre of Excellence in Youth Mental Health, Australia; ⁷Impact Strategic Research Centre, Deakin University, Australia; ⁸Department of Psychiatry, School of Clinical Sciences, Monash University, Australia

Background: Elevated levels of pro-inflammatory markers are consistently reported in people with schizophrenia (SZ) and bipolar-I disorder (BD), as well as people exposed to childhood trauma. However, associations between trauma exposure, inflammation levels, brain morphology and cognition in psychotic disorders are not well understood. **Objective:** To examine whether childhood trauma exposure moderates the relationship/s between peripheral inflammation, brain morphology and cognition. **Method:** Participants were 71 SZ cases and 72 psychotic BD cases who underwent magnetic resonance imaging, provided blood serum from which levels of interleukin 6 (IL-6), tumour necrosis factor alpha (TNF- α) and C-reactive protein (CRP) were quantified, completed a battery of cognitive testing and the Childhood Trauma Questionnaire. **Results:** Within the BD group, as levels of IL-6 (but not CRP or TNF- α) increased, the volume of the bilateral dorsolateral prefrontal cortex and right fusiform gyrus decreased in those exposed to low (but not high) levels of trauma; there was no effect on cognitive performance. In contrast, in the SZ group, as levels of CRP (but not IL-6 or TNF- α) increased, the volume of the posterior cingulate cortex/precuneus and the left superior parietal lobule decreased, and spatial working memory performance increased, in those exposed to low (but not high) levels of trauma. **Conclusions:** Our results indicate that childhood trauma exposure differentially moderates the relationship between peripheral inflammation, brain morphology and cognitive performance among cases with psychotic BD and SZ. This suggests that exposure to childhood trauma may impact stress and immune systems differently in people suffering from BD and SZ.

Novel influence of early-life adversity across functional networks during working memory and resting-state in schizophrenia

Maria Dauvermann, David Mothersill, iRELATE consortium and Gary Donohoe

National University of Ireland, Ireland

Background: Alterations in functional networks during working memory (WM) and resting-state (RS) have been repeatedly reported in schizophrenia (Teicher et al., 2016). **Objective:** Here, we tested whether early-life adversity (ELA) is associated with alterations of functional networks during WM and RS. **Method:** Data were analyzed from 69 healthy controls (HC) and 26 patients with chronic schizophrenia (SZ). Individuals completed the Childhood Trauma Questionnaire (CTQ) (Bernstein et al. 1994), performed a spatial WM task (Callicott et al. 2003) and a RS scan while undergoing functional MRI. We compared the impact of ELA severity on functional connectivity during WM and RS across different functional networks. **Results:** Patients with SZ reported significantly greater ELA severity than HC. We found different patterns of functional connectivity findings for WM and RS. For WM, only HC with low ELA severity levels showed reduced functional connectivity in task-based networks, but not in HC with high ELA severity levels or SZ. Conversely for the RS network, only SZ with high ELA severity levels showed significantly reduced functional connectivity, but not in SZ with low ELA levels or HC. For RS, we observed a significantly increased connectivity in SZ with low ELA levels relative to HC with low ELA levels. **Conclusions:** These results suggest that alterations across networks during WM and RS are correlates of ELA experience in both HC and SZ, rather than an illness-effect in SZ. We speculate that these findings may reflect a biomarker of ELA experience.

S2.4 Evaluating the implementation of the World Health Organisation's scalable psychological interventions for refugees in the Middle East

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Track: Transcultural & Diversity

Tremendous care gaps exist in access to mental health services globally. In low and middle-income countries (LMICs) it is estimated that over 80% of individuals requiring mental health services do not receive the care required. Furthermore, the majority of armed conflicts occur in LMICs, and LMICs also host the majority (86%) of the world's refugees. This frequently results in dramatically increased mental health needs in the context of health systems that are ill-equipped to cope with the burden. Innovative evidence-based interventions are needed, that are feasible to deliver in under-resourced settings. This symposium will present findings from the Scaling-up Psychological Interventions with Syrian Refugees (STRENGTHS) consortium, involving an analysis of health care utilization and access to services for Syrian refugees in Turkey, the cultural adaptation of a World Health Organization scalable psychological interventions for adolescents in Lebanon, and pilot trials of psychological interventions for adults in Turkey and Jordan.

Mental health care utilization and access to health services among Syrian refugees in Turkey

Daniela Fuhr¹, Ceren Acartürk², Michael McGrath³ and Bayard Roberts¹

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Background: Turkey is home to the highest number of Syrian refugees who fled their country since the onset of the Syrian Civil War. The exposure to war and violence makes refugees vulnerable to psychosocial distress, which may manifest in mental disorders if remaining untreated. Psychosocial services are offered to refugees in Turkey, however, data on utilization patterns and access to services is lacking. **Objective:** Our study sought to examine utilization patterns of mental health and psychosocial support services among Syrian refugees in Turkey and to explore reasons for not seeking

health services. *Method:* A cross-sectional survey design was used. The study sample consisted of 1678 Syrian refugees who were residing in Sultanbeyli, İstanbul. Data on mental health care utilisation were collected, along with outcomes including PTSD, depression, and anxiety. *Results:* The prevalence of PTSD, anxiety and depression was 15.2%, 43.4% and 53.3% respectively. The overall treatment gap was 89%. Out of the participants screening positive for a mental disorder and who self-reported mental health problems only 26 (8%) sought care. The majority of Syrian refugees reported an array of attitudinal and structural barriers which hindered them to seek care. *Conclusion:* This study confirmed that there is a high number of Syrian refugees in Turkey who suffer from a mental disorder and need treatment. Services are not adequately used by Syrian refugees despite their availability. New interventions which overcome barriers of care need to be implemented to reduce the treatment gap for common mental disorders among this population group.

Cultural adaptation of the Early Adolescent Skills for Emotions programme for use in Lebanon

Felicity Brown, Mark Jordans, Karine Taha and Frederik Steen

War Child Holland, the Netherlands

Background: Globally, there is a vast mental health care gap, whereby the majority of individuals living in low and middle income countries requiring mental health services, do not access adequate care. There is increasing evidence for the applicability of evidence-based interventions across cultures. (Brown et al., 2017) However, adaptation to culture and context results in better outcomes and uptake. (Harper et al., 2016). *Objective:* To conduct a systematic adaptation of the Early Adolescent Skills for Emotions (Dawson et al., in press) programme for use in Lebanon. *Method:* i) literature review; ii) qualitative assessment; iii) cognitive testing of materials with parents and adolescents; iv) 'mock sessions' with professionals; v) adaptation workshop; vi) intervention pilots. *Results:* Materials were iteratively revised. During piloting, the programme was found to be useful, acceptable, and applicable. *Conclusions:* Systematic cultural adaptation is vital for ensuring uptake and effectiveness of interventions in a new context.

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Effectiveness of Group Problem Management Plus (PM+) in Reducing Symptoms of Depression and Anxiety Among Syrian Refugees in Turkey: Results of a Pilot Study

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Background: Syrian refugees have been exposed to traumatic events and post migration difficulties since conflict in Syria. Research indicates high risk for common mental disorders for Syrian refugees. However, there is scarce of evidence based culturally adapted psychosocial interventions for them. WHO has developed PM+ to address the mental health gap in communities exposed to adversity. In

previous trials, PM+ has been found to be effective in Pakistan and Kenya (2, 3). Its characteristics makes PM+ suitable to be scaled up: 1) it is a brief intervention with 5 sessions, 2) it can be delivered by trained and supervised lay people, 3) it's a transdiagnostic intervention which address depression, anxiety or other symptoms at the same intervention. *Objective:* It was aimed to examine the effectiveness of culturally adapted group PM+ in reducing depression, anxiety, trauma and stress symptoms and functional impairment among Syrian refugees. *Method:* A randomized controlled trial with 64 Syrian refugees in a community sample was conducted. Participants with elevated levels of distress according to Kessler 10 (K10 > 15) and self-reported functional impairment (WHODAS 2.0 > 16) were randomly allocated in a 1:1 ratio either to PM+ group or enhanced care as usual (E-CAU) which consists an information leaflet about available health services in Istanbul. The primary outcome is psychological distress, measured by Hopkins Symptoms Checklist 25 at 3 month follow-up and secondary outcome includes posttraumatic stress reactions (PCL-5). *Results:* The results of the pilot RCT will be examined. *Conclusions:* The findings will be discussed.

Effectiveness of Group Problem Management Plus (gPM+) in Reducing Psychological Distress Among Syrian Refugees in Jordan: A Feasibility Study

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Background: There are currently over 670,000 Syrians registered with UNHCR as refugees in Jordan (UNHCR, 2018). High levels of susceptibility of mental illness in this population have caused a burden on the mental healthcare system. Low-intensity interventions have helped circumvent this burden, allowing for training of, and implementation by lay-workers. Problem-Management Plus (PM+) is one intervention that has shown to be effective in reducing psychological distress and severity of symptoms associated with common mental disorders (Rahman et al., 2016; Bryant et al., 2017). Recently, a group PM+ intervention (gPM+) has been developed in addition to the previously available individual version. *Objective:* The primary objective was to examine the feasibility of implementing large-scale randomized controlled trials (RCT) within a refugee camp in Jordan. Secondary objectives include looking at the cultural acceptance and preliminary effectiveness of gPM+ among Syrian refugees. *Method:* An RCT was conducted with participants (n=64) receiving gPM+ (n=32) or enhanced treatment as usual (n=32). Inclusion criteria included those with increased levels of distress (K10>15) and functional impairment (WHODAS 2.0>16). The primary outcome is level of psychological distress during post-assessment (HSCL). Secondary outcomes include measures of PTSD, prolonged grief, effects on child distress and cost-effectiveness. *Results:* The results of the feasibility RCT will be presented. *Conclusion:* The findings will be discussed with regards to feasibility and barriers of conducting large scale RCTs in a Syrian refugee camp.

S2.5 From trauma-informed care and latest PTSD treatment guidelines to professional PTSD training program evaluation: A symposium hosted by the German speaking Society for Psychotraumatology (DeGPT)

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Track: Intervention Research & Clinical Studies

This symposium features recent clinical and research activities conducted on behalf of and/or by members of the German speaking Society for Psychotraumatology (DeGPT), one of the largest societies under the ESTSS umbrella. The presentations thus showcase some of the most recent activities of our

society. We will start with a study on current methods of psychosocial trauma-informed care for traumatised adolescents (Schmid). Second, a recent investigation on behalf of the DeGPT into PTSD treatment training programs will be presented and this will include important implications and future considerations for the development of such curricula (Bartels). Finally, DeGPT supported the development of new PTSD treatment guidelines, due to be published this year and some of the key psychotherapeutic and pharmacological recommendations for treating PTSD will be presented (Schäfer). Together the contributions provide an opportunity to learn from recent advances in traumatic stress research and hear about clinical insights and innovations.

The curricula psychotrauma therapy and psychotrauma therapy with children and adolescents of the German speaking society for psychotraumatology: An evaluation of the current state

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Background: In 2009, the German speaking society of psychotraumatology (Deutschsprachige Gesellschaft für Psychotraumatologie (DeGPT)) introduced two advanced training programs, special psychotrauma therapy and psychotrauma therapy with children and adolescents, to further facilitate specialized knowledge in the treatment of patients with posttraumatic stress disorders. *Objective:* The aim of this survey was to evaluate the current state of the content and implementation of the two offered advanced training programs from the perspective of the institute directors and the graduates to gain insight in optimization needs. *Method:* A total of n = 38 (38.8%) institute directors and n = 299 graduates (57.5%) participated in the online-survey. Aspects regarding the curricula, the teaching of psychotrauma therapy approaches, treated patients and change requests were assessed with two self-designed online questionnaires. Additionally, a grading of the current curricula was requested. *Results:* The overall rating of the curricula by the institute directors was good and by the graduates excellent (Mgraduates = 1.78, Minstitute = 2.06; 1 = "excellent" to 6 = "insufficient"). The most frequently taught and learned therapy approaches within the curricula were Eye Movement Desensitization and Reprocessing (EMDR) and Trauma-Focused Cognitive Behavioral Therapy. Furthermore, both parties requested more sufficient imparting of theory and skills in the treatment of refugees and patients with acute stress as well as complex posttraumatic stress disorder. *Conclusions:* Generally, the results of the survey indicate that the graduates and institute directors are satisfied with the curricula. Future adjustments to specific aspects and graduation requirements could assure further improvement of the curricula.

The National German Guideline on the Treatment of Posttraumatic Stress Disorder: An Initiative of the German-speaking Society for Psychotraumatology (DeGPT)

Ingo Schäfer¹, Ursula Gast², Arne Hofmann³, Christine Knaevelsrud⁴, Astrid Lampe⁵, Peter Liebermann, Andreas Maercker⁶, Rita Rosner⁷ and Wolfgang Wöller⁸

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Background: Two decades ago, the German-speaking society for psychotraumatology (DeGPT) published 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 5 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, 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 behavioral 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, behavioral 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 behavioral 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 behavioral 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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Saarland University, Germany

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

Birgit Kleim and Ines Wilhelm

University of Zurich, Switzerland

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 memories. *Objective:* The present study aimed to replicate these findings in a nap study in healthy females (N= 60) exposed to experimental trauma. We hypothesized that (i) a 90-minute nap is sufficient to produce a similar protective effect of sleep on intrusive memories and (ii) REM sleep is associated with reduction in intrusive memory distress. *Results:* Results showed no difference between nap and wake groups in intrusions frequency and level of distress. However, presence of REM sleep during the nap determined frequency and distress of intrusive memories. Those with periods of REM sleep experienced fewer and less distressing intrusive trauma memories than those who did stay awake and those without REM sleep. *Conclusions:* Our findings indicate that a nap including REM sleep can play a protective role in intrusion formation and have implications for prevention science.

Saturday June 15th 2019

Day #2

8:30 9:45 Parallel session #3

S3.1 Towards an integrated conceptualization of Traumatic Grief

Paul Boelen^{1,2}, Manik Djelantik^{1,2}, Suzan Soydas^{1,2} and Geert Smid²

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Track: Assessment & Diagnosis

Recently, the diagnoses Persistent Complex Bereavement Disorder (PCBD) and Prolonged Grief Disorder (PGD) have been included in resp. the DSM-5 and ICD-11. However, there is an ongoing discussion about which concepts and which criteria best describe the phenomenon of disturbed, complicated, or traumatic grief. In this symposium, we will discuss several studies that offer different perspectives on the conceptualization of this condition. In the first presentation the difference in factor

structure, prevalence, and validity of disturbed grief in DSM-5 and ICD-11 will be discussed. Furthermore, the symposium covers presentations about the influence of culture on the nature and assessment of (disturbed) grief symptoms, symptoms predicting problematic grief trajectories, and variables associated with alleviation of disturbed grief symptoms during traumatic-grief focused CBT for homicidally bereaved people. At the end, participants will be up to date in the recent scientific discussions about the conceptualization of traumatic grief.

Disturbed grief in DSM-5 and ICD-11: Overlapping or different syndromes?

Paul Boelen^{1,2}, Lonneke Lenferink³, Mariken Spuij¹ and Geert Smid²

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Background: Three decades of research on disturbed grief has led to the inclusion of persistent complex bereavement disorder (PCBD) in DSM-5 and prolonged grief disorder in ICD-11. For clinical practice and research, it is important that PCBD and PGD represent the same construct. Is that so? *Objective:* We conducted three studies, the goal of which was to evaluate differences and overlap between criteria for PCRS and PGD. *Method:* The first study was a cross-sectional study with over 400 bereaved people. The second was a longitudinal study including 500 individuals. The third evaluated PCBD and PGD among 8-18 yr old children. *Results:* Outcomes of the studies indicated that (i) PCBD encompasses three distinguishable symptom-clusters and PGD one cluster, (ii) both syndromes are strongly associated with concurrent posttraumatic stress and depression, (iii) PCBD is considerably less prevalent than is PGD, and (iv) PCBD has better predictive validity. *Conclusions:* PCRS and PGD are not completely overlapping syndromes. Implications of this outcome are discussed with a specific focus on what can be done to harmonize the two criteria-sets, in order to foster research and care focused on helping the bereaved.

Early indicators of a problematic grief trajectory following bereavement

Manik Djelantik¹², Geert Smid², Rolf Kleber² and Paul Boelen¹²

¹Utrecht University, the Netherlands; ²Arq Psychotrauma Expert Group, Centrum '45, the Netherlands

Background: For clinical purposes, it would be useful to have knowledge about early indicators of problematic PGD trajectories. *Objective:* The aim of this study was to identify classes of bereaved individuals with similar trajectories of PGD symptoms and to identify symptoms predicting the classes with a problematic grief trajectory. *Method:* using data from 166 Dutch bereaved individuals, we conducted a latent class analysis to identify classes of bereaved individuals with similar trajectories of PGD symptoms between two time points (resp., 6 months and 18 months). Next, we used Receiver Operating Characteristic (ROC) analysis to examine which early symptoms best predicted membership of a class with a problematic grief trajectory. *Results:* we found two classes with a problematic grief trajectory in adults over the first two years after a loss. Daily endorsement of yearning, feeling stunned, anger and/or feeling that life is empty could act as early indicators of these two classes. *Conclusions:* this first study about early indicators of problematic grief trajectories among adults will help caregivers to identify bereaved individuals at risk for developing psychopathology.

Risk and protective factors for symptom reduction following traumatic grief focused CBT

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¹Arq Psychotrauma Expert Group, Centrum '45, the Netherlands; ²Utrecht University, the Netherlands; ³ASSIST Trauma Care, UK

Background: Although it appears evident that emotional consequences of homicidal loss merit clinical attention, options for both preventative and curative treatments are scarce. To this date, few studies have examined treatments specifically targeting emotional problems of homicidally bereaved individuals. *Objective:* To offer a preliminary evaluation of the potential effects of a traumatic grief-focused outreaching model of care. *Method:* Pre- and posttreatment data were obtained from 942 individuals who underwent traumatic-grief focused CBT provided by ASSIST Trauma Care UK designed specifically for homicide survivors. Baseline levels of PTSD, Prolonged grief disorder, anxiety, depression and general functioning as well as change scores were estimated using latent growth models in Amos. Sociodemographic, therapy, and homicide related characteristics were included as predictors. *Results:* A significant decline in scores was found on all measures, and effects were found on sociodemographic, therapy, and homicide related characteristics, both on op baseline levels and change scores. *Conclusions:* The shown impact of several predictors on baseline and change scores underlines the importance to tailor treatment to the specific needs associated with individual and homicide related characteristics following a homicide.

Culturally sensitive assessment of traumatic grief

Geert Smid¹, Sophie Hengst¹, Simone De la Rie¹, Simon Groen² and Paul Boelen^{1,3}

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Background: Migrants and refugees are at increased risk of traumatic loss of loved ones that may cause specific psychopathology. Ways of dealing with bereavement and grief are influenced by the norms of one's cultural identity. Cultural assessment of bereavement and grief is therefore needed for a comprehensive evaluation of grief-related psychopathology and for negotiating appropriate treatment (Smid et al., 2018). *Objective:* To evaluate the risk of psychopathology related to traumatic and multiple loss in refugees and to describe a culturally sensitive assessment of traumatic grief. *Method:* We evaluated the effects of traumatic and multiple losses of family members and friends on psychopathology, disability, and quality of life in Iraqi asylum seekers in the Netherlands (Hengst et al., 2018). To facilitate clinical exploration of cultural aspects of bereavement and grief, we developed a set of brief, person-centered, and open-ended questions as a draft supplementary module to the DSM-5 Cultural Formulation Interview. (CFI; Smid et al., 2018). *Results:* The loss of a loved one was reported by 87.6% of the sample. Traumatic and multiple losses of family members independently predicted psychopathology (Hengst et al., 2018). Cultural ways of dealing with bereavement and grief include cultural traditions related to death, bereavement, and mourning as well as help seeking and coping (Smid et al., 2018). *Conclusions:* Clinicians need to assess psychopathology related to traumatic loss in a culturally sensitive way, especially when working with migrants and refugees. The proposed supplementary module bereavement and grief to the DSM-5 CFI supports such assessment.

S3.2 Adolescence and PTSD: Perspectives on Gender, Sleep and PTSD Outcomes in Different Contexts

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¹University of Bath, UK; ²Stellenbosch University, South-Africa; ³Ulster University, UK

Track: Intervention Research & Clinical Studies

This symposium will address epidemiological, phenomenological and treatment aspects of PTSD in adolescence, a vulnerable developmental stage associated with an increased risk for trauma exposure and a high prevalence of PTSD and co-morbid disorders. Presenters from high and low and middle income countries present research findings born out of a collaboration. A longitudinal UK study will report on the emergence of sex differences in PTSS from childhood to adolescence. Sleep difficulties

are pervasive in PTSD and an important treatment target in adolescence. We present data on the relationship between sleep difficulties and PTSD symptom severity in trauma exposed, treatment-seeking adolescents. The findings of a pilot feasibility RCT of adolescents diagnosed with PTSD and sleep disturbances are presented. Considering the paucity of treatment outcome studies in adolescents with PTSD a RCT in adolescents with PTSD, utilising task-shifting will report on the long-term outcomes of prolonged exposure compared with supportive counseling.

The emergence of sex differences in PTSD across development: Evidence from the ALSPAC cohort

Sarah Halligan¹, Katharina Haag¹, Abigail Fraser², Rachel Hiller¹ and Seedat Soraya³

¹University of Bath, UK; ²University of Bristol, UK; ³Stellenbosch University, South-Africa

Background: Cross-sectional evidence suggests females in late adolescence exhibit higher rates of post-traumatic stress symptoms (PTSS) than males and younger age groups. However, longitudinal evidence is limited, and underlying factors are not well understood. **Objective:** We investigated the emergence of sex differences in PTSS from childhood to adolescence in a large, longitudinal UK cohort, and tested whether these could be explained by overlap between PTSS and depressive symptoms, or onset of puberty. **Method:** Trauma exposure and PTSS were assessed at ages 8, 10, 13 (parent-report) and 15 (self-report) years in a sub-sample of 9966 children and adolescents from the ALSPAC cohort-study. Analyses of PTSS focused on those who reported potential trauma-exposure at each time-point (ranged from n = 654 at 15 years to n = 1231 at 10 years). Age at peak-height velocity (APHV) was used as an indicator of pubertal timing. **Results:** There was no evidence of sex differences in PTSS at ages 8 and 10, but females were more likely to show PTSS at ages 13 (OR= 1.54, p= .002) and 15 (OR= 2.04, p=.001), even once symptoms related to depression were excluded. We found little evidence that the emergence of sex differences was related to pubertal timing (as indexed by APHV). **Conclusions:** Results indicate that females show higher levels of PTSS in adolescence but not during childhood. The emergence of this sex difference does not seem to be explained by overlap with depressive symptoms, while the influence of pubertal status requires further research and clarification.

Sleep disturbances, trauma load and perceived stress: predictors of PTSD symptom severity in a sample of trauma exposed adolescents

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¹Stellenbosch University, South-Africa; ²Ulster University, UK

Background: Few studies have investigated sleep difficulties in relation to PTSD in adolescent samples. sleeping difficulties are more prevalent among adolescents exposed to trauma and in those diagnosed with PTSD. **Objective:** To determine if nightmares and insomnia are predictors of PTSD symptom severity and if trauma load and perceived stress are significant moderators of PTSD symptom severity. **Method:** 338 trauma exposed, treatment seeking adolescents, 12 and 18-years of age, exposed to at least one DSM-5 qualifying traumatic event, were assessed for PTSD related sleep difficulties using the Kiddie Schedule for Affective Disorders and Schizophrenia (KSADS). Exposure to ten common trauma types and depression status were also determined. PTSD symptom severity was measured using the Child PTSD Checklist (CPC) and perceived stress with the Perceived Stress Scale (PSS). **Results:** Gender (B=.04, p=.535), age (B=.20, p=.027) and education level (B=-.16, p=.061) were entered as demographic predictors of PTSD symptom severity in a multiple regression model predicting PTSD symptom severity. Age was the only significant demographic predictor. Nightmares (B=.14, p=.045) and insomnia (B=.21, p=.004) were also significant predictors of PTSD symptom severity. Trauma load (B=.08, p=.228) was not a significant moderator of PTSD symptom severity in the final model, but perceived stress (B=.48, p<.000) was. Depression (B=.14, p=.052) was not a significant covariate in the regression analysis. The regression model explained 63.1% of variance predicting PTSD symptom

severity. *Conclusions:* Assessing and treating sleep difficulties in PTSD to reduce the developmental impact of trauma on brain development and general functioning, should not be overlooked.

Improving sleep to indirectly alleviate trauma symptomatology: South African Adolescence Sleep Intervention (SAASI) project

Cherie Armour¹, Margaret McLafferty¹, Gillian Shorter¹, Jana Ross¹, Mark Tully¹, Jaco Rossouw², Jani Nothling² and Soraya Seedat²

¹Ulster University, UK; ²Stellenbosch University, South-Africa

Background: In South Africa (SA) traumatic experiences are highly prevalent in adolescents (Seedat et al., 2004). This can lead to post-traumatic stress disorder (PTSD), which is highly co-morbid with other psychological disorders and sleep problems (Ohayon & Shapiro, 2000). Improving sleep quality however may reduce symptoms of PTSD and other mental health problems. *Objective:* To examine the impact of a cost-effective, non-drug intervention; the Transdiagnostic Sleep and Circadian Intervention (Trans-C-Youth; Harvey, 2016), on sleep quality and symptoms of PTSD, depression, and anxiety in adolescents in SA. *Method:* The pilot study consisted of 40 SA adolescents (aged 15-19) who screened positively for PTSD (20 control, 20 intervention). Participants completed a sleep diary and wore an activity watch. The intervention group also participated in a sleep skills training session; the Trans-C-Youth, delivered by trained SA researchers over a 6-week period. Focus groups were also conducted with researchers and participants to examine the feasibility of implementing the Trans-C-Youth. *Results:* Sleep data and symptoms of PTSD, mood, and anxiety disorders will be compared within and between participant groups pre, during and post intervention. We hypothesised improved sleep and reductions in psychological symptoms in the intervention group. We also envisage that focus group feedback will be useful in testing the feasibility of several components of the intervention. *Conclusions:* The rationale for conducting the pilot study is to assess the feasibility of a full-scale randomised control trial utilising the Trans-C-Youth to help improve sleep quality and reduce symptoms of mental health disorders among SA adolescents.

Effectiveness of Prolonged Exposure for adolescents with PTSD, as administered by counsellors in a task shifting intervention in South Africa: Comparative trial of supportive counselling

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Background: There is a need for longer term follow-up (FU) on the effectiveness of task-shifted psychological treatments for adolescents with posttraumatic stress disorder (PTSD) in low- and middle-income countries (LIMICs). *Objective:* The comparative effectiveness of prolonged exposure (PE-A) and supportive counseling (SC) for PTSD in adolescents at 1- and 2-year FU are examined. *Method:* Sixty-three adolescents were randomly assigned to receive either intervention and completed 7-14 treatment sessions. Nurses previously naïve to PE-A and SC provided these treatments at the high schools of adolescents. Data were analysed as intention to treat. The primary outcome, PTSD symptom severity, was independently assessed with the Child PTSD Symptom Scale–Interview (CPSS-I). Some of the secondary measures such as, depression severity, was assessed with the Beck Depression Inventory (BDI), PTSD diagnosis with the MINI-Kid and global functioning with the CGAS, are also reported. *Results:* Participants receiving PE-A experienced greater improvement in PTSD symptom severity than those receiving SC (between group differences at post-intervention, mean 12.49, 95% CI 6.82–18.17, $P < 0.001$; $d = 1.22$). A similar pattern was observed with the above mentioned secondary measures and at FU (3-, 6-, 12- and 24-month). *Conclusions:* The maintenance of treatment gains at longer term FU of adolescents receiving treatment for PTSD from non-specialist health workers within a community setting in Cape Town, South-Africa are reported.

S3.3 Interdisciplinary Collaborations to Promote Recovery among Trauma-Exposed Youth: Challenges and Success Stories

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Track: Child Trauma

This symposium will describe three interdisciplinary initiatives to improve reach, access, quality of care, and sustained use of best practices for child trauma victims. The first paper (Jensen) describes the successful application of an implementation model involving trauma experts, front-line providers, and administrative staff to deliver trauma-focused treatment in child and adolescent mental health clinics in Norway. The second paper (Hanson) describes a community-focused implementation model that improved interdisciplinary communication and provider competence in delivery of trauma-focused treatment. Each of these improvements uniquely enhanced service utilization among trauma-exposed youth. The third paper (Ruggiero) describes a collaboration between Psychiatry, Nursing, Trauma Surgery, and Pediatrics to implement a technology-enhanced, stepped-care intervention in a pediatric trauma center in the Southeastern United States. Together, these data highlight challenges and successes associated with interdisciplinary initiatives to promote recovery among trauma-exposed youth across service settings. Dr. Berliner will discuss future directions and implications of key findings.

Implementing trauma focused treatments with fidelity into child and adolescent mental health clinics: Anchoring new approaches in the organization to ensure reach over time

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Background: In 2012, the Norwegian directorate of health commissioned the Norwegian center for violence and traumatic stress studies to implement trauma focused cognitive behavioral therapy (TF-CBT) in child and adolescent mental health clinics. *Objective:* We will describe how the implementation model of Fixsen et al. (2005) and Aarons et al. (2011) has been used to guide our work, and present results of reach, fidelity, sustainability, and patient outcome. *Method:* In the implementation model, the collaboration between leaders, therapists, and administrative staff is essential. Implementation success was defined as the clinics' ability to screen routinely for trauma (reach), provide treatment (fidelity) over time (sustainability), and reduce post-traumatic stress (outcome). *Results:* Levels of reach were initially low. After continuous feedback and involvement of all levels at the clinics, the average level of reach was 65% (R=22-100%). The therapists were able to provide TF-CBT with fidelity, however therapist turnover was high (49%), so continuous training was warranted. The youth had significant improvements in levels of post-traumatic stress (M=30.7, 23.8, and 13.8 before, midway, and after treatment), comparable to findings from the Norwegian TF-CBT randomized controlled trial (Jensen et al., 2014). *Conclusions:* Implementing an evidence-based treatment into regular clinics requires continuous efforts and involvement of all levels at the clinic. Leadership is essential, and our next step is to investigate how leadership training may improve evidence-based practice implementation.

Impact of Therapist-Reported Competence in TF-CBT and Interprofessional Collaboration on Utilization of Trauma-Focused Evidence-Based Treatment by Youth

Rochelle Hanson¹, Benjamin Saunders¹, Samuel Peer² and Funlola Are¹

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Background: Interprofessional collaboration (IPC) across service providers for traumatized youth can improve utilization of trauma-focused evidence-based treatments (EBTs); however, quality EBT delivery is needed for positive outcomes. Thus, training/implementation efforts need to target IPC and skill acquisition to maximize treatment outcomes. The Community-Based Learning Collaborative (CBLC) involves multidisciplinary professionals and strategies to promote IPC and EBT skills, thereby improving service utilization and treatment outcomes. **Objective:** Examine whether pre- to post-CBLC changes in IPC and therapist competence with trauma-focused cognitive behavioral therapy (TF-CBT) increase utilization of trauma-focused EBTs. **Method:** 572 multidisciplinary professionals (296 clinicians, 168 brokers, 108 senior leaders) participated in one of five CBLCs from a U.S. statewide initiative to disseminate TF-CBT. 165 therapists completed online pre- and post-CBLC surveys to assess changes in community IPC, their TF-CBT skills, and community service utilization of trauma-focused EBTs. **Results:** Paired t-tests indicated significant pre- to post-CBLC changes in IPC ($t[164] = 7.78, p < .001, d = .61$), TF-CBT skills ($t[164] = 14.65, p < .001, d = 1.14$), and service utilization ($t[164] = 7.94, p < .001, d = .62$). Hierarchical regression revealed that gains in TF-CBT skills significantly predicted increased service utilization ($R^2 = .04, p = .01$); whereas, IPC gains significantly predicted increased service utilization above and beyond TF-CBT skill changes ($\Delta R^2 = .05, p = .003$). **Conclusions:** Findings suggest that CBLCs can increase therapist skills and IPC—and that each of these improvements uniquely enhance service utilization for trauma-exposed youth. Study implications/future research directions will be discussed.

A Multi-Disciplinary Stepped Care Intervention to Address Children's and Caregivers' Mental Health Needs After Pediatric Traumatic Injury

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Background: Roughly 300,000 children in the United States are hospitalized annually after traumatic injury. Depression and PTSD are prevalent, but few trauma centers address mental health needs. An interdisciplinary solution is critical to addressing this public health problem. **Objective:** Describe the development and initial evaluation of an interdisciplinary, technology-enhanced program to accelerate mental health recovery after pediatric traumatic injury. **Method:** The Trauma Resiliency and Recovery Program (TRRP) is the product of an interdisciplinary partnership involving clinical psychologists, nurses, trauma surgeons, and pediatricians. TRRP is a stepped-care intervention embedded within our trauma center that involves education of families in hospital, post-discharge tracking of mental health recovery via an automated text-messaging system, telephone screens 30 days post-injury, and telehealth-based services for families that need trauma-focused treatment. **Results:** We will describe the evolution of our interdisciplinary partnerships as well as data from over 150 families approached in hospital and enrolled in TRRP after pediatric traumatic injury. Over 95% of families enrolled. Two-thirds of caregivers endorsed clinically elevated distress at enrollment. Most families (64.6%) completed the 30-day mental health screen, 35.5% of whom exceeded clinical thresholds for depression and/or PTSD. Fully 84% agreed to treatment, and more than 70% preferred home-based telehealth vs. in-person treatment. **Conclusions:** Findings supported the feasibility of an interdisciplinary stepped-care program within a pediatric trauma center. Cost barriers were addressed, in part, by cost-efficiencies that leveraged technology. High levels of engagement were found at each level of the intervention, thereby dramatically improving access to mental health services in this population.

S3.4 How social environments shape traumatization and its impact: mental health after radicalization, stigmatization and familial rejection – studies from crisis and post-conflict regions

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Track Transcultural & Diversity

Accumulating traumatic experiences lead to increasingly adverse mental health outcomes, a fact described by the well-established dose effect. Nevertheless, this does not explain some of the remarkable variability in the prevalence of trauma-related mental disorders among populations comparably affected by violence. This symposium is presenting unique data from current crisis and post-conflict regions that investigate how aspects of the social environment influence traumatization and the development of psychopathology. R. Mohammed assumes that Iraqi Ex-ISIS combatants can retain their mental health, when past experiences and current environments are in harmony. K. Goessmann discusses cultural and community factors related to IPV against Yazidi women. M. Preußé presents data on the nature of mental health-related stigmatization and its relationship to psychopathology in Northern Uganda. Finally, A. Crombach looks into shame coping in Burundian children as a mediator between parental rejection and peer victimization. Intervention implications and measures to promote de-radicalization will be discussed.

Violence, Radicalization and Mental Health – A Study with Iraqi Ex-ISIS Combatants

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Background: During the past decade, the phenomenon of radicalization became a central topic for psychological research. They primarily focus on the psychological roots and pathways of radicalization. Only rarely the psychological impacts of radicalization are studied. *Objective:* This paper hopes to address this gap, by focusing on the impact of radicalization on members of the Islamic State of Iraq and Syria (ISIS) who are imprisoned across Iraq since the Iraqi Army regained control of the occupied cities in 2016. The central assumption of the present study is that the mental health of the ex-combatants is intact only when their past experiences of violence (i.e., instrumental vs ideological use of violence) and current environment (i.e., identification with ISIS and ideology) are in harmony. *Method:* The first author carried out semi-structured interviews with 60 ex-combatants (aged between 22 and 60) who are detained in the reformatory facility in Erbil, Iraq. We specifically examined the extent to which ex-combatants' history of use of violence, personal experiences of abuse and displacement predict their current levels of PTSD and depression, depending on their motivation behind joining armed groups (i.e., ideological, camaraderie, instrumental), identification with them, and current ideology. *Results:* Preliminary analyses show ideologically motivated ISIS joiners, who still held these ideologies and identified with ISIS, had the lowest levels of PTSD symptoms and depression and the highest levels of aggression. *Conclusions:* The implications of these findings for motivations to engage in violent extremism and new approaches to deradicalization are discussed.

The impact of interpersonal and organized violence on psychopathology of Yazidi women

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Background: Yazidi women have been heavily affected by human rights violations by ISIS in Iraq. In addition, intimate partner violence (IPV) is a common issue in Iraq (Lafta et al., 2018). Interpersonal violence is known to have a strong impact on mental health issues like depression and PTSD, especially in contexts of social instability and conflict (Vinck & Pham, 2013). *Objective:* This study aims to demonstrate associations between Yazidi women's experiences of violence (IPV, enslavement) and mental health. *Method:* We conducted a cross-sectional study with 326 Yazidi women living in IDPs camps in Iraq. ISIS had abducted 16.6% of them and traded many of them into sexual slavery. Details on data assessment and ethical considerations have been described elsewhere (Ibrahim et al., 2018). *Results:* Almost all participants (99.4%) reported at least one traumatic event. 82.5% had experienced at least one IPV event in the last past year by their husbands. There were no significant differences between abducted and non-abducted women in terms of IPV events. Regarding mental health states, 97.1% of all participants and 100% of those who were abducted met criteria for a probable PTSD diagnosis. There were positive associations of IPV with PTSD and depression, even after controlling for the number of experienced traumatic events. *Conclusions:* Yazidi women had experienced brutal events by ISIS, and this is highly associated with their negative mental health states. Cultural and community factors related to IPV will be discussed.

Mental health stigma from the victim's perspective and the relationship to trauma-related psychopathology in an East African post-conflict society

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Background: While being a worldwide phenomenon, particularly in low- and middle-income countries (LMIC), stigma towards individuals with mental health problems appears to be a strong barrier to treatment (e.g. Thornicroft, 2008). Studies in LMIC-settings found stigma to be associated with lower rates of mental health care utilization, aggravated symptoms of trauma-related psychopathology and poorer intervention outcomes (e.g. Shidhaye & Kermode, 2013; Schneider et al., 2018). In LMIC-regions affected by violent conflict where prevalence rates of mental health disorders are generally elevated studies investigating mental health stigma are scarce. *Objective:* We aim to investigate stigmatization from the victim's perspective within a post-conflict population in order to understand better the reciprocal relationships between experienced discrimination and trauma-related psychopathology and to identify factors potentially diminishing help-seeking and treatment effectiveness. *Method:* A cross-sectional convenience sample consisting of 585 young adults (n=345 male) from rural communities in Northern Uganda was interviewed using standardized diagnostic tools. Respondents were asked about different experiences of stigmatization and reasons they assume for them. Furthermore, symptoms of psychopathology along with other psychological constructs such as self-efficacy were assessed. *Results:* About 45% of respondents reported recent discrimination experiences. Alcohol consumption, alcohol consumption of the spouse, or being a former member of the rebel army were among the most frequently assumed reasons. Perceived stigmatization was strongly linked to symptoms of PTSD and alcohol use disorder and negatively associated with self-efficacy. *Conclusions:* Further analyses on the interrelationships and implications for the development of context-specific anti-stigma interventions will be presented and discussed.

Parental rejection and peer victimization – does social withdrawal as a reaction to shame mediate the link?

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Background: Parental emotional maltreatment and its inherent message of rejection have a detrimental effect on children's sense of self and ability to form positive, trustful relationships via fostering the experience of shame. While past research identified social withdrawal as being linked to peer victimization, the Compass of Shame proposed social withdrawal as a maladaptive reaction to shame. This reaction to shame might contribute to the development of maladaptive social skills and thereby foster peer victimization in children. *Objective:* Aiming to assess maladaptive shame coping as mediator between parental rejection and peer victimization, we conducted a field study with children and youths in Burundi with an elevated likelihood of exposure to parental rejection and peer violence. *Method:* A sample of 96 children aged between six and 17 years was interviewed in a semi-structured format. We assessed perceived parental rejection, shame coping strategies and peer victimization using the Parental Acceptance Rejection Questionnaire, the Compass of Shame Scale and a short adapted version of the Maltreatment and Abuse Chronology of Exposure Scale. Furthermore, we assessed traumatic event load and PTSD symptoms. *Results:* Perceived parental rejection was significantly correlated with peer victimization ($r = 0.440$, $p < .001$) and social withdrawal as shame coping strategy ($r = 0.492$, $p < .001$). Social withdrawal mediated the relationship between parental rejection and peer victimization (fully standardized indirect effect $b = 0.19$). *Conclusions:* Maladaptive shame coping strategies resulting from caretaker child interactions seem to be an important risk factor contributing to ongoing peer victimization in children and youth.

S3.5 Learning from recent terror situations in Europe: Psychosocial follow-up

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Track: Public Health

European cities have increasingly been plagued by terrorist acts. In October 2018, representatives from 8 European cities that has experienced terror since 2011 (Oslo, Berlin, London, Turku, Nice, London, Stockholm and Manchester) took part in a workshop to learn from each other. Representatives were sought that had either a central role in organizing the psychosocial follow-up or were part of a support organization formed or acting on behalf of those directly affected (user representatives). In the proposed symposium, representatives from three of these eight cities will share lessons learned in the psychosocial organisation, response and follow-up. Although the organization may differ from country to country, problems and solutions are similar across borders. The presentations will cover challenges faced in the immediate, the intermediate and the long-term follow-up of the terror events in Stockholm, Barcelona, and Manchester, including public health aspects of the events.

The terror attack in Barcelona in 2017 - the importance of taking care of bystanders and helpers

Ingeborg Porcar Becker

Center for Trauma, Crisis and Conflicts, Autonomous University of Barcelona (UAB), Spain

During the attack, about 10,000 people were bystanders and were confined for more than 5 hours in shops in the area. The employees of the stores, of the cafeterias and even the neighbours, helped during those hours all the bystanders. In many cases, the bystanders were tourists and the locals didn't speak their language. For the first responders during these hours it was difficult to do their work, due to security conditions. The presentation will focus on the challenges of reaching out and monitoring these two groups of affected persons, who don't consider themselves as affected by the traumatic

situation and tried to recover without any help but then started to experience difficulties to carry on with their normal life. The lessons learned about what was considered helpful and what the citizens missed in the psychosocial response will be shared. The presentation will also include the changes and improvements that have been introduced in the response model to situations of multiple victims of the public health system of the city of Barcelona. Finally, the presentation will share a list of good practices about psychosocial attention to this type of events, prepared by the group of mental health professionals from the public health system who have specialised since the attack in responding to this type of incident. This list will include our experience with the sensitisation and training that were necessary to consolidate this group of specialised professionals.

Lessons learned from the terror attack in Stockholm 2017

Charlotte Therup Svedenlöf

Stockholm County Council, Sweden; Karolinska Institutet NVS, Sweden

On 7 April 2017, Stockholm was hit by a terrorist attack. A hijacked delivery lorry was driven at high speed down a busy pedestrian street in the city centre. Crisis counsellors were mobilised and crisis hotlines and crisis support centres opened. In total up to 1,000 affected individuals of all ages received psychosocial support. However, how many individuals that were actually exposed to the incident is unknown. The figure is presumably large. Persistent reactions that require treatment are difficult to predict in the immediate phase and it is therefore unknown how many of these have developed health issues since the terror attack. During this presentation the main challenges and important lessons learned are described. On the positive side, the crisis support was effective and quality requirements were met. However, our services during the incident highlighted the need for; a permanent crisis support hotline number, modern IT solutions making communication between different levels more efficient and further development of ways to provide counselling for children. There was considerable pressure from media and a need for additional crisis support spokespersons from the organisation in the future. It is also essential to coordinate efforts for particularly affected family members and to set up a routine to ensure support and information to them. After the acute phase it was essential to provide follow-up support or treatment to those in need but hard to achieve this within the health care system. In conclusion crisis support efforts require understanding and preparation amongst authorities.

The Manchester Resilience Hub: Meeting the psychosocial needs of those affected by the Manchester Arena Attack

Alan Barrett

Manchester Resilience Hub (NHS), UK

On 22nd May 2017, in the city of Manchester in the UK a suicide bomber detonated an improvised explosive device killing himself and 22 children and adults, and physically injuring hundreds as they were exiting a music concert at a 20,000 capacity city center venue. It was clear to Mental Health providers and commissioners that the psychosocial impact would be great, and local NHS providers rapidly set up the Manchester Resilience Hub as an enhanced mental health service to screen and facilitate access to intervention for those affected. This presentation will discuss lessons learned within three core domains. Firstly, the benefits of establishing an all age centralised response, bringing together both Adult and Child professionals, who typically operate within different systems. This enabled a 'whole family' approach to the psychosocial needs of those affected. Secondly, the presentation advocates the use of using technology to assist. From social media and email outreach through to conducting psychological screening with large volume, geographically spread populations, using online tools. Numbers affected will be described. Additionally, it will describe and advocate for

the use of augmented and virtual reality to facilitate virtual visits to the scene of the attack to aid recovery. Thirdly, the talk will describe the benefits of responding to preferences of those affected through facilitating psychologically informed, clinically supported day-long workshops for young people, families, and adult groups for those affected.

London's Learning: Addressing people's needs after multiple terrorist attacks, 2017

Jelena Watkins

Disaster Action, UK

London experienced an unprecedented series of terrorist attacks in 2017: at Westminster Bridge, London Bridge, Finsbury Park Mosque and Parsons Green tube station. Most of those directly affected as bereaved and survivors from these incidents lived outside of the UK. Additionally the Grenfell Tower fire disaster and Manchester Arena attack in 2017 compounded demands on national as well as local resources for responding to the complex impacts of these collective trauma events. This presentation highlights London's experiences in 2017 in the context of consolidated learning from UK experiences of dealing with disaster. It builds on the fact that today's world of prolific social media, live streaming and great public expectation brings in new challenges and opportunities for addressing people's needs for support both in the short and longer term. Individual and group interventions will be highlighted as well as the value of harnessing peer support networks as an effective form of longer term support. Proactive emergency planning, good professional relationships and networks will be emphasised as crucial for responding to international terrorist incidents.

S3.6 Driving PTSD treatment forward with virtual exposure and technological enhancements

Marieke van Gelderen^{1,2}, Kali Barawi³, Karlijn Wagemaker-Schols^{1,2} and Eric Vermetten^{1,2,4}

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Track: Intervention Research & Clinical Studies

To optimize treatment for PTSD, insights from multiple disciplines as well as implementation of novel technologies can be used to our advantage. The current symposium revolves around an example of an innovative, virtual exposure based intervention: Multi-modular Motion-assisted Memory Desensitization and Reconsolidation (3MDR). This therapy augments traditional trauma-focused strategies with virtual reality, movement, self-selected trauma-related images and a dual-attention task. Its aim is to reduce cognitive avoidance and augment engagement with therapy. This symposium will consider the latest research developments in 3MDR: from pilot studies to international phase III trials. Presenters will discuss the clinical framework of 3MDR, results from two randomized controlled trials, a cost-effectiveness trial and the latest technological developments. Prof Vermetten will discuss how technology continues to drive the pace of progress in healthcare and how, by effectively treating PTSD, 3MDR has potential to reduce demand and costs through enhancing the current care pathway.

Next Generation Exposure Therapy for Veterans with Treatment-Resistant Posttraumatic Stress Disorder: A Randomized Controlled Trial

Marieke van Gelderen^{1,2}, Mirjam Nijdam^{1,3} and Eric Vermetten^{1,2,4}

¹Foundation Center '45, Arq Psychotrauma Expert Group, the Netherlands; ²Leiden University Medical Center, the Netherlands; ³Amsterdam University Medical Center, the Netherlands; ⁴Military Mental Health, Research Center, Ministry of Defense, the Netherlands

Background: Veterans with PTSD often do not fully benefit from current evidence-based treatments. A persistent avoidance of traumatic memories and low therapy engagement can explain limited treatment effectiveness and requires different approaches to treatment. **Objective:** To report results on the efficacy of an innovative treatment, Multi-modular Motion-assisted Memory Desensitization and Reconsolidation (3MDR). This therapy optimizes the context of exposure with virtual reality, movement, and personal pictures and music (van Gelderen et al., 2018; Nijdam & Vermetten, 2018). A dual-attention task facilitates reconsolidation. **Method:** In a randomized controlled trial veterans with treatment-resistant PTSD (N=44) received either 6 sessions of 3MDR followed by 10 weeks treatment as usual, or 16 weeks treatment as usual. Result will include group comparisons on PTSD symptom severity, co-morbid symptoms, and neuropsychological functioning, measured at baseline, posttreatment, 12 weeks and 16 weeks follow-up. **Results:** Preliminary results demonstrated low drop-out (10%), no reported adverse events and a positive reliable change in 50% of the veterans receiving 3MDR, with increased treatment effects over time. **Conclusions:** 3MDR shows potential to improve treatment outcomes for this chronic patient population and could provide a breakthrough in therapy. Replication of these results in larger samples is needed.

References

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3MDR: A novel intervention that combines Virtual reality and Exposure therapy for Military Veterans with Treatment - Resistant Post Traumatic Stress Disorder

Kali Barawi, Jonathan Bisson, Catrin Lewis and Neil Kitchiner

Cardiff University, UK

Background: Current treatment options for PTSD include evidence-based pharmacological and psychological approaches that perform reasonably well for many people with PTSD, but are of limited benefit to many others. There is an urgent need to develop more effective treatment. **Objective:** To provide an overview of a Phase II feasibility study of 3MDR: Multi-Modular motion-assisted memory desensitisation and reconsolidation. This therapy is based on known therapeutic principles of virtual reality, exposure therapy and eye movement desensitization and reprocessing (EMDR), with the added element of the patient walking on a treadmill whilst being exposed to self-selected images of their trauma on a surrounding screen. **Method:** A randomised control trial (RCT) is being conducted in which veterans with treatment-resistant PTSD (N = 42) are randomly allocated to either receive 3MDR (N = 21) or waiting list control for 12 weeks followed by 3MDR (N = 21). Participants are being assessed at baseline, 14 and 26 weeks post-randomisation with a primary outcome measure of clinician rated symptoms of PTSD. **Results:** To date, 39 participants have been randomised, 25 have been followed up to 12 weeks and 12 to 26 weeks. The study is due to be completed in August 2019. **Conclusions:** No conclusion can be made at this point, however 3MDR appears to be a feasible and promising treatment for military veterans. The results of this study will help determine its potential and whether a Phase III pragmatic effectiveness RCT should be conducted.

Leveraging Technology in VRET: Enhancements in Study Design and Effectiveness in PTSD

Karlijn Wagemaker-Schols^{1,2}, Mirjam Nijdam¹, Eric Vermetten¹

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The use of technological enhancements in psychotherapy has seen an impressive uprising since the 1990's. A prominent example of such an enhancement is virtual reality therapy (VRT), which is subject in a growing body of literature. VR in PTSD started 20 years ago and has seen an exponential growth of publications on this topic, ranging from little over 300 in the decade 1990-2000, up to over 11,000 only since 2010, with a total of almost 1800 in 2018 alone. The recent additions to VR focus on immersion and presence, often by enhancing multi modularity of VR e.g. with smells, acoustics, kinesthetics or high resolution pictures of film. In reviewing these developments we will focus on one of the latest advances that also uses interactive motion in VR. This provides a new interactive mode of delivering therapy that adds movement to enhance openness to experience by using forward motion. After validation of the method a refinement is made by delivering the therapy in a user friendly way. We will also discuss the latest RCT on this intervention, which is studied as a stand-alone treatment in first-aid responders. In this randomized controlled trial we compare 3MDR (Multi-modular Motion-assisted Memory Desensitisation and Reconsolidation) therapy to the evidence-based trauma treatments: EMDR, BEP, NET and TF-CBT. Furthermore, preliminary results on the acceptance of this new technology from a therapist perspective will be presented as well as the further development of this technology.

10:15 11.30 Parallel session #4

S4.1 Empirical findings on the new stress-related diagnoses in ICD-11: Complex PTSD and Prolonged Grief Disorder

Rita Rosner¹, Cedric Sachser², Rebekka Eilers¹ and Hannah Comtess¹

¹Catholic Univeristy Eichstätt-Ingolstadt, Germany; ²University Ulm Medical Center, Child and Adolescent Psychiatry/Psychotherapy, Germany

Track: Assessment & Diagnosis

The ICD-11 has included new diagnoses in the area of stress-related disorders and reorganized criteria for PTSD substantially. Due to these bold changes, empirical findings concerning sensitivity and specificity as well as concordances with DSM-5 and ICD-10 need to be discussed. Yet, the most relevant outcome is whether and how these changes will impact treatment. The three presentations in this symposium aim at different goals: The first two presentations report secondary analyses from two randomized clinical trials and evaluate the effects of the new diagnoses complex PTSD and the new PTSD criteria for children and adolescents. While the definition of caseness and therefore access to treatment was severely impacted, there were no differential treatment outcomes for PTSD and complex PTSD. The third presentation focuses on the concordance of different grief-related diagnoses and provides empirical data on the number of accessory symptoms to define caseness.

Comparing treatment outcomes of patients with ICD-11 PTSD, CPTD and those who lose diagnosis

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Background: For ICD-11, features of Posttraumatic Stress Disorder (PTSD) have been narrowed and a new diagnosis of Complex PTSD (CPTSD) has been formulated. As yet, only few studies investigated the application of the new diagnoses in children and adolescents and reported decreasing prevalence rates. Furthermore, the impact of ICD-11 changes for clinical practice has to be investigated. *Objective:*

To compare the respective rates for the different diagnoses and to evaluate effectiveness of developmentally adapted Cognitive Processing Therapy (D-CPT) for ICD-11 diagnosis groups. *Method:* N=76 adolescents (14-21 years) with a DSM-IV PTSD diagnosis participating in a treatment study were diagnosed according to ICD-11 algorithm. Prevalence rates of ICD-11 diagnoses and effect sizes of changes in symptom severity were calculated after treatment and at 3-month follow-up. *Results:* 13 (17.11%) of participants fulfilled ICD-11 criteria for PTSD, 38 (50.00%) for CPTSD and 25 (32.89%) had no diagnosis. PTSD symptoms improved in all groups with high effect sizes. No outcome differences were found between PTSD and CPTSD. Yet PTSD symptom severity was higher in CPTSD than in the “no diagnosis” group at post-treatment. *Conclusions:* Although all participants met DSM-IV PTSD criteria connected to physical and/or sexual abuse, a large proportion developed PTSD and CPTSD. Furthermore, one third lost their diagnosis even though they were significantly impaired. Thus, the low sensitivity of ICD-11 criteria seems to be problematic. Patients with ICD-11 PTSD and CPTSD benefit equally from D-CPT. It remains open to discussion if the new criteria show an optimal fit for young people.

Trauma-focused Cognitive Behavioral Therapy (TF-CBT) for children and adolescents with PTSD and complex PTSD: Secondary Analyses within a randomized controlled trial

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Background: Within the ICD-11 a complex PTSD (CPTSD) diagnosis is suggested in addition to the PTSD diagnosis. It is questionable whether current first line treatments for pediatric PTSD are also feasible and effective in reducing symptoms for children and adolescents with CPTSD symptoms. *Objective:* Thus, this study investigates the treatment effects in a CPTSD group compared to a PTSD group within a RCT evaluating the effectiveness of TF-CBT in children and adolescents. *Method:* Mixed effect models with fixed effects of time (pre-treatment, post-treatment, 6 and 12 month FU) and group (CPTSD (n=27; Mage=13.45; 81% female) vs. PTSD (n=46; Mage=12.78; 66% female)) as well as their interaction were performed on the relevant outcome measures (posttraumatic stress symptoms (PTSS) (CAPS-CA); depression (CDI); anxiety (SCARED), dysfunctional posttraumatic cognitions (CPTCI)). *Results:* Intention-to-treat-analyses revealed parallel treatment responses for the CPTSD group (pre to post change: -32.0 ± 4.49 , $d=1.78$, $p<.001$; pre to 12-FU change: -49.28 ± 4.20 , $d=2.90$, $p<.001$) compared with the PTSD group (pre to post change: -33.88 ± 3.52 , $d=1.85$, $p<.001$; pre to 12-FU change: -36.96 ± 3.28 , $d=2.15$, $p<.001$) for the primary outcome PTSS. Similar response patterns were found for all secondary outcomes. *Conclusions:* Similar treatment gains were achieved in both groups from pre-to post-treatment, with the CPTSD group reporting higher symptom severity pre- and posttreatment compared to the PTSD group. However, the CPTSD group showed additional significant improvements in the FU period. Therefore the study provides preliminary evidence that the application of standard TF-CBT can be a safe and effective treatment for CPTSD.

Evaluation of Prolonged Grief Disorder Criteria-Sets in a Treatment-Seeking Sample

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Background: Prolonged grief disorder (PGD) is a new diagnosis within the ICD-11. There is a lack of knowledge in how far the ICD-11 diagnostic criteria result in different prevalence rates compared to its precursor as proposed by Prigerson et al. (2009) and the DSM-5. Of specific interest is the effect of the differing accessory symptom numbers needed to meet the ICD-11 diagnostic threshold, as they have as yet not been specified. *Objective:* We aimed at evaluating the diagnostic performance of the

ICD-11 PGD criteria in comparison to Prigerson et al.'s (2009) and the DSM-5 criteria in a treatment-seeking sample. *Method:* 95 patients screened for a RCT evaluating the effectiveness of a grief-specific therapy completed the PG-13+9 at intake. We performed ROC analysis to examine the ICD-11 diagnostic threshold. PGD-caseness was based on clinician-rated PG-13. Kappa statistics were used for diagnostic agreement between the different criteria-sets. *Results:* The ICD-11 accessory symptoms threshold (at least one category B item) revealed many false positive cases. While sensitivity and specificity for ICD-11 PGD symptoms were worse as compared to the criteria by Prigerson et al. and the DSM-5, ICD-11 PGD prevalence rate was higher. The number of participants meeting the criteria for ICD-11 diagnosis differed substantially from that of the other two criteria-sets. *Conclusions:* The results demonstrate that the prevalence rate and diagnostic performance of the ICD-11 criteria differs substantially from its precursor (Prigerson et al., 2009) and the DSM-5 criteria-set. Future work may reconsider the ICD-11 diagnostic threshold for accessory symptoms.

S4.2 How are pain and traumatic stress related?: From origins to interventions

Justin Kenardy¹, Christian Schmahl², Johan Siqveland³ and Natalie Hellman⁴

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Track: Intervention Research & Clinical Studies

It has been recognized for some years that pain and PTSD are connected. Rates of comorbidity are high. However, less is known about how pain and PTSD are connected. In this symposium, the relationship will be explored through a series of presentations. First, there will be a brief general introduction to set the scene by Justin Kenardy. This will be followed by an evaluation of longitudinal studies of chronic pain and posttraumatic stress via meta-analysis by Johan Siqveland. Natalie Hellman will focus on the mechanisms of pain processing in sexual assault survivors and Christian Schmahl will examine the relationships between psychological processes dissociation and pain following adverse childhood experiences. Justin Kenardy will report on the results of two RCT examining the impact of the intervention for stress and PTSD on pain in victims of motor vehicle crash.

Trauma exposure, posttraumatic stress symptoms and chronic pain: A systematic review and meta-analysis of longitudinal studies

Johan Siqveland

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Background: The association between trauma exposure, posttraumatic stress symptoms and chronic pain is well established, mostly from cross sectional studies. Theoretical models have suggested how trauma and pain may be related through dynamic processes such as mutual maintenance. However, these theoretical models need to be tested in longitudinal research designs to better evaluate their validity and accuracy. The objective for this review is to systematically review the existing literature to evaluate the empirical support for the different moderating and mediating factors on the relationship between trauma exposure, posttraumatic stress and chronic pain. *Method:* Studies will be searched for in the PubMed, PsycINFO, and EMBASE databases and selected based on several search terms related to trauma exposure, posttraumatic stress and chronic pain, including the most common chronic pain disorders. All longitudinal quantitative studies assessing trauma exposure and both posttraumatic stress symptoms and pain at the least two different time points will be eligible for inclusion. The included studies will be narratively summarized and when possible meta-analyzed. Specific sub group analysis will be performed based on trauma exposure, age, gender and cultural context, population, when possible. A protocol for the study will be made publicly available before the

search. *Results and Conclusions:* The literature search and data analysis will be performed during the spring 2019, and results are therefore not available at the time of the writing of this abstract.

Pain Processing in Sexual Assault Survivors

Natalie Hellman, Cassandra Sturycz, Edward Lannon, Erin Ross, Tyler Toledo, Bethany Kuhn, Yvette Guereca, Burkhart Hahn, Michael Payne, Felicitas Huber Mag, Mara Demuth, Shreela Palit, Joanna Shadlow and Jamie Rhudy

The University of Tulsa, USA

Background: Sexual assault (SA) survivors commonly report chronic pain, however the mechanisms behind this relationship need elucidation. Assessing pain processing in SA survivors before they develop chronic pain, via quantitative sensory testing and laboratory descending pain modulation tasks, has the potential to uncover chronic pain risk factors. *Objective:* To assess pain perception and pain modulation in pain-free female and male SA survivors. *Method:* Participants were pain-free male and female SA survivors, compared to a no-trauma group (no-TE) and/or non-SA trauma groups (TE) depending on the study. Laboratory testing evaluated pain threshold and tolerances in response to thermal (heat, cold) and ischemic stimuli. Two paradigms assessed descending modulation of a physiological correlate of spinal pain neuron signaling (nociceptive flexion reflex, NFR). *Results:* SA survivors displayed higher ischemia tolerances than the TE group. SA survivors exhibited hyperalgesia during thermal tasks compared to the no-TE group. Descending modulation tasks suggested that SA survivors have disrupted modulation of spinal pain signaling, with one task implying that spinal neurons were amplified. *Conclusions:* SA survivors exhibited hyperalgesia (enhanced pain) to thermal pain, suggesting peripheral sensitization (increased sensitivity of peripheral nerves). Contrastingly, SA survivors showed hypoalgesia (dampened pain) to deep tissue pain, indicating SA survivors may process cutaneous and deep pain differently. Additionally, descending modulation tasks provide evidence for disrupted pain modulation, perhaps promoting central sensitization (amplified pain signaling). Overall, sensitization may place SA survivors at heightened risk for developing future chronic pain.

Experimental investigation of stress responsivity and pain sensitivity in CSA survivors with and without PTSD

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Central Institute of Mental Health, Germany

Background: Patients with PTSD following adverse childhood experiences (ACE) demonstrate alterations on a broad spectrum of variables related to stress and pain. However, it is unclear to which extent these alterations are related to the diagnosis of PTSD, or to experiences of ACE per se. *Objective:* To clarify this question, we compared healthy women with a history of ACE (n=33), who did not meet criteria of any lifetime psychiatric disorder, patients with PTSD related to ACE (n=33), and healthy controls (HC) with no history of ACE (n=32). *Method:* We investigated i) indicators of baseline stress levels (subjective stress ratings, dissociation, heart rate, heart rate variability, and pain sensitivity) and ii) stress responses to a validated stress induction paradigm with respect to these indicators. *Results:* At baseline, large effect sizes were found for the difference between the ACE and the PTSD group with respect to subjective stress ratings, subjective dissociation ratings, heart rate, and heart rate variability, while effect sizes for the differences between ACE and HC were consistently small. In contrast, pain sensitivity was already significantly lower in the ACE group as compared to HC, with an additional smaller effect of PTSD in reducing pain sensitivity. Stress induction led to a further reduction of pain sensitivity in all three groups. *Conclusions:* These results suggest that

psychophysiological measures of stress and dissociation are more dependent on the diagnosis of PTSD, while alterations of pain sensitivity can be related to the experience of ACE per se.

PTSD and Pain in Whiplash Injury: Response to Intervention

Justin Kenardy and Michele Sterling

University of Queensland, Australia

Background: PTSD is relatively common in individuals with whiplash injuries. Furthermore, the PTSD symptoms in acute whiplash predict the development of chronic whiplash. *Objective:* To evaluate the impact on pain in interventions in injured individuals that aim 1. to prevent the development of PTSD, 2. to treat chronic PTSD. *Method:* In study 1 1104 individuals with acute whiplash injuries were randomly allocated to an early stress inoculation intervention after the injury or physiotherapy delivered 3 weeks. Study 2 322 individuals with chronic whiplash and PTSD were randomly allocated to trauma-focused CBT or a waiting list. *Results:* In study 1 stress inoculation was associated with a significant reduction in pain and injury-related disability, as well as PTSS at post-intervention, 6 and 12 months after the injury compared to physiotherapy. In study 2, compared to waitlist trauma-focused CBT was associated with a significant reduction in injury-related disability and for pain sensitivity as well as PTSD. *Conclusions:* The results of both studies highlight the value of a psychological intervention for stress including traumatic stress on pain and pain-related disability, for both acute and chronic pain. The relationship between pain and traumatic stress can be influenced by psychological intervention. Interventions for acute and chronic traumatic injuries should consider adding psychological interventions.

S4.3 Parental Influences on Child Post-Traumatic Stress Outcomes

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Track: Child Trauma

Social support is a central predictor of child PTSD symptoms (PTSS) following trauma exposure. However, in-depth information about the key social components of importance is limited. This symposium will present evidence from three different studies: 1) A study from Israel focusing on pre-trauma psychosocial risk-factors for child post-traumatic stress symptoms (PTSS), including familial social support, and the potential mediating role of peri-traumatic medical team support; 2) A study from the United States investigating parent-child conversations about trauma-related ambiguous situations, such parental reactions to avoidant appraisals/ problematic coping, and their relationship to parent and child PTSS; 3) A South Africa-based study on how early parenting and attachment may predict PTSS symptoms in children at age 13. The role of parenting in determining child PTSS outcomes will be critically discussed, and linked to an Australian programme designed to support children and adolescents with moderate PTSS following exposure to disaster or terror.

Pre-trauma factors, parental distress and medical team support after a traumatic medical event: A Biopsychosocial Framework to examine pediatric Posttraumatic Stress symptoms

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Background: An experience of a traumatic medical event (TME) during childhood involves significant damage to the child's functioning, accompanied by long-term consequences for both child and family. *Objective:* This study examined the interdependency between mother and child's post-traumatic stress symptoms (PTSS), and the contribution of pre-trauma psychosocial risk factors to the development of child's PTSS, using a multiple-informant (child and mother) approach. In addition, the medical team's support and its contribution to family coping during the peri-trauma period were examined. *Method:* 194 children (7-18 years) admitted to a Pediatric Rehabilitation Department and their mothers were assessed approximately 1-2 months post-TME. Mothers and children rated the child's PTSS. Mothers also rated their own PTSS and the family's pre-trauma psychosocial risk factors. A psycho-social team member rated the medical team's support provided to the family. *Results:* Pre-trauma psychosocial risk factors were significantly related to mother and child's PTSS; mother's PTSS was significantly related to her own report on child's PTSS, but not to child's self-report on PTSS. Medical team's support mediated the relationship between pre-trauma social support and mothers' PTSS. *Conclusions:* The results support previous findings on the association between mother and child's reactions to TME. However, the associations were related to mothers' perceptions regarding her child and her own levels of symptomatology supporting the need for a multi-informant approach in child psychopathology. A closer look at the medical team's support during the peri-trauma period may allow for the development of appropriate preventive intervention programs.

Using observed sequential parent-child interactions to understand parent influences on child trauma recovery

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Background: Parent and child posttraumatic stress symptoms (PTSS) are moderately associated. Prior longitudinal research has suggested that parent symptoms influence child symptoms over time. However, the processes through which parent symptoms and behaviors influence child recovery trajectories are not well understood. One challenge is that prior research has relied almost exclusively on questionnaire measures. *Objective:* To use an observational method - the Trauma-related Ambiguous Situations Task (TAST) - in order to directly examine specific parent-child interactional sequences in the peri-trauma period. *Method:* We enrolled 96 recently injured children during inpatient hospital admission, and used the TAST to generate parent-child conversations about trauma-related situations. We coded each utterance for threat vs neutral appraisals and proactive vs negative/avoidant coping strategies, and also assessed parent and child PTSS via questionnaire at baseline, 6, and 12 weeks. We calculated the conditional probability of specific parent responses following child expression of an appraisal or coping strategy. *Results:* Children with significant later PTSS were less likely to have had a parent who challenged their peri-trauma threat appraisals or avoidant coping strategies. Results were mixed regarding association of parent responses with parent peri-trauma PTSS. *Discussion:* Findings broadly support hypotheses that peri-trauma parent responses to child appraisals or coping solutions are associated with later child PTSS. Observational methods can elucidate processes through which parents' behaviors (how they help their child appraise and cope with trauma-related situations) impact child PTSS development. Future research should continue to hone observational approaches that can complement self-report measures in longitudinal studies.

The impact of early parenting and attachment on subsequent PTSD development

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Background: Children living in low and middle -income countries (LMIC) are more likely to be exposed to trauma than children living in high income countries. Families in these settings are also more likely to face environmental adversity such as poverty and may have very few formal support or care structures available. *Objective:* As social support is a central determinant of child outcomes after trauma exposure, it is of importance to better understand the role of parental support in these settings. *Method:* We used a sub-sample of N=264 children and their primary caretakers from the longitudinal “Saving Brains” randomized control trial, set in the Khayelitsha township of South Africa, which provided mothers with either a 16-session parenting and attachment intervention, or standard postnatal care shortly after birth. It was investigated whether early parenting (maternal sensitivity and intrusiveness) at 6 and 12 months, and child attachment status at 18 months may predict child PTSD symptoms at the age of 13. *Results:* It was found that higher parental intrusiveness at 12 months, but not any other variable, predicted child PTSD at 13 years above and beyond current family stress. *Conclusions:* Implications for the role of early parenting, the importance of interventions in high risk contexts, and potential study limitations will be discussed.

S4.4 Determinants of trauma-related mental health problems and recovery in refugees and migrants

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Track: Transcultural & Diversity

Epidemiological studies show that the risk of mental health problems is approximately twice as high in refugee and migrant populations as compared to in the general population. The most prevalent mental health problems are posttraumatic stress disorder (PTSD), anxiety and depression. A variety of risk and protective factors have been shown to be related mental health problems in refugees and migrants, such as traumatic experiences, and psychological and social stressors associated with migration and resettlement. This symposium presents findings across three refugee and migrant populations: migrant workers in China, Palestinian refugees, and Burundi refugees in Tanzania. It will focus on the influence of pre-, peri and postmigration experiences and risk factors on mental health problems, such as PTSD, and on the association of risk and protective factors with symptoms within family contexts. Targets and implications for interventions for refugees and migrants will be discussed.

Exploring the modifying role of post-migration adversities on lifetime trauma exposure for PTSD among female Domestic Workers in China

Brian Hall

University of Macau, China

Background: Migrant Domestic Workers in China are a potentially vulnerable population. Key drivers of population health risks for migrants involve cumulative exposures to social determinants of health (e.g., discrimination, decent work) and potentially traumatic life events (e.g., natural disasters, interpersonal violence). These exposures are found across the migration continuum, occurring within pre-, peri-, and post-migration contexts. *Objective:* The current study focused on understanding postmigration experiences as key modifiers of the association between cumulative life adversities and posttraumatic stress disorder symptom severity. *Method:* Respondent driven sampling methods were utilized to enroll 1349 female Filipino domestic workers in the study. The Everyday discrimination scale (EDS), Life Events Checklist (LEC-5), PTSD Checklist (PCL-5) were translated and culturally adapted for use among this population of domestic workers. *Results:* Nearly 20% of the population met criteria for

PTSD. The number of lifetime exposures to PTEs ($r = .21$) and greater discrimination ($r = .32$) were associated with higher PTSD symptom severity. Multivariable linear regression analysis showed that discrimination modified the effect of lifetime trauma exposure. *Conclusions:* Women who reported greater discrimination also reported greater current PTSD symptom severity. These results will be discussed within the growing literature that demonstrates the importance of the receiving country context for migrant mental health.

We are in this together: Associations between parental and child mental health in Burundian refugee families residing in Tanzanian refugee camps

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Background: Research with refugee children in high-income settings suggests that parents' mental health is crucial for children's well-being (Fazel et al., 2012). While supporting evidence for refugees in humanitarian settings is emerging (Meyer et al., 2017; Sim et al., 2018), existing studies included only one parent, mostly the mother, and/or lacked child-reported data. *Objective:* To investigate the relationship between children's and parents' mental health problems in a representative sample of 230 Burundian child-mother-father triads living in Tanzanian refugee camps. *Method:* Using structured clinical interviews, we assessed posttraumatic stress symptoms (PTSS) and other mental health problems in children and parents, and risk and protective factors on the individual, familial and societal level. *Results:* Structural equation modelling revealed significant associations between parents' and children's PTSS and between mother's and children's mental health problems. *Conclusions:* The results underscore the importance of involving parents in prevention and treatment of mental health problems in refugee children living in camps.

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Rethinking Cognitions: The Relation Between Negative Post Traumatic Cognitions and Post-Traumatic Stress among Palestinian Refugees

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Background: Palestinian Refugees live under extremely challenging circumstances, with negative future prospects, where negative cognitions are likely. Post Traumatic Negative Cognitions (PTNC) are important for the development, persistence, and treatment of Post-Traumatic Stress Disorder (PTSD). It is uncertain if findings on the relation between NPTC and PTSD can be generalized to the Palestinian Refugee context. *Objective:* The first objective is to establish if PTNC on 'oneself' (SELF), 'the world' (WORLD) and 'self-blame' (BLAME) explain variance in PTSD symptomatology. The second objective is

to examine if these cognitions are predictive for PTSD classification. *Method:* Palestinian refugees (N=85, 51.8% female) administered the Post Traumatic Cognitions Inventory and the Harvard Trauma Questionnaire. Multiple and logistic regression analysis were performed. *Results:* SELF ($p<.001$) and BLAME ($p<.029$) explained significant variance in PTSD symptoms, however findings for BLAME indicated a suppressive role for PTSD. Findings for WORLD ($p<.148$) were not significant. SELF ($p<.002$) was the only subscale with significant predictive value for PTSD classification. *Conclusions:* Findings outline the relevance of contextual factors for the interplay between NPTC and PTSD. This is especially relevant for researchers and clinicians working with refugees in conflict areas. *Keywords:* Cognitions, Trauma, PTSD, Refugees, Conflict Area.

S4.5 Can implementation science lead to better trauma care?: Bridging the gap between research and practice

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Track: Public Health

It takes on average 17 years for 14% of biomedical research to make its way into health settings. Implementation science examines the integration of evidence and seeks to accelerate the delivery of evidence-based practices. Implementation research is context specific and demand driven. It is co-created and co-produced by researchers and implementers, and it is designed to lead to real-time improvements within the organizations where the research is embedded. This symposium presents three examples of how implementation research can lead to rapid translation of evidence within three distinct health organizations. The symposium will showcase three examples of research taking place within each of these organizations on: the effects of trauma on family systems in an asylum-seeking sample in Ireland; research on polyvictimization within an organisation in Denmark managing child abuse cases and research on the implementation of a low-intensity intervention within a volunteer-based organization working with displaced persons in Colombia.

Polyvictimization, professional Partnerships and participatory Processes – Bridging research and practice in The Danish Children Centre

Ida Haahr-Pedersen

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Background: Exposure to multiple different types of victimizations, also known as ‘polyvictimization’, is a powerful predictor of adverse health outcomes among children (Finkelhor et al. 2011) and a more holistic approach with strengthened professional partnerships among sectors to facilitate coordinated and cohesive interventions for victimized children is warranted (Hamby & Grych, 2013). In order to understand how polyvictimization issues can be handled effectively by the various sectors involved in cases of child abuse, involvement of the different stakeholders in the research process is crucial to ensure that proposals for future work practices reflect the institutional reality and are feasible to the sectors implementing them. *Objective:* The study investigates the role of polyvictimization in relation to explaining trauma symptomatology and consequently case management for children at the Danish Children Centre. *Method:* (1) a quantitative study identifying different (poly)victimization profiles and associated risk factors and mental health status. (2) a qualitative study applying participatory methods to investigate: (2a) different experiences of professionals with polyvictimization cases and cross-sectoral cooperation in cases of child abuse. (2b) Workshops and cross-sectoral focus groups discussions: findings from study 1 are fed back to and reflected upon by the stakeholders in order to identify facilitators and barriers in the work with complex cases of child abuse, which will inform

recommendations for future work practices. *Results:* The studies are currently proceeding and methods and results will be presented.

Towards the Successful Implementation of Low-intensity Psychological Interventions

Camila Perera

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Background: Clinician shortage is a primary barrier to the universal provision of mental health services in low and middle-income countries (LMICs) (van Ginneken et al., 2013). Low-intensity psychological interventions that can be provided by community health workers are increasingly being recommended as an effective approach for improving access to mental health care in LMICs (WHO, 2017). This project builds on the International Federation of the Red Cross and Red Crescent Societies (IFRC)' need to understand which factors contribute to the successful implementation of low-intensity psychological interventions before recommending its wider use across National Societies. *Objective:* The purpose of this research is to contribute to existing evidence on the successful implementation of a low-intensity psychological intervention –Problem Management Plus (PM+)— for displaced persons in the Colombian Red Cross. *Method:* This research consists of: (1) a qualitative study to identify contextual and cultural adaptations to the intervention, (2) a quasi-experimental study to determine whether there are associations between the implementation of PM+ and decreased psychological distress among displaced persons in the Colombia and (3) a qualitative study to identify the barriers and facilitators that determine the implementation of PM+ in the Colombian Red Cross. *Results:* The process of co-designing the research project, results as well as how the IFRC will incorporate the research findings to inform their work with migrant populations will be presented in the symposium.

Investigating the Effects of Trauma on Family Systems in an Asylum-Seeking Sample: A Collaborative Approach to Trauma Care

Natalie Flanagan

Trinity College Dublin, Ireland

Background: The current refugee crisis resultant of international political transformations and protracted wars and conflicts, has heralded the arrival of an unprecedented influx of forcibly displaced persons into European host countries. This wave of migration has prompted multifarious discourse across political and organisational spheres as to how best implement frameworks which will provide effective care for asylum-seeking families. War trauma and broader asylum seeking experiences have been demonstrated to exert a negative, additive effect on family systems, but the communicative mechanisms by which parental trauma sequelae are transmitted to children are less understood. *Objective:* This study examines the effects of war and trauma on family systems in Spirasi, Ireland. Spirasi offers a holistic approach to health and integration for asylum seekers, with special concern for those who are survivors of torture. As Spirasi has seen a sharp increase in referral numbers, in parallel with global migration, they aspire to implement evidenced-based, context-specific family therapy programmes in response to this growing demand. Findings of the present study will be absorbed at an organisational level across various therapeutic groups. *Method:* The study consists of (1) a systematic review detailing risk and protective factors for the transgenerational transmission of trauma in asylum-seeking families (2) a mixed methods approach investigating associations between maternal traumatic exposure and trauma sequelae, and child psychosocial adjustment and resiliency. It assesses whether these associations are mediated by the quality of dyadic interactions, and moderated by intra-family communication styles. *Results:* The studies are currently ongoing and findings will be presented.

S4.6 Coping of families with military service: Learning from three cultural contexts

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Track: Intervention Research & Clinical Studies

This symposium will focus on family dynamics during military service and deployment and explore the coping of different family members – female spouses, both partners, and children – in three geographical and cultural contexts: England, Denmark, and Israel. The symposium will enable participants to learn more about family adjustment, as well as the coping resources that contribute to this adjustment. Presentations will include: A) A qualitative analysis of English female spouses' adjustment during deployment separations, B) The adjustment and coping of combat commanders and their spouses – among an Israeli sample, and C) A comparison of the well-being of children of formerly deployed Danish fathers and the well-being of children of civilian controls. These diverse presentations will trigger a discussion about differences and similarities in coping, depending on family role and culture, and will contribute to the theory of family coping with deployment.

Perceptions of family functioning and well-being among UK Naval spouses during non-operational family separations

Rachael Gribble

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Background: Previous literature has focused on how deployment affects the health and well-being of military families, with little known about the impacts of other forms of family separation. Such experiences can be common, with 36% of UK Naval families living separately from Service personnel during the working week (Ministry of Defence, 2016). *Objective:* This study explores experiences of family life during non-deployment related family separation among UK Naval spouses and the perceived influences on health and well-being. *Method:* 20 telephone interviews were conducted with female spouses and analysed using Framework analysis. *Results:* The lack of family time as a result of non-deployment related separations was reported to affect family functioning, communication and relationships. Spouse employment was often a reason for living separately but participants described issues managing work and careers alongside family responsibilities. Difficulties managing as a single parent were attributed to poor mental health and well-being. Children were also reported to find separations difficult, although this varied according to their age. Social networks, finances, employers and Naval support were family resources that could help or hinder family adaptation to these separations. *Conclusions:* These findings highlight the difficulties military families can experience during shorter but more rapid family separations, many of which are similar to challenges during operational deployments. Proposed changes to military housing may lead to an increase in this form of family life but improving the resources supporting families during these separations could pre-empt potential challenges.

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The mutual adjustment of the combat commander and his wife: The contribution of dyadic coping

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Bar illan university, Israel

Background: Families of combat commanders cope with stressors including absences from home, emergency situations, and existential dangers. Spouses must cope with uncertainty and worry about their partners' security, and with most of the tasks involved in home and child-care (Padden & Posey, 2013). Although many studies have assessed each partner's coping and adjustment, there have been calls to study the way couples cope with these stressors as dyads. *Objective:* To examine a) the association between spouses' adjustment and b) the contribution of positive dyadic coping (i.e., common dyadic coping, supportive coping and delegated coping, and negative supportive dyadic coping) to marital satisfaction. *Method:* Self report questionnaires are gathered from a systematic sample of 400 combat commanders and their spouses. *Results:* Preliminary results, based on 110 couples, support positive associations between partners' mental health and functioning. The positive dyadic coping of the partners was positively associated with, and contributed to, better marital adjustment. No significant associations were found between the negative dyadic coping of the spouses. *Conclusions:* Results highlight the importance of couples' mutual adjustment, as well as the need to further identify the types of coping that contribute to marital satisfaction.

Examination of well-being among children of Danish formerly military deployed fathers as compared to children of civilian controls

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Background: Military deployment increases the risk of traumatic event exposure, PTSD, and other mental illnesses (Gates et al., 2012). Family life and coping strategies may be affected, e.g. child well-being in terms of poorer academic outcomes (De Pedro et al., 2011) and behavioural problems (Creech et al., 2014). Well-being among children of formerly deployed military personnel has mainly been studied in the United States and in Great Britain. Research from Europe, especially Scandinavian countries, is scarce, and little knowledge of child well-being of formerly Danish military deployed personnel exists. *Objective:* To examine whether well-being among children of Danish formerly deployed fathers (FDF) differs from well-being of children of civilian controls. *Method:* Survey data gathered amongst 11- and 15-year-old children (N=1,590) of Danish FDF and among a random Danish sample of children (N=4,781). Well-being was examined in areas such as family life, self-evaluated school outcomes and problems (loneliness, mental well-being (measured as SDQ), and externalizing behaviour). We examined differences between children of FDF and civilian offspring using logistic regression analyses. *Results:* Adverse mental well-being (SDQ) was more pronounced among children of FDF than civilian offspring. The 11-year-olds of FDF evaluated themselves less good in school than civilian offspring although they more often got help from parents. The 15-year olds of FDF more often talked with parents about school than civilian offspring. *Conclusions:* Results underline the importance of paying attention to mental well-being of children of FDF since their mental well-being, despite stronger family bonds, seems to be poorer than civilian offspring.

S4.7 Joint expertise in responding to terror attacks - building bridges between countries

Miranda Olf^{1,2}, Idit Albert², Dean Kilpatrick³ and Grete Dyb⁴

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Track: Intervention Research & Clinical Studies

Societies worldwide are experiencing a dramatic and continuing increase in number and catchment of terrorist attacks, accompanied by a substantial increase of terrorism related costs. Terrorist attacks are traumatic events that violate security and feelings of safety, and prevalence of post-traumatic stress reactions following a terrorist attack often are substantial. When societies are attacked, questions immediately arise as to how the terrorist attack will affect the bereaved, survivors, their families and communities, and how authorities should respond. Societies struggle to provide adequate services and support to victims, and widespread unmet healthcare needs have repeatedly been reported among survivors of terrorist attacks. The symposium will identify barriers in providing adequate services after terror attacks in USA, UK and Norway and present initiatives aiming to build bridges between countries, establish cross-country research and jointly meet these challenges.

Psychological Outreach, Screen and Support Service for London Terrorist Incidents Albert Idit

Centre for Anxiety Disorders and Trauma, UK

In 2017 London experienced four different terrorist attacks that were estimated to have directly affected 1300. The NHS devoted a service to provide assertive outreach to address the mental health needs of those affected by the incidents in Westminster, London Bridge, Finsbury Park and Parsons Green. The service offered repeated standardised screening (Gobin et al, 2018; Brewin et al, 2010) clinical assessments and evidence-based treatment. The service outreached to 550 survivors and their families, the bereaved and first responders and demonstrated high levels of significant recovery (70%). However, lack of allocated planned funding resulted in the establishment of the service five months after the attack in London Bridge. The service has also encountered several barriers to access those affected. The main barriers were: misunderstanding of data protection legislation, attitudes of community leaders and employing organisations and media biases. The presentation will focus on different methods utilised for outreach and relevant data as well as on lessons learnt.

References

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Respond - a European network on health and social response to terrorist attacks

Grete Dyb, Synne Stensland, Lisa Govasli Nilsen and Lise Stene

Norwegian centre for violence and traumatic stress studies, NKVTS, Norway

An important barrier to provide adequate interventions and services after terror attack is that knowledge needed to improve readiness and respond adequately to victims' needs has important shortcomings; 1) knowledge accumulated by victims, clinicians, NGOs and health- and social authorities is seldom published, and their experiences are often not accounted for in planning of services and research, 2) most research projects are nationally funded, isolated initiatives, and establishing more generalizable knowledge about what works, is problematic due to lack of collaboration and coordination, 3) research is action driven and short-term initiatives lacking information on acute reactions and long-term consequences, 4) most studies are biased by low response rates due to problems in access to exposed populations, 5) research has failed to investigate challenges met by victims in less research-intensive areas, and 6) health problems such as somatic complaints and social difficulties, relationship problems, impacted functioning and absence from

school and work have rarely been studied. There is currently no coordinated effort in Europe to improve responses through collaborations between research, policy and practice. "RESPOND", a European initiative to form a research network, has recruited professionals from 17 countries and aim to: 1) summarize knowledge on countries' responses to recent terrorist attacks, 2) identify shortcomings in research and barriers for conducting adequate cross-country research, 3) develop best practice guidelines i) to improve knowledge acquisition on health and social consequences, and ii) build competence and implement measures to improve responses in member states. "RESPOND" presents how this initiative build bridges across countries.

Mass Violence in the US: How the National Mass Violence and Victimization Resource Center Is Addressing the Need to Improve Planning and Comprehensive Victim Services

Dean Kilpatrick

National Mass Violence Center, Medical University of South Carolina, USA

The United States has numerous large scale mass violence incidents (MVI) each year that kill hundreds, injure thousands, and terrify countless others, taking away freedom to work, worship, shop, study, and engage in recreational activities free from fear. Preparing for and responding to these events requires a team approach involving: 1) government officials and agencies; 2) criminal justice, health care, mental health, and victim service professionals; and 3) NGOs, but current efforts are fragmented and suffer from a lack of collaboration and good information about best practices and what works. To address these problems, the U.S Office for Victims of Crime funded a cooperative agreement with the Medical University of South Carolina to establish the NMVRC. Its mission is: To improve community preparedness and the nation's capacity to serve victims recovering from mass violence through research, planning, training, technology, and collaboration. This presentation describes how the NMVRC is accomplishing this mission via strategic partnerships with universities (i.e. Boston U. College of Public Health, Columbia U. DART Center, UCLA NCTSN) and NGOs (e.g. American Hospital Association, National Governors Association, U.S. Conference of Mayors), conducting new research on the mental health impact of MVIs, developing online training courses for MH professionals, self-help apps for survivors, and developing evidence-based fact sheets and training materials for government officials, MH and health care professionals, and victim service professionals. We will also discuss our Center's involvement with recent large MVIs and potential avenues of collaboration with our European colleagues.

11:30 12:45 Parallel session #5

S5.1 Clinical Usability of Complex Posttraumatic Stress Disorder

Philip Hyland¹, Frédérique Vallieres², Marieke van Gelderen^{3,4} and Marylène Cloitre^{5,6}

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Track: Assessment & Diagnosis

Complex Posttraumatic Stress Disorder (CPTSD) has been recognized by the International Classification of Diseases (11th edition) as a separate disorder. The current symposium will present research which focusses on the clinical usability of CPTSD and associated concepts. Firstly, the discriminant validity of CPTSD versus borderline personality disorder and PTSD will be addressed and suggestions for understanding and distinguishing these constructs will be given. Next, we will shed light on the usability of CPTSD in a non-western culture by presenting data on CPTSD construct validity in a sample of Syrian refugees in Lebanon, as well as on clinical utility of CPTSD for therapists in Lebanon. Thirdly, findings

on how the association between age at time of trauma and CPTSD might be better explained by trauma type and trauma duration will be shared. Finally, Dr. Cloitre will discuss overall implications of the presented studies for clinical practice.

Nosological structure of ICD-11 PTSD, Complex PTSD, and Borderline Personality Disorder: Results from a UK community sample

Philip Hyland¹, Mark Shevlin² and Thanos Karatzias³

¹Maynooth University, Kildare, Ireland; ²Ulster University, UK; ³Edinburgh Napier University, UK

Background: Complex Posttraumatic Stress Disorder (CPTSD) was introduced to the diagnostic nomenclature with the release of the 11th version of the International Classification of Diseases (ICD-11; World Health Organization, 2018). Although considerable evidence exists to support the construct validity of CPTSD, the discriminant validity of CPTSD and Borderline Personality Disorder (BPD) has been questioned (Resick et al., 2012). *Objective:* This study examined the distinguishability of BPD, PTSD, and 'Disturbances in Self-Organization' (DSO) symptoms. *Method:* A trauma-exposed community sample from the UK (N = 546) completed self-report measure of PTSD, DSO, and BPD symptoms, and the latent structure of these symptoms was assessed using exploratory structural equation modelling (ESEM). *Results:* The best fitting ESEM model included three-factors with latent variables reflective of 'PTSD', 'DSO', and 'BPD' symptomatology ($\chi^2 = 1650$, $df = 399$, $p < .001$; CFI = .944; TLI = .930; RMSEA = .077). These results identified symptoms that served to distinguish the constructs from one another, as well as the symptoms that were shared across the constructs. The PTSD ($\beta = .24$), DSO ($\beta = .23$), and BPD ($\beta = .27$) factors were all positively associated childhood interpersonal trauma. *Conclusions:* ICD-11 PTSD and CPTSD symptoms can be empirically distinguished from BPD symptoms, however, these constructs are not entirely discrete. The nature of the relationship between these constructs can be best understood within a dimensional framework of psychopathology (Kotov et al., 2017).

The construct validity and clinical utility of ICD-11 PTSD and CPTSD amongst Syrian refugees in Lebanon

Frédérique Vallières¹, Philip Hyland² and Ruth Ceannt³

¹Trinity College Dublin, Ireland; ²Maynooth University, Kildare, Ireland; ³St. John of God Hospital, Ireland

Background: Considerable support exists for the validity of ICD-11 Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD) (Brewin et al., 2017). Several studies have examined the validity of these proposals amongst refugees (Nickerson et al., 2016), however, none have included refugees from the Middle East. Furthermore, despite the fact that ICD-11 revisions were focused on improving clinical utility, no study has examined the usability of these diagnostic guidelines among clinicians in humanitarian contexts. *Objective:* To determine the prevalence of PTSD and CPTSD among a sample of Syrian refugees in Lebanon; to assess the factorial and discriminant validity of PTSD/CPTSD; and to evaluate the clinical utility of ICD-11 PTSD/CPTSD (measured by the International Trauma Questionnaire [ITQ; Cloitre et al., 2018]) among a sample of psychotherapists responsible for treating Syrian refugees in Lebanon. *Method:* Confirmatory factor analysis and latent class analyses were conducted based on data collected from 112 Syrian refugees. Qualitative data was collected from six psychotherapists. *Results:* CPTSD (36.1%) was more common than PTSD (25.2%). CFA and LCA findings provided support for the factorial and discriminant validity of PTSD/CPTSD. Qualitative findings indicated that the ITQ is positively regarded, with some limitations and suggested modifications noted. *Conclusions:* This is the first study to support ICD-11 PTSD/CPTSD amongst refugees in the Middle East, and the clinical utility of the ITQ in a humanitarian context. Findings support the growing evidence for the cross-cultural applicability of ICD-11 PTSD/CPTSD.

Association between age at time of trauma and complex PTSD: do trauma type and duration matter?

Marieke van Gelderen^{1,2}, Neil Roberts³, Philip Hyland⁴, Neil Kitchiner³, Mirjam Nijdam^{1,5}, Natalie Simon⁶, Eric Vermetten^{1,2,7} and Jonathan Bisson⁶

¹Foundation Center '45, Arq Psychotrauma Expert Group, the Netherlands; ²Leiden University Medical Center, the Netherlands; ³Cardiff & Vale University Health Board, Cardiff, UK; ⁴Maynooth University, Ireland; ⁵Amsterdam University Medical Center, the Netherlands; ⁶Cardiff University School of Medicine, UK; ⁷Military Mental Health, Research Center, Ministry of Defense, the Netherlands

Background: Complex Posttraumatic Stress Disorder (CPTSD) has been described as related to prolonged and repetitive events, which has often been operationalized as childhood trauma. It is unclear whether age at trauma is most strongly related to CPTSD or whether other aspects of a traumatic event, such as type and duration, are actually responsible. **Objective:** To determine if age at trauma was associated with CPTSD and whether trauma duration and type moderated this potential relationship. **Method:** A British clinical sample of trauma-exposed individuals (N=182) completed the International Trauma Questionnaire. Linear and logistic regression models were estimated with CPTSD symptoms and diagnosis as respective criterion variables and with age at trauma, type of trauma, duration of trauma and their interactions as predictors. **Results:** The linear model as a whole significantly explained 12.6% of variance in CPTSD symptom levels. Age at trauma was not individually associated with CPTSD symptom levels. A positive moderation effect of trauma type on the association between age at trauma and symptom levels was found ($b=.28$, $p=.041$). The moderation effect of trauma duration was negative and just above significance threshold ($b=-.24$, $p=.058$). The logistic model did not improve expected likelihood to either CPTSD, PTSD or no diagnosis groups. However, a younger age at time of trauma was associated with CPTSD diagnosis as compared to PTSD diagnosis (OR=0.96). **Conclusions:** These findings support the importance of duration and type of trauma, in addition to age at time of trauma, when considering traumatic events related to CPTSD, especially in a clinical setting.

S5.2 When violence against children is the norm! Studies on prevalence, consequences and prevention of violence in East Africa

Tobias Hecker¹, Joseph Ssenyonga², Laura Saupe¹ and Mabula Nkuba³

¹Bielefeld University, Germany; ²Mbarara University of Science and Technology, Uganda; ³Dar es salaam University College of Education, Tanzania

Track: Child Trauma

Though violence against children has been outlawed worldwide by ratifying the UN Conventions on the Rights of the Child, more than 1.7 billion children experience violence in their upbringing. The prevalence of violence is particularly high in Sub-Saharan Africa (~90%). These children grow up in a toxic environment of violence and maltreatment that is associated with adverse outcomes across multiple domains. Though it is of global concern, violence against children has received little attention in research. Following a general introduction on this topic, we will present findings from East Africa, where violence against children is the rule rather than the exception. First, Dr. Ssenyonga will present a study on the prevalence and drivers of violence. Ms. Saupe will present a model linking child maltreatment with detrimental developmental outcomes. Finally, Dr. Nkuba will present a Cluster Randomized Controlled Trial testing the effectiveness of a violence-reducing intervention in schools.

Linking consequences of child maltreatment and potential protective factors with future expectations in northern Uganda

Laura Bebra Saupe

Bielefeld University, Germany

Background: Recent research has shown increased levels of child maltreatment in post-war societies together with its detrimental effects on children's healthy development. For adolescents growing up in such a challenging context, future expectations are a particularly relevant developmental outcome. By applying a socio-ecological perspective we try to identify risk and protective factors such as community integration that influence adolescents' mental health and development. *Objective:* The study's aim was to establish pathways between experiences of child maltreatment, internalizing symptoms and adolescents' future expectations, including community integration as a protective factor. *Method and Results:* We calculated a serial mediation model ($R^2=.22$, $F(5,193)=10.54$, $p<.001$) in a sample of $N=199$ northern Ugandan adolescents (40.2% females, age 14.56), which revealed a direct effect of child maltreatment on future expectations as well as an indirect effect from child maltreatment via internalizing symptoms and community integration on future expectations. *Conclusions:* Child maltreatment was found to be linked to adverse developmental outcomes. One way to possibly mitigate these negative effects could be to treat internalizing symptoms and fostering community integration in adolescents.

Prevalence and drivers of violence against children: Findings from a representative sample of adolescent students in Southwestern Uganda

Joseph Ssenyonga¹ and Hecker Tobias²

¹Mbarara University of Science and Technology, Uganda; ²Bielefeld University, Germany

Background: Globally, violence against children is still highly prevalent at home and at school, particularly in Sub-Saharan Africa. However, prevalence data from representative samples remain scarce and factors that drive the use of violence are largely unknown. *Objective:* The current study examined the prevalence and drivers of violence in Southwestern Uganda. *Method:* We assessed a representative sample of 702 students and 291 teachers from 12 secondary schools. *Results:* In the past month, 87% of the teachers used violent discipline, 92% of the students' experienced violence at school and 95% at home, and 79% experienced neglect at home. Teachers (88%) and students (81%) reported positive attitudes towards violence. Teachers' stress and positive attitudes towards violence were positively related to the use of violent discipline. *Conclusions:* The findings reveal a high prevalence of violence at home and school. Factors that drive violence by teachers were stress and positive attitudes towards violence. There is a great need to address the importance of protecting children from familial and school-based violence, and to change societal attitudes towards violent discipline.

Preventing school violence in Tanzanian public secondary schools: Analysis of primary and secondary outcome measures of a Cluster Randomized Controlled Trial

Mabula Nkuba

Dar es salaam University College of Education, Tanzania

Background: The high global prevalence of school violence underlines the need for prevention. However, few interventions that enable teachers to use non-violent disciplinary measures have been scientifically evaluated in Sub-Saharan Africa. *Objective:* We evaluated the effectiveness of the preventative intervention Interaction Competencies with Children for Teachers (ICC-T). *Method:* In a cluster randomized controlled trial, we assessed attitudes towards and use of violence by teachers

and students' internalizing and externalizing problems. Data were assessed in the months before and three months after intervention. In total, 158 teachers and 486 students (age: ~15.61 years) participated in this study. *Results:* We found a significantly stronger decrease in the use of violence and positive attitudes towards violence of teachers in intervention schools at follow-up. Similarly, we found a significant interaction effect for internalizing but not for externalizing problems. *Discussion:* Our study provides initial evidence for the effectiveness of ICC-T. However, further evidence for the sustainability of its effect is needed.

S5.3 New Technologies and Mental Health: From Pathological Use to Novel Treatment Delivery

Eric Bui¹, Claudia Carmassi², Samantha Al Joboory³, Alix Lavandier³ and Brian Hall⁴

¹Massachusetts General Hospital, Harvard Medical School, USA; ²University of Pisa, Italy; ³Centre Hospitalier de Cadillac, France; ⁴University of Macau, China

Track: Intervention Research & Clinical Studies

Over the past decade, major developments in the field of communication and information technologies resulted in the worldwide use of the Internet and mobile technologies. These recent advances in computer and communication science have implications in human behaviors including in the clinical presentation of mental disorders as well as their treatment. While the Internet has facilitated certain behaviors relevant to pathological response to stressors, such as addictive behaviors and avoidance, it has also fostered novel treatment modalities and delivery methods that have the potential to overcome traditional barriers to treatment for individuals affected by stressor-related disorders including posttraumatic stress disorder. This international symposium brings together researchers from three different continents to present recent data on the association of Internet use and posttraumatic stress symptoms, and on novel treatment interventions delivered using virtual reality and mobile technology.

The Relationship Between Traumatic Stress Symptoms and Problematic Internet Use in 151 hospitalized Bipolar patients

Claudia Carmassi, Carlo A Bertelloni and Liliana Dell'Osso

University of Pisa, Italy

Background: Over the past two decades, Problematic Internet Use (PIU), defined as “use of the Internet that creates psychological, social, school and/or work difficulties in a person's life”, has dramatically increased and recently associated to trauma exposure PTSD. Aim of this study was to investigate PIU and its correlations with post-traumatic stress spectrum in 151 hospitalized Bipolar patients enrolled at the Azienda Ospedaliero-Universitaria Pisana (Pisa, Italy). *Method:* All patients were assessed by the Trauma and Loss Spectrum-Self Report (TALS-SR) to investigate PTSD rates and posttraumatic spectrum symptomatology. One item of the Adult Autism Subthreshold Spectrum (AdAS Spectrum)⁶ was utilized to evaluate the presence of PIU. *Results:* 25 subjects (18.7%) reported PIU. Patients with PIU reported significantly higher PTSD rates (80,0% vs 49,5%, $p=.012$), “Avoidance” (92,0% vs 73,3%, $p=.046$) and “Arousal” (92,0% vs 73,3%, $p=.046$). Furthermore, patients with PIU presented higher score in the following TALS-SR domain: potentially traumatic events (4.85 ± 3.17 vs 8.36 ± 5.25 , $p=.002$), re-experiencing (4.10 ± 2.22 vs 5.32 ± 2.70 , $P=.028$), avoidance and numbing (5.03 ± 3.00 vs 6.40 ± 2.70 , $p=.047$), maladaptive coping (1.95 ± 1.85 vs 3.08 ± 2.44 , $p=.036$), arousal (2.35 ± 1.64 vs 3.32 ± 1.60 , $p=.010$), and in the TALS-SR total score (47.33 ± 17.21 vs 59.64 ± 22.52 , $p=.025$). *Conclusions:* We found bipolar patients with PIU to show higher rates of PTSD, Avoidance, Arousal and posttraumatic spectrum symptoms.

A Novel Virtual Reality-based Integrative Treatment Program for Complex PTSD

Samantha Al Joboory and Alix Lavandier

Centre Hospitalier de Cadillac, France

Background: Complex posttraumatic stress disorder (C-PTSD) was introduced as a clinical presentation resulting from sustained, repeated, or multiple forms of traumatic exposure (genocide campaigns, sexual and/or physical abuse during childhood, child soldiering, severe domestic violence, torture, or slavery). While there is some support for Cognitive-Behavioral Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) in the treatment of C-PTSD, their efficacy is limited, and more treatment options are needed. *Purpose:* The goal of this research is to examine the efficacy of an integrative therapy, the TIM-E protocol, a 18 session program (9 individuals session/9 group session) that combines elements from CBT, EMDR, the Good Live Model, and Virtual Reality (VR), for C-PTSD. *Method:* Participants were 15 adults with C-PTSD (Mean age = 36; SD = 13,24; 60% women) were randomly assigned either TIM-E, EMDR only, or a control condition. They were assessed pre- and post-treatment with the PTSD check-list (PCL-5; Mean pre-treatment score = 43,73; SD = 10,79; Mean post-treatment score = 31,57; SD = 17) and SIDES (SIDES; Mean pre-treatment score = 58,13, SD = 11,20; Mean post-treatment = 40,23; SD = 17,05). *Results:* Both TIM-E and EMDR were associated with significant pre- to post-treatment decreases in PTSD symptom severity ($p < 0.01$). Furthermore, TIM-E was associated with greater symptom reduction compared to EMDR ($p < 0.01$). *Conclusions:* An integrative therapy approach that includes Virtual Reality may be efficacious for Complex PTSD, compared to control and possibly EMDR.

A Novel Mind-Body Podcast to Reduce Stress Among Military Caregivers

Eric Bui

Massachusetts General Hospital, Harvard Medical School, USA

Background: There are millions of military caregivers in the US who face a variety of stressors inherent to caring for an incapacitated loved one. Mind-body interventions have been shown to reduce stress and improve overall health and functioning but are not readily available in the community. We adapted an existing 8-week mind-body program into a 28-day podcast series that included psychoeducation about the stress response, relaxation-response training, and self-compassion practices. *Objective:* To conduct an open pilot of a podcast mind-body program among military caregivers. *Method:* Participants were $N = 55$ (100% women, $M(SD)Age = 42.3 (9.1)$, $M(SD) years serving as caregiver = 7.6(3.1)$) who were assessed pre-, mid-, and post-program for perceived stress, depressive symptom severity, anxiety symptom severity, somatic symptom severity, and quality of life. *Results:* The mixed model was significant for perceived stress (primary outcome) indicating a significant effect of time, with medium effect sizes (Coefficient = -1.77 , $SE = 0.47$, $p < 0.001$, $d = 0.5$). Similar mixed models were significant for depressive symptoms (Coefficient = -1.33 , $SE = 0.39$, $p < 0.001$), somatic complaints (Coefficient = -4.01 , $SE = 1.66$, $p = 0.02$), and ability to perform social roles (Coefficient = 0.84 , $SE = 0.24$, $p < 0.001$). Models for anxiety symptoms for and for satisfaction with social roles only approached statistical significance. *Conclusions:* Our results suggest that a mind-body program delivered as a daily podcast may be efficacious in reducing perceived stress, and symptoms of depression and anxiety among military caregivers. Randomized controlled trials are needed to confirm these results.

Making scalable digital mental health interventions culturally appropriate: A program to reach Filipinos in China

Brian Hall

University of Macau, China

Background: Digital mental health interventions offer scalable solutions to meet the needs of diverse populations living in contexts of adversity and where there are few mental health providers. **Objective:** This presentation will describe the cultural adaptation of the World Health Organization's digital mental health program, Step-by-Step, currently being piloted tested among Filipino transnational migrants. **Method:** Cultural adaptation was carried out in several phases: 1) Consultations with expert Filipino psychologists; 2) Preliminary content adaptation; 3) Iterative content and illustration adaptations based on focus groups with 28 migrants working in diverse industries; 4) Stakeholder feedback. In each FGD, cognitive interviewing was used to probe for relevance, acceptability, and comprehensibility. **Results:** We made a number of key adaptations. To enhance relevance, we adapted the program narrative to match migrants' experiences, incorporated Filipino values, and illustrated familiar problems and activities. To increase acceptability, our main characters were changed to wise elders rather than health professionals, potentially unacceptable content was removed, and the program was made suitable for a variety of migrants. To increase comprehension, we used English and Filipino languages, simplified the text to ease interpretation of abstract terms or ideas. We retained the core elements and concepts included in the Step-by-Step program to maintain completeness. **Conclusions:** This study showed the utility of using the four-point framework that focuses on acceptance, relevance, comprehensibility, and completeness. We achieved a culturally-appropriate adapted version of the Step-by-Step program for OFWs. We discuss lessons learned in the process to guide future cultural adaptations of digital mental health interventions.

S5.4 Building evidence-based treatments for refugee populations – results and pitfalls from the field

Rina Ghafoer Khan¹, Jetske van Heemstra¹, Nadine Stammel² and Maja Nordbrandt³

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³Competence Centre for Transcultural Psychiatry, Denmark

Track: Transcultural & Diversity

Numbers of refugees are growing worldwide, many of which suffer from mental health problems. The need for evidence-based treatment for this population is urgent. However classical designs and guidelines for building evidence-based treatment do not fit this population. Well-known challenges are cultural and language barriers and high drop-out rates due to uncertain living conditions. As a result treatment studies are scarce, and its participants do not necessarily represent the population as a whole (i.e., selection bias). Challenges in designing and carrying out refugee treatment studies are rarely represented in the scientific literature. In the current symposium, we will present findings from several European refugee treatment studies and discuss the many pitfalls and compromises it takes to carry out such studies. Considering these refugee treatment studies we want to put forward realistic recommendations for future studies. A general introduction beforehand and a discussion afterwards will be part of the symposium.

Multidisciplinary treatment for traumatized refugees in a naturalistic setting: symptom courses and predictors

Nadine Stammel

Freie Universitat Berlin, Germany

Background: Multidisciplinary treatment (MT) approaches are commonly used in specialised psychosocial centers for the treatment of traumatised refugees, but empirical evidence for their efficacy is inconsistent (Nickerson et al., 2011; van Wyk & Schweitzer, 2014). **Objective:** To obtain

evidence on the effectiveness of MT approaches for traumatised refugees, symptom courses of post-traumatic stress disorder (PTSD), anxiety, depression, somatoform symptoms subjective quality of life (QoL) were investigated in the course of a naturalistic MT. It was also analysed if sociodemographic variables predicted changes in symptomatology and quality of life. *Method:* N = 76 patients of the outpatient clinic of Center Überleben receiving regular MT were surveyed at three measurement points in a single-group design. Pitfalls during study execution: Due to a high amount of missing data and irregular time intervals between the assessments (e.g. range of second assessment: 4.4–17.3 months), multilevel analysis was applied (Hox, 2010). *Results:* We found significant improvements of PTSD symptoms, depression, anxiety (all $p < .001$), and somatoform symptoms ($p = .002$) as well as of QoL ($p < .001$) over time. *Conclusions:* Due to the aforementioned incomplete and irregular assessments, a suitable method for data analysis had to be applied. Results suggest that the received MT had a positive effect on trauma-related symptoms and QoL of traumatised refugees. Most sociodemographic characteristics did not seem to predict symptom courses. However, as for ethical reasons no randomised controlled group design was implemented, the clients' improvements cannot be clearly attributed to the intervention.

Trauma-affected refugees treated with Basic Body Awareness Therapy or mixed physical activity as augmentation to treatment as usual – a pragmatic randomised controlled trial

Maja Nordbrandt

Competence Centre for Transcultural Psychiatry, Denmark

Background: The prevalence of post-traumatic stress disorder (PTSD) is 30% among refugees, with high co-existence of prevalent chronic pain that maintains psychopathology. Meanwhile, evidence on effective treatment methods is sparse. *Objective:* To evaluate the effects of physical activity as add-on to psychiatric treatment as usual (TAU) in adult trauma-affected refugees with PTSD. *Method:* Adult refugees with PTSD (N=338), were randomised to three following groups: individual physiotherapy one hour per week for 20 weeks (Basic Body Awareness Therapy plus TAU (group B), mixed physical activity plus TAU (group M)), or TAU only (group C). The primary outcome was PTSD severity. Pitfalls during study execution: High chronicity of physical and mental conditions among the participants resulted in low functional capacity. This implied adaptation in the physical activity to avoid drop-out, and potentially impacted effects of the experimental intervention. Additionally, cultural, ethnic and language differences made group-based interventions unsuitable, resulting in a costly and time demanding study to conduct. The difficult mental and social conditions of participants contributed to high drop-out rates and low adherence. Translations and validations of instruments were challenging and not always satisfying. *Results:* 318 patients were eligible for intention-to-treat analysis (C/B/M=104/105/109). On the primary outcome small but significant improvements on PTSD were found in all groups, with no significant between-group effect. *Conclusions:* The findings do not provide evidence that either BBAT or mixed physical activity as add-on treatment bring significantly larger improvement on PTSD compared to TAU alone for trauma-affected refugees.

Predictors of change during Narrative Exposure Therapy for displaced populations: First results of a repeated measures design

Jetske van Heemstra

Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Background: Displaced victims of interpersonal violence, e.g., refugees, asylum seekers, and victims of sexual exploitation, are growing in numbers, and are often suffering from a posttraumatic stress disorder (PTSD). At the same time these victims are known to benefit less from trauma-focused therapy, and are less compliant to treatment. *Objective:* In the present study, perceived daily stress,

emotion regulation, and mood are investigated as predictors of change in PTSD symptoms during a trauma-focused therapy (Narrative Exposure Therapy (NET)). Since these factors might promote or undermine therapy effectiveness. *Methods:* The current study evaluates the trajectories of change of the first 20 displaced victims of interpersonal violence in the current study (end goal is N=80). Weekly questionnaires tapping the aforementioned possible predictors and PTSD were administered. Pitfalls during study execution: During data collection, the threshold for inclusion was low to guarantee the external validity. Unfortunately, this resulted in high drop-out rates. *Results:* To encourage study adherence, adaptations to the study design were made, e.g. participants were called to remind them to their appointments, flexibility in planning assessments, and accepting treatment pause's. Additional previous findings on primary outcomes are to be revealed and will be presented at the ESTSS. *Discussion:* The present study was the first to examine the interplay of facilitating and interfering factors possibly impacting treatment outcome in displaced victims of interpersonal violence with PTSD receiving NET. Also, it revealed important aspects that contribute to study adherence. The current study can help to improve future treatment based on individual characteristics.

S5.5 The long-term imprints of traumatic experiences on the body: Physical, somatic and psychological expressions

Zahava Solomon¹, Anat Talmon², Karni Ginzburg¹ and Noga Tsur¹

¹Tel Aviv University, Israel; ²Stanford University, USA

Track: Public Health

The proposed symposium will present three perspectives that illuminate the ways in which trauma is engraved in the experience of, orientation to, and physical functioning of the body. The first talk, given by Prof. Zahava Solomon, will present three decades of research that examines the long-term implications of war and war captivity on combatants' premature aging, morbidity and mortality. The second presentation, given by Dr. Noga Tsur, will include two studies examining the imprints of torture on the way later chronic pain is perceived and personified, and its significance in explaining the link between trauma and dysfunctional pain-modulation. The third presentation, given by Dr. Anat Talmon and Prof. Karni Ginzburg, will present the results of a study demonstrating the long-term implications of childhood emotional neglect on women's body experience during pregnancy and postpartum, as well as postpartum depression. The shared links and implications of these different perspectives will be discussed.

Premature aging following war-induced trauma: Results of a three-decade longitudinal study

Zahava Solomon

Tel Aviv University, Israel

Background: Research suggests that trauma experienced at an earlier stage of life may be implicated in premature or accelerated aging in later stages. Premature aging, in this respect, evinces in various domains, particularly in health impediments and mortality. *Objective:* The current study prospectively assessed the long-term impact of war and war captivity on mortality, medical assessments of morbidity, self-rated health, and subjective age among Israeli combat veterans and former prisoners of war (POWs). *Method:* Participants were evaluated at four points in time over three decades. *Results:* Results revealed that war captivity and the resulting PTSD trajectories were implicated in premature aging in all domains. Ex-POWs exhibited higher mortality rates and more health impairments than comparable veterans who were not held captive when assessed both by medical professionals and via self-report measures. Differential posttraumatic stress disorder (PTSD) trajectories mediated the relationship between captivity and health. *Conclusions:* Theoretical and clinical implications will be discussed.

Trauma, PTSD and dysfunctional pain modulation: The role of traumatized pain personification

Noga Tsur¹, Ruth Defrin¹ and Golan Shahar²

¹ Tel Aviv University, Israel; ² Ben Gurion University, Israel

Background: Substantial findings reveal that trauma and PTSD are implicated in chronic pain and altered pain perception and modulation. However, the underlying mechanisms of these processes are yet to be established. The illness-personification theory (Shahar and Lerman, 2013) suggests that individuals tend to ascribe human-like characteristics to chronic illness and develop a sort of “relationship” with it. *Objective:* Two studies tested (1) whether trauma and PTSD trajectories are implicated in later pain personification, and (2) whether traumatized pain personification mediates the link between trauma, long-term PTSD, and pain perception and modulation. *Method:* Fifty-nine ex-prisoners of war who underwent severe torture and 44 matched combatants were assessed for PTSD at 18, 30, and 35 years post-war, and for torturing pain personification at 35 years post-war. Quantitative somatosensory testing of heat-pain threshold, heat-pain tolerance, conditioned pain modulation (CPM), and temporal summation of pain (TSP) were assessed at 35 years post-war. *Results:* The findings of Study 1 reveal that torture survivors tend to ascribe torturing personification to their chronic pain. Participants with chronic and delayed onset of PTSD had higher torturing personification compared to resilient and controls. The findings of Study 2 showed that torturing personification significantly mediated the associations between captivity long-term PTSD, and pain modulation (i.e., CPM and TSP). *Conclusions:* These findings point to the effect of trauma on the subjective orientation towards the body as a key factor in dysfunctional pain modulation. Implications for the PTSD - chronic pain comorbidity will be discussed.

“From neglected self to disturbed body” – The relation between childhood emotional neglect and adjustment to motherhood

Anant Talomon¹ and Karni Ginzburg²

¹Stanford University, USA; ²Tel Aviv University, Israel

Background: The transition to motherhood involves many challenges that require adjustment; included among them are adapting to bodily changes. Occurring in the context of their developing motherhood, the body experience may reflect both women's reactions to the concrete physical changes taking place inside their bodies, as well as to the formation of new self-identities during the transition to motherhood. Although these tasks may be challenging for many women, those who experienced emotional neglect during childhood may find them especially difficult. *Objective:* The aim of this study is to examine the association of childhood emotional neglect with women's body experience during pregnancy and postpartum, and their implications for postpartum depression. *Method:* Three hundred and ninety four women filled out a battery of questionnaires during their pregnancy (Time 1) and two months postpartum (Time 2), assessing their history of childhood emotional neglect, body experience, and depression. *Results:* Results from structural equation modeling (SEM) indicated that childhood emotional neglect was associated with depression at both Time 1 and Time 2. These associations were mediated by the body experience during pregnancy (Time 1) and motherhood (Time 2). The model explained 44% of the variance of postpartum depression (Time 2). *Conclusions:* The findings of this longitudinal study suggest that childhood emotional neglect may color women's bodily experiences during the transition to motherhood. Therefore, identifying these women during pregnancy might enable professionals to provide them with the support they need, and foster the development of preventative interventions.

S5.6 Treatment options for women with PTSD related to childhood abuse. Results from a randomized controlled multicenter trial (RELEASE)

Tamar Neubauer, Nikolaus Kleindienst and Christian Schmahl

Central Institute of Mental Health, Germany

Track: Intervention Research & Clinical Studies

Sexual or physical childhood abuse (CA) may lead to complex presentations of posttraumatic stress disorder (PTSD) with pervasive emotion dysregulation and co-occurring disorders such as borderline personality disorder. Systematic evaluations of treatments for these complex forms of PTSD after CA are sparse. This symposium will present the major results from a recently finished multi-center RCT comparing DBT-PTSD and Cognitive Processing Therapy (CPT) in n=193 women with PTSD related to CA. Following a general introduction setting the symposium into perspective, Tamar Neubauer will present similarities and differences between DBT-PTSD and CPT and will identify their unique characteristics. In the second talk Nikolaus Kleindienst will present major results from the RELEASE-study comparing safety, efficacy, and drop-outs across the two treatments. Finally, Christian Schmahl will present functional neuroimaging data and experimental data on general and specific effects of DBT-PTSD and CPT on pre-to-post changes in neural correlates of emotion regulation, and working memory.

DBT-PTSD: A modular treatment approach for complex PTSD after childhood abuse

Tamar Neubauer

Central Institute of Mental Health, Germany

Background: Posttraumatic stress disorder (PTSD) with co-occurring severe psychopathology, such as symptoms of borderline personality disorder (BPD), is a frequent sequela of childhood sexual or physical abuse (CA). We have designed DBT-PTSD to meet the specific needs of patients with complex PTSD. The treatment programme is based on the rules and principles of dialectical behavioural therapy (DBT), and adds interventions derived from cognitive behavioural therapy (CBT), acceptance and commitment therapy (ACT) and compassion-focused therapy (CFT). Apart from that it integrates trauma-specific treatment modules such as exposure procedures, processing of guilt, shame and disgust as well as body therapy. In the last stage of the therapy patients get supported to actively transfer what they have learned in the therapy, in their daily lives, targeting their values and goals. DBT-PTSD can be provided as a comprehensive residential programme or as an outpatient programme. *Method:* To evaluate the treatment female patients who experienced CA and who fulfilled DSM-5 criteria for PTSD plus borderline features, including criteria for severe emotion dysregulation were randomized to outpatient treatment with either Cognitive Processing Therapy (CPT) or Dialectical Behaviour Therapy for PTSD (DBT-PTSD). The primary outcome was the change on the Clinician Administered PTSD Scale for DSM-5. DBT-PTSD showed high effect sizes ($d=1.8$), as well as good remission rates. *Conclusions:* DBT-PTSD provides empirically supported psychological treatments for survivors of childhood physical and sexual abuse suffering from complex PTSD.

Differential efficacy of Dialectical Behaviour Therapy for PTSD (DBT-PTSD) vs Cognitive Processing Therapy (CPT-C) in Post-Traumatic Stress Disorder Related to Childhood Abuse

Nikolaus Kleindienst

Central Institute of Mental Health, Germany

Background: About 18% of adult women report a history of sexual childhood abuse and about 22% report a history of childhood physical abuse (Stoltenborgh et al., 2015). Women who have experienced

these forms of childhood abuse (CA) often live with significant consequences such as emotional numbness, emotion dysregulation or psychiatric disorders such as post-traumatic stress disorder (PTSD) and/or borderline personality disorder (BPD). However, despite the significance of clinical conditions related to CA, systematic evaluations of evidence-based treatments for PTSD after CA are sparse. *Method:* A total of n=193 women with PTSD related to CA were randomized to outpatient treatment with either Cognitive Processing Therapy (CPT) or Dialectical Behavior Therapy for PTSD (DBT-PTSD). Efficacy was assessed with mixed linear models over an observation period of 15 months. The CAPS was the primary outcome; secondary outcomes included a wide range of variables including behaviors such as non-suicidal self-injury. *Results:* Large improvements were observed in both groups (Cohen's d for the primary outcome were larger than 1.0 for both intent-to-treat samples). Participants randomized to DBT-PTSD were less likely to drop-out and improved significantly more in the primary outcome (CAPS) and in most of the secondary outcomes. *Conclusions:* The findings support the efficacy of both DBT-PTSD and CPT-C in the treatment of highly symptomatic survivors of CA. Regarding the primary outcome (i.e. the improvement of the CAPS-score) results favored DBT-PTSD.

Reference

Stoltenborgh, et al. (2015) Child Abuse Review (2015), doi: 10.1002/car.2353.

Neural Correlates of Emotional-Cognitive Interaction Before and After DBT-PTSD and CPT

Christian Schmahl¹, Juia Herzog¹, Inga Niedtfeld¹, Sophie Rausch¹, Janine Thome¹, Regina Steil², Kathlen Priebe³ and Martin Bohus¹

¹Central Institute of Mental Health, Germany; ²Goethe University Frankfurt, Germany; ³Charite University Medicine Berlin, Germany

Objective: Increased distractibility and hypervigilance are frequent symptoms of posttraumatic stress disorder (PTSD). Findings of functional neuroimaging studies (fMRI) suggest hypoactivation of inhibition-related prefrontal regions (e.g., anterior cingulate cortex (ACC), dorsolateral prefrontal cortex (dlPFC)), leading to increased activation in limbic areas (amygdala, insula) [1]. Preliminary studies suggest that this dysbalance can be altered after treatment [2]. *Method:* In a cross-sectional study, we examined neural activity in 28 female patients with complex PTSD (cPTSD), 28 female trauma-exposed healthy controls (TCs) and 28 female non-trauma-exposed healthy controls (HCs), performing an emotional Stroop Task and a Sternberg working memory task. In a longitudinal study, the same tasks were conducted in 36 patients before and after 12 months DBT-PTSD or CPT treatment. *Results:* Patients with cPTSD displayed significantly greater Stroop interference with trauma-related words (slower reaction times and increased errors) compared to the other conditions and compared to the TC and HC groups. Moreover, patients with cPTSD showed increased activation in the context of trauma-related words in brain regions associated with cognitive control (dlPFC, ventromedial PFC, dorsal ACC) compared to both control groups. After treatment, we found reduced activation in amygdala, insula, and ACC in the Stroop trauma condition. *Conclusions:* Findings highlight individual differences in neural functioning following childhood trauma and point to alterations in inhibition-related prefrontal brain circuits which are in line with PTSD symptoms of hypervigilance and distractibility during exposure to trauma cues. Results of the longitudinal study confirm earlier findings of reduced activation in emotion-processing brain areas after treatment of PTSD.

15:45 17:00 Parallel session #6

S6.1 Network analysis in Psychotraumatology

Cherie Armour¹, Dominic Murphy^{2,3} and Talya Greene⁴

¹Ulster University, UK; ²Combat Stress, UK; ³King's College London, UK; ⁴University of Haifa, Israel

Track: Assessment & Diagnosis

Network analysis is a relatively new approach in the field of post-traumatic stress disorder (PTSD). The approach focuses on symptom-level associations within and between disorders or related constructs (e.g., risk factors). It views symptoms as co-occurring and interacting in syndromes due to potential causal interactions, rather than understanding symptoms as being indicators of an underlying common cause. By focusing on individual symptoms and symptom interactions, network analysis can complement the ongoing diagnosis-level research. The results from a network analysis study have a potential to inform clinical interventions by pointing to specific symptoms or symptom interactions that could be targeted. The current symposium will showcase three recent studies that focused on PTSD symptom networks and used data from traumatised populations from across the world. The presentations should encourage researchers to conceptualise PTSD from a network perspective.

Posttraumatic Stress Disorder Symptoms and Reckless Behaviors: A Network Analysis Approach

Cherie Armour

Ulster University, UK

Background: Existing literature indicates a theoretical and empirical relation between engagement in reckless behaviors and posttraumatic stress disorder (PTSD). Thus, the DSM-5 revision of the PTSD nosology added a new reckless or self-destructive behavior (RSDB) symptom (Criterion E2). *Objective:* The current study aimed to examine the item-level relations between a range of reckless behaviors and PTSD symptom clusters using network analysis. *Method:* Participants were recruited from Amazon Mechanical Turk (N = 417) and network analysis was conducted with 21 variables: the seven PTSD symptom clusters (community 1) corresponding to the Hybrid model of PTSD (Armour et al., 2015) and fourteen reckless behavior items (community 2). *Results:* Results showed that PTSD and reckless behaviors clustered primarily within their respective communities (i.e., within PTSD and within reckless behaviors), although several bridge connections (i.e., between PTSD and reckless behaviors) were identified. The externalizing behaviors symptom cluster had the highest number of direct bridge connections with reckless behaviors. The majority of reckless behavior items had direct relationships with one or more PTSD symptom clusters. *Conclusions:* The findings support the inclusion of the E2 symptom in the DSM-5 PTSD criteria and provide testable hypotheses about the relationships between specific reckless behaviors and PTSD symptom clusters that may inform future research.

A network analysis of DSM-5 posttraumatic stress disorder and functional impairment in UK treatment-seeking veterans

Dominic Murphy^{1,2}

¹Combat Stress, UK; ²King's College London, UK

Background: Network analysis is a relatively new methodology for studying psychological disorders. It focuses on the associations between individual symptoms, which are hypothesised to mutually interact with each other. *Objective:* The current study represents the first network analysis conducted with treatment-seeking military veterans in UK (Ross, Murphy & Armour, 2018). The study aimed to examine the network structure of post-traumatic stress disorder (PTSD) symptoms and four domains of functional impairment by identifying the most central (i.e., important) symptoms of PTSD and by identifying those symptoms of PTSD that are related to functional impairment. *Method:* Participants were 331 military veterans with probable PTSD. In the first step, a network of PTSD symptoms based on the PTSD Checklist for DSM-5 was estimated. In the second step, functional impairment items were added to the network. *Results:* The most central symptoms of PTSD were recurrent thoughts,

nightmares, negative emotional state, detachment and exaggerated startle response. Functional impairment was related to a number of different PTSD symptoms. Impairments in close relationships were associated primarily with the negative alterations in cognitions and mood symptoms and impairments in home management were associated primarily with the reexperiencing symptoms. *Conclusions:* The results are discussed in relation to previous PTSD network studies and include implications for clinical practice.

Reference

Ross J, Murphy D, Armour C. A network analysis of posttraumatic stress disorder and functional impairment in UK treatment-seeking veterans. *Journal of Anxiety Disorders* 2018; 57:7-15.

A network analysis of peritraumatic distress following large-scale community fires: Do central symptoms have stronger associations with subsequent PTSD?

Talya Greene, Yuval Palgi and Daniela Dikar-Oren

University of Haifa, Israel

Background: Research indicates that people who experience more intense peritraumatic reactions are at higher risk of subsequently developing PTSD. *Objectives:* The study used network analysis: 1) to explore the network structure of peritraumatic distress reactions; 2) to identify clusters of peritraumatic distress reactions; and 3) to assess whether central items in the peritraumatic network have stronger network associations with subsequent posttraumatic stress symptoms (PTSS). *Method:* Adults living in communities that were affected by large-scale community fires in Israel (November 2016) were recruited via social networking sites and apps. Participants completed the 13-item peritraumatic distress inventory (PDI) within one month of the fire (n=372), and the PTSD checklist for DSM-5 (PCL-5) four months later (n=200). Network analyses and exploratory graph analysis were conducted using the qgraph, bootnet and EGA packages in R. *Results:* The PDI items were positively connected to each other in a network structure, which divided into two clusters: one which comprised emotional reactions; and a second which was characterized by physical/somatic reactions along with guilt and shame. Emotional loss of control had the highest strength centrality. When a PTSS item was included as a covariate, it was not most strongly related to the central items in the PDI network, but rather to physical reactions, thinking that one might die, and feelings of shame and horror. *Conclusions:* Peritraumatic distress reactions are related to each other in a network structure comprised of two communities. Central items for peritraumatic distress are not those most strongly associated with subsequent PTSS.

S6.2 The role of biological markers in predicting effectiveness of trauma-focused psychotherapy

Sarah Wilker¹, Sinha Engel², Sarah Schumacher² and Paul Zhutovsky³

¹University Bielefeld, Germany; ²Freie Universität Berlin, Germany; ³Amsterdam UMC, location AMC, University of Amsterdam, the Netherlands

Track: Biological & Medical

Posttraumatic Stress Disorder (PTSD) is associated with severe functional impairments, poor physical health outcomes and elevated suicidality. Exposure-based therapies are considered to be the most effective treatment for PTSD. However, at least one third of trauma survivors do not benefit and continue to suffer from clinically relevant PTSD symptoms. The identification of individual biological risk factors for a poor treatment response is of high clinical relevance as the derived knowledge will help to understand disparities in therapy outcome, and to improve and individualize psychotherapeutic treatments in the future. After a general introduction (S. Wilker) on biological predictors of treatment

response, including variations of the FKBP5 gene, the three presentations will present the influence of a wide range of biomarkers on the outcome of psychotherapy for PTSD, that is, endogenous blood concentrations of the neuropeptide oxytocin (S. Engel), salivary cortisol and alpha-amylase (S. Schumacher) as well as resting-state fMRI (P. Zhutovsky).

Does oxytocin predict psychotherapeutic process? Exploring biological markers of internet-based cognitive behavioral therapy for posttraumatic stress disorder

Sinha Engel¹, Helen Niemeyer¹, Annika Küster¹, Jan Spies¹, Heinrich Rau², Christine Knaevelsrud¹ and Sarah Schumacher¹

¹Freie Universität Berlin, Germany; ²German Armed Forces Hospital Berlin, Germany

Background: The neuropeptide oxytocin promotes prosocial behavior, especially interpersonal bonding, trust and communication. Therefore, intranasally delivered oxytocin has been discussed as psychotherapy enhancing drug. Specifically, it has been hypothesized that oxytocin might strengthen the therapeutic alliance, a well-known psychotherapeutic change factor. At the same time, oxytocin's prosocial effects depend on contextual and intrapersonal factors and adverse effects have been detected in clinical populations. **Objective:** To date, the impact of endogenous oxytocin concentrations on psychotherapy process variables in general and the therapeutic alliance in particular is still unknown. We investigated these associations in the context of a six weeks internet-based cognitive behavioral therapy for posttraumatic stress disorder. **Method:** We performed regression analyses to test whether endogenous oxytocin concentrations, measured pre-therapy under fasted, unstimulated conditions, in blood of n = 31 German Armed Forces soldiers, predicted early therapeutic alliance. Moreover, oxytocin's impact on other psychotherapy process variables was explored. We described courses of psychotherapy expectation and evaluation, resource activation, clarification of meaning, problem actuation and mastery, as well as dropout, assessed pre-, peri- and post-therapy, as a function of pre-therapy oxytocin concentrations. **Results:** Data analysis is still in progress. Results will be presented in the talk. **Conclusion:** Our results contribute to the discussion whether oxytocin's prosocial effects might indeed be transferred to psychotherapy by means of an alliance-promoting drug or whether instead, posttraumatic stress symptoms are a counterindication .

Salivary cortisol and alpha-amylase as predictors of response to an internet-based treatment for German soldiers with PTSD

Sarah Schumacher¹, Sinha Engel¹, Helen Niemeyer¹, Annika Küster¹, Jan Spies¹, Nadine Skoluda², Urs Nater², Heinrich Rau³ and Christine Knaevelsrud¹

¹Freie Universität Berlin, Germany; ²Universität Wien, Austria; ³German Armed Forces Hospital Berlin, Germany

Background: Military personnel is particularly at risk to be exposed to traumatic events and to subsequently develop posttraumatic stress disorder (PTSD). Disturbances in the hypothalamic-pituitary-adrenal (HPA) axis and dysregulations in the autonomic nervous system (ANS) have been related to the development and maintenance of PTSD. Given the modulating role of stress markers on cognitive processes, it is conceivable that pronounced alterations in HPA axis and ANS regulation could be associated with less favourable responses to psychotherapy. **Objective:** The aim of the study was to investigate whether pre-treatment salivary cortisol and salivary alpha-amylase concentrations, reflecting HPA axis and ANS regulation respectively, predict response to psychological treatment in German soldiers with PTSD. **Method:** Soldiers of the German Armed Forces, diagnosed with PTSD according to the CAPS-5, were randomized to an experimental group receiving a 6-week internet-based cognitive behavioural therapy (iCBT) or a waitlist group, which received the same treatment after a period of 6 weeks. On two consecutive workdays, a diurnal profile consisting of six saliva samples was collected for analysis of cortisol and alpha-amylase before, directly after, and 3 months

after iCBT. For the current analysis, only pre-treatment concentrations of cortisol and alpha-amylase were analysed. Therefore, the cortisol awakening response (CAR), the alpha-amylase awakening response (AAR), the daily total cortisol output, and the daily total alpha-amylase output were calculated and used as predictors of treatment outcome, assessed by CAPS-5. *Results and Conclusion:* Data analysis is still in progress. Results and discussion of results will be presented in the talk.

Individual Prediction of Trauma-Focused Therapy Outcome in Veterans with Posttraumatic Stress Disorder using Neuroimaging Data

Paul Zhutovsky¹, Rajat Thomas¹, Tim Varkevisser^{2,3,4}, Miranda Olff^{1,5}, Sanne van Rooij⁶, Mitzy Kennis⁷, Guido van Wingen¹ and Elbert Geuze^{2,3}

¹Amsterdam UMC, location AMC, University of Amsterdam, the Netherlands; ²University Medical Center, Utrecht, the Netherlands; ³Research Center Military Mental Health Care, Utrecht, the Netherlands; ³Department of Experimental Psychology, Utrecht University, the Netherlands; ⁵Arq Psychotrauma Expert Group, the Netherlands; ⁶Emory University School of Medicine, USA; ⁷Department of Clinical Psychology, Utrecht University, the Netherlands

Background: Trauma-focused psychotherapy is the first-line treatment for PTSD but 30-50% of patients do not benefit sufficiently (Bradley et al., 2005). Neuroimaging has been proposed as a potential biomarker predicting treatment-response in PTSD patients (Colvonen et al., 2017; Yuan et al., 2018). *Objective:* We investigated whether neuroimaging data could distinguish between treatment responders and non-responders on the group and single-subject level. *Methods:* Fourtyfour male veterans with PTSD underwent baseline structural and resting-state MRI followed by trauma-focused therapy (EMDR or TF-CBT). Grey-matter volumes (GMV) were extracted from the MRI data and resting-state networks (RSN) were estimated using group-ICA of data from 28 matched trauma-exposed healthy controls. GMV and RSNs were used to find differences between responders and non-responders on the group and single-subject level. Treatment response was defined as 30% decrease in total Clinician-Administered PTSD Scale for the DSM-IV (CAPS-IV) score from pre- to post-treatment assessment. Gaussian process classifiers with 10 times repeated 10-fold cross-validation were used for classification. *Results:* An RSN centered on the pre-SMA could distinguish between responders and non-responders on an individual level with 81.4% accuracy ($p < 0.001$), 84.5% sensitivity, 78% specificity and AUC of 0.93, while an RSN centered on the bilateral superior frontal gyrus differed between groups ($p_{FWE} < 0.05$). No significant single-subject classification or group differences were observed for GMV. *Conclusions:* Rs-fMRI is capable of providing personalized predictions of treatment response in a sample of veterans with PTSD. It therefore has the potential to be useful as a biomarker of treatment response.

S6.3 Innovative study approaches of child maltreatment from a family perspective.

Bernet Elzinga¹, Susan Sierau², Sheila Berkel¹, Renate Buisman¹ and Marie-Louise Kullberg¹

¹Leiden University, the Netherlands; ²University of Leipzig, Department for Medical Psychology and Medical Sociology, Germany

Track: Child Trauma

Child maltreatment, particularly physical and emotional abuse and neglect, often occurs within the family context. So far, commonly used methods focus on unrelated individuals and investigate the impact of individual parent-to-child maltreatment, while the complex interactions and the different perspectives of family members are not taken into account. To further contribute to the ecological validity of the research on child maltreatment, incorporating the complexity of the multiple forms of maltreatment, e.g. sibling-to-sibling victimization, and combining the perspectives of different

individuals living in the same household is needed. In this symposium, we will present various new and innovative studies on child maltreatment, using a variety of research methods, e.g. observations of interactions and multi-informant assessments, while integrating different family perspectives (i.e. parents versus children, brothers and sisters) and discuss its impact on individual's and family's lives. These approaches may further advance our knowledge relevant for assessment, prevention and (family) interventions.

Whom to ask for reporting on child maltreatment? A multi-source approach evaluation of records, caregivers and children

Susan Sierau

University of Leipzig, Department for Medical Psychology and Medical Sociology, Germany

Background/Objective: Reporting sources often disagree about the nature of maltreatment of a given child. This study included data from Child Protective Service records, caregivers and children to incorporate a multi-source factor-analytic approach on presence of maltreatment subtypes. *Method:* The sample consisted of 686 children and adolescents aged 3 to 8 years (n=275), and 9 to 16 years (n=411), 161 of them with CPS-documented histories of lifetime maltreatment and 525 from the community. Maltreatment subtypes in CPS records and caregiver interviews were assessed using the Maltreatment Classification System. Children were interviewed about maltreatment subtypes using pictorial versions of the Multidimensional Neglectful Behavior Scale and the Conflict Tactics Scales – Parent-Child Version. *Results:* Three factor-analytic components were established: the congruent view of all sources on presence of maltreatment (convergence) as well as information discrepancies resulting from the child's own perspective and the caregiver vs. CPS perspective. Convergence accounted for most variance in parent- and self-reported child symptoms across maltreatment subtypes and age groups. Child perspective and caregiver vs. CPS perspective added predictive strength of symptoms in adolescence over and above convergence in the case of emotional maltreatment, lack of supervision, and physical maltreatment. *Conclusions:* Our results support the utility of a multi-source strategy for the assessment of maltreatment experiences, and highlight caregivers and children as promising reporting sources in addition to CPS records. The importance of the child perspective on maltreatment seems to increase with age, but is also meaningful for reports of specific subtypes (i.e., failure to provide) in younger children.

Maltreatment between siblings; The forgotten abuse

Sheila van Berel

Leiden University, the Netherlands

Background: Sibling maltreatment, the most common form of intrafamilial violence (Button & Gealt, 2010), escaped the attention of parents, clinicians, and researchers globally. The involuntary, inevitable, and intense contact between siblings and the general tendency to perceive sibling maltreatment as harmless and normative (Caspi, 2012), places it among the most traumatic life-experiences. *Method:* We examined how the combination of victimization by a sibling and parental child maltreatment is related to mental health problems and delinquency in childhood and adolescence. Co-occurrence, additive, and interactive associations of sibling victimization and parental child maltreatment (i.e. physical abuse and neglect) were investigated using a sample of 2053 children aged 5–17 year from the National Survey of Children's Exposure to Violence. *Results:* The results provide primarily evidence for additive associations and only suggest some co-occurrence and interactive associations of sibling victimization and child maltreatment. Sibling victimization was related to more mental health problems and delinquency over and above the effect of physical abuse and neglect. Moderation by sibling victimization depended on child age and was only found for the

relation between both types of child maltreatment by parents and delinquency. For mental health no interactive associations were found. *Conclusion:* These results highlight the unique and combined associations between sibling victimization on child development. The increase in developmental problems when children experience victimization in two, compared to one, important relational contexts within the home, stresses the importance for professionals to recognize sibling victimization.

Understanding the interplay between maltreatment, family cohesion and parent-offspring interactions in the context of a family study

Renate Buisman¹, Marian Bakermans-Kranenburg², Katharina Pittner¹, Jolanda Lindenberg³, Marieke Tollenaar¹, Marinus van Ijzendoorn⁴, Bernet Elzinga¹ and Lenneke Alink¹

¹Leiden University, the Netherlands; ²University of Amsterdam, the Netherlands; ³Leyden Academy on Vitality and Ageing, the Netherlands; ⁴Erasmus University Rotterdam, the Netherlands

Background: A popular approach to the treatment of maltreating families is parent-child interaction therapy (Batzer, Berg, Godinet & Stotzer, 2018). However, observational research on the association between maltreatment and parent-child interactions is scarce. In addition, little is known about the interplay between family functioning, maltreatment, and parent-child interactions. *Objective:* Therefore, we examined the associations between multiple types of maltreatment (abuse and neglect), parent-offspring interactions and family cohesion in an extended family study. *Method:* A total of 363 parent-offspring pairs from 137 nuclear families participated. Parents (Mage = 52.8 years, range: 26.6–88.4 years, 57% female) and offspring (Mage = 25.7 years, range: 7.5–65.5 years, 58% female) reported about perpetrated and experienced maltreatment (abuse and neglect) during the childhood of the offspring, respectively. Parent-offspring interactions were observed during a parent-offspring conflict interaction task. Cohesion within the nuclear family was observed during a playful tower building task. Multilevel modeling was used to account for the hierarchical structure of the data and missing values were multiply imputed. *Results:* Preliminary results show that parents and offspring communicate more positively towards each other in families that are more cohesive. No associations were found between child maltreatment and family cohesion. While accounting for family cohesion, child abuse, but not neglect, was associated with parent-offspring communication, such that parents and offspring were both more negative in dyads with higher levels of reported abuse. No interactions with age and gender were found. *Conclusions:* Implications of findings will be discussed during the symposium.

Sibling aggregation of childhood maltreatment and the association with adult depressive symptomatology - Being the black sheep or the overall family atmosphere?

Marie-Louise Kullberg

Leiden University, the Netherlands

Background: It is known that childhood maltreatment (CM) has a familial component and that siblings of abused targets are often also at risk (Jean-Gilles & Crittenden, 1990; Witte, et al., 2018), yet it is unclear which types of abuse and neglect are specific to a child or whether the experiences of CM is rather similar for all siblings. Moreover, we do not know to what extent childhood experiences of siblings, i.e. the family level or atmosphere, is associated with depression and to what extent being more maltreated than siblings, i.e. being the black sheep, also affects a person's depression. *Method:* This study is part of the Netherlands Study of Depression and Anxiety (NESDA). A total from 636 siblings, aged 20-78 years, part of 256 families, with 2-6 participating siblings per family, were included. We examined the extent of sibling aggregation of emotional, physical and sexual abuse and how both individual level and family level of differential types of CM are related to depressive symptomatology. *Results:* Preliminary results show that there is some overlap in the reports of siblings

for emotional maltreatment. While for physical and sexual abuse there is almost no similarity shown in siblings. Furthermore, we found that, on individual level, emotional and sexual abuse are related to more adult depressive symptoms and that there is no association between physical abuse and depression. While on family level, next to emotional and sexual abuse, also physical abuse is related to more depressive symptoms. Further findings and implications will be discussed during the symposium.

S6.4 Traumatic grief after disasters worldwide

Maarten C. Eisma¹, Carina Heeke², Pål Kristensen³ and Lonneke I.M. Lenferink^{1,4}

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Track: Transcultural & Diversity

Experiencing the death of a significant other due to a disaster heightens the risk of disturbed grief with comorbid posttraumatic stress disorder (PTSD) and depression, also referred to as traumatic grief. The present symposium seeks to elucidate the patterns of traumatic grief symptoms following loss in major disasters in over 1500 disaster-bereaved people. First, the results of two latent class analyses on traumatic grief symptoms among Sichuan earthquake survivors, and internally displaced Colombians will be discussed. Analyses show that traumatic grief, disturbed grief and/or PTSD symptom classes can be distinguished in disaster-bereaved people. Next, two four-wave longitudinal studies will be presented on people bereaved through the Utøya terrorist attack and the MH17 airplane disaster. Results indicate that the course and etiology of disturbed grief differs from PTSD and depression. Clinical implications of findings and cultural considerations will be discussed.

Complicated grief and posttraumatic stress symptom profiles in bereaved earthquake survivors: Latent class analyses

Maarten Eisma¹, Lonneke Lenferink^{1,2}, Amy Chow³, Cecilia Chan³ and Jie Li⁴

¹University of Groningen, the Netherlands; ²Utrecht University, the Netherlands; ³University of Hong Kong, China; ⁴Renmin University, China

Background: Studies on mental health following disasters have primarily focused on posttraumatic stress disorder (PTSD), yet severe, enduring and disabling grief (i.e., complicated grief, CG) also appears relevant. *Objective:* The present study examines symptom profiles of PTSD and CG among bereaved Sichuan earthquake survivors one year after the disaster. *Method:* Self-report measures of demographic, disaster, and loss-related characteristics and symptoms of PTSD and CG were administered among 803 survivors (63% women, mean age = 46.7 years). Latent class analysis (LCA) was performed to identify subgroups of people with different PTSD and CG symptom profiles. *Results:* The LCA demonstrated that a five class solution yielded the best fit, consisting of a CG class with low PTSD and high CG (N = 208), a combined class with high PTSD and high CG (N = 205), a class with low PTSD and partial CG (N = 145), a class with partial PTSD and CG (N = 136), and a resilient class with low PTSD and CG (N = 108). Being a woman (vs. man), losing a child or spouse (vs. other), being injured (vs. non-injured), and/or having a missing family member (vs. non-missing) predicted membership of the CG class compared to other classes. *Conclusions:* CG appears a unique consequence of disasters involving many casualties. Disaster survivors should be screened for CG and provided with appropriate psychological treatment.

Symptom profiles of prolonged grief and posttraumatic stress disorder among Colombian internally displaced persons

Carina Heeke

Freie Universität Berlin, Germany

Background: Exposure to trauma and bereavement is common in conflict-affected regions. Purpose of the study was to (1) identify classes of prolonged grief disorder (PGD) and posttraumatic stress disorder (PTSD) symptom profiles and (2) to examine whether sociodemographic, loss and trauma-related characteristics could predict class membership. *Methods:* 308 internally displaced Colombians who had experienced trauma and loss were assessed through measures of PGD (PG-13), PTSD (PCL-C), and social support (DUKE-UNC). *Results:* LCA revealed a four-class solution: a resilient class (23.6%), a PTSD-class (23.3%), a predominately PGD class (25.3%) and a high distress-class with overall high values of PGD and PTSD (27.8%). Relative to the resilient class, membership to the PGD class was predicted by the loss of a close family member and the exposure to a higher number of assaultive traumatic events, whereas membership to the PTSD class was predicted by the perception of less social support. Compared to the resilient class, participants in the high distress-class were more likely to be female, to have lost a close relative, experienced more accidental and assaultive traumatic events, and perceived less social support. *Conclusions:* Specific symptom profiles emerged following exposure to trauma and loss within the context of the Colombian armed conflict. Profiles were associated with distinct types of traumatic experiences, the degree of closeness to the person lost, the amount of social support perceived, and gender. The results have implications for identifying distressed subgroups and informing interventions in accordance with the patient's symptom profile.

The development of prolonged grief in long-term after terror. A study of parents and siblings bereaved by the 2011 Utøya killings

Pål Kristensen

Center for crisis psychology, Norway

Background: Bereavement caused by terrorism is associated with high risk of posttraumatic stress symptoms (PTSS) (Neria, DiGrande, & Adams, 2011), but few have examined prolonged grief (PG) after terror. *Objective:* 'The Utøya bereavement study' is a longitudinal mixed-method study of bereaved parents (n=86), siblings (n=43) of the 69 persons who were killed at Utøya Island, Norway in 2011. Data were collected at 18 (T1), 28 (T2), 40 months (T3) after the killings. An 8- year follow-up (T4) is under way. The aim of the study is to examine the development of PG in long-term, and the association between PG and PTSS. *Method:* PG was measured with the self-reported Inventory of complicated grief (ICG) and PTSS with the self-reported Impact of Event Scale-Revised (IES-R). We used latent growth modelling to examine the development of PG, and a cross-lagged path analysis to examine the association between PG and PTSS clusters. *Results:* The level of PG, although significantly decreasing, was high from T1 to T3 (Wågø, Byrkjedal, Sinnes, Hystad, & Dyregrov, 2017). Parents reduced their scores to a lesser degree compared to the siblings. High levels of intrusion at T1 was associated with higher levels of PG at T2, and high levels of arousal at T2 was associated with higher levels of PG at T3 (Kristensen, Gjestad, Dyregrov, Dyregrov, & Heir, In prep). *Conclusion:* Bereavement caused by terror is associated with high levels of PG in long-term. PTSS seem to affect the level of PG more than vice versa. Implications are discussed.

Grief, posttraumatic stress, and depression following MH17 plane disaster: A four-wave longitudinal study

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Background: Knowledge on the course of persistent complex bereavement disorder (PCBD), posttraumatic stress disorder (PTSD), and depression among disaster-bereaved people enhances our understanding of the etiology and treatment of traumatic grief. *Objective:* To identify trajectories of PCBD, PTSD, and depression in disaster-bereaved people (study 1) and to examine temporal associations between PCBD, PTSD, and depression symptoms (study 2). *Method:* People (N=172) whose significant other(s) died in MH17 flight completed PCBD, PTSD, and depression questionnaires 11, 22, 31, and 42 months post-loss. In study 1, distress-trajectories were identified using latent class growth modelling. In study 2, the same data were used to examine temporal associations between symptoms, using cross-lagged analysis. *Results:* In study 1, a Mild (81.8%) and Chronic (18.2%) PCBD class emerged. For PTSD and depression we found a Mild (85.2% and 85.6%), Recovered (4.4% and 8.2%), and Chronic trajectory (10.3% and 6.2%). In study 2, changes in PCBD symptoms had a greater impact on changes in PTSD and depression symptoms than vice versa. *Conclusions:* Findings from study 1 indicate that different symptom-profiles post-loss may need different treatment. Study 2's findings run counter to the notion that PTSD and depression symptoms should be treated before grief. We suggest that early screening and treatment of elevated grief is pivotal in preventing long-lasting distress.

S6.5 Journalists and online harassment: The psychological impact of threats and aggression in social media and on the web

Klas Backholm¹, Elana Newman^{2,3}, Trond Idås¹ and Gavin Rees⁴

¹Åbo Akademy University, Finland; ²Dart Center for Trauma and Journalism, UK; ³University of Tulsa, USA; ⁴Dart Centre Europe, UK

Track: Public Health

Journalists have always risked becoming targets for criticism and harassment as an effect of their role as investigators of public affairs. Via social media and online instant messaging, such intimidation has taken new and more intense forms. In this symposium, researchers and trainers discuss what we know about the psychological impact of such harassment. Two presentations focus on introducing results from a comprehensive study of Norwegian journalists (N = 585) and a pilot study of American (N = 66) journalists. The prevalence and nature of online harassment and its potential effect on psychological wellbeing and media content production are presented. In the third presentation, the Dart Centre for Journalism and Trauma will present tips and guidelines for addressing online intimidation. In the final part, the chair summarizes the presentations by drawing implications about what the results mean for trauma specialists, and by leading a Q&A discussion with the symposium audience.

Health and chilling effect among journalists who are victims of online harassment

Trond Idaas

Åbo Akademy University, Finland

Background: Smartphones and social media have made journalists reachable 24/7 for people who want to harass them. The aim of the harassment might be to express frustration over the news coverage, or it might be an attempt to influence or stop the coverage of a story. For the journalist, the threats may result in mental impairment and a chilling effect on their news coverage (Löfgren Nilsson & Örnebring, 2016). *Objective:* The aim of the study is to investigate the potential effect of threats and harassment on journalists' mental health and on a chilling effect (typically meaning self-censorship). *Results:* The data is from an online survey launched among Norwegian journalists. The data used are from the 585 respondents who reported that they had experienced threats, out of a total of 1156 respondents. A SEM analysis indicated that more exposure to threat was significantly associated with both health ($p > .001$) and chilling effect ($p > .001$). The way threat/harassment was conducted (for

instance obscene calls or comments) was also significantly associated with more health problems ($p = .018$) and a stronger chilling effect ($p = .020$), so was the channel used (for instance SoMe or e-mail), when it comes to chilling effect ($p = .001$). *Conclusion:* Threats and harassment might lead to mental impairment for journalists, and they might result in self-censorship in the news coverage, undermining the media's role as the watchdog and the fourth estate in the society.

Reference

Löfgren Nilsson, M. & Örnebring, H. (2016) Journalism Under Threat, *Journalism Practice*, 10:7, 880-890, DOI: 10.1080/17512786.2016.1164614

Journalists and online harassment: The psychological impact of threats and aggression in social media and on the web

Elana Newman^{1,2} and Autumn Slaughter²

¹Dart Center for Trauma and Journalism, UK; ²University of Tulsa, USA

Background: Online harassment (OH) is a growing problem amongst journalists, and may result in self-censorship and/or high turnover (Article 19, 2015) and mental health problems. Yet, there is little research about the frequency and nature of OH, the emotional responses towards such OH, and/or gender differences among journalists'. *Objective:* This pilot study's goal is to further the literature on the extent of OH amongst journalists and the differences in how men and women journalists may experience and respond to OH. *Results:* Sixty-six Journalists provided adequate information on an online survey assessing OH exposure and emotional responses to OH exposure. In total, 62.1% were female, 65.2% were white, and the median age was 37. Women journalist reported experiencing more OH than men (one-way ANOVA; $F[1, 36] = 6.51$; $p = .014$). Women journalists reported stronger negative emotional reactions when presented with OH than men. Specifically, women reported experiencing OH as more harmful (one-way ANOVA; $F[1, 60] = 12.21$; $p = .001$) and more threatening (one-way ANOVA; $F[1, 61] = 17.51$; $p < .001$). *Conclusions:* Unlike in the general population (Duggan 2017), where men report more overall OH than women, women journalists report more OH exposure than their male counterparts. However, similar to the general population (Lindsay et al., 2016) women journalists report stronger negative emotional reactions to OH than male journalists.

Handling online aggression: self-defence strategies for journalists and media workers

Gavin Rees

Dart Centre Europe, UK

How to resist online intimidation is a pressing issue for journalists, news organisations and the publics they seek to serve. The fractious, unruly world of online discussion has given birth to a new environment in which disinformation and personal attacks - some of which involve systematic and coordinated attempts to inflict psychological harm - have prospered. Such attacks often involve threats of violence and may be at their most intense around high-profile reporting on such trauma-related issues as military aggression, sexual and domestic violence, racist attacks, and the plight of refugees. The standard journalist-to-journalist advice on how to deal with online aggression usually takes the form of "don't engage and don't take it personally". But that only gets one so far: journalists depend on social media for story ideas and sources, and at times may feel compelled to wade into the fray in order to correct false accusations and defend their credibility. This presentation explores advice the Dart Centre for Journalism and Trauma has been developing in order to equip journalists with digital self-defence techniques that are both psychologically-informed and responsive to journalism's own culture around open debate. It will discuss: - the specific challenges that online content-moderators face when dealing with high volumes of negative and abusive material - how online abuse

works and why different trolling types require different responses - how perspective and reframing techniques may help reduce the perceived impact of the anonymous attacker - how trauma-informed self-care strategies can be adapted to online working environments.

S6.6 E-health innovations in PTSD treatment across Europe

Anne Bakker¹, Natalie Simon², Nannette Mathyi¹, Helen Niemeyer³ and Andreas Maercker⁴

¹Amsterdam University Medical Centers, the Netherlands; ²Division of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, UK; ³Freie Universität Berlin, Germany; ⁴University of Zurich, Switzerland

Track: Intervention Research & Clinical Studies

Despite the overall literature presenting evidence for the effectivity of PTSD treatment, such as TF-CBT and EMDR, not all patients will (fully) benefit from treatment. Clinical symptoms that persist after treatment and/or relapse of trauma-related symptomatology urge the field to develop and investigate other techniques or tools to optimize trauma treatment. E-health and m-health are promising agents to improve or add to current treatments given their technological opportunities, their wide reach, easy access, and low costs. Scientific evidence for the efficacy and acceptability of such innovative interventions is however still limited. This symposium will bring together results from clinical studies into innovations in PTSD treatment from Wales (Natalie Simon), Germany (Helen Niemeyer), and the Netherlands (Nannette Mathyi). The presentations will be followed by an overarching discussion into future needs, possibilities, and boundaries of technology-based treatment enhancement (Prof. Andreas Maercker, Switzerland).

'Spring', an internet-based Guided Self-Help Trauma-Focused Programme, for mild/moderate PTSD to a single traumatic event: intervention development and testing, including the RAPID Trial (multi-centre RCT)

Natalie Simon¹, Nannette Mathyi², Helen Niemeyer³ and Andreas Maercker⁴

¹Division of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, UK; ²Amsterdam University Medical Centers, the Netherlands; ³Freie Universität Berlin, Germany; ⁴University of Zurich, Switzerland

Background: Cognitive Behavioural Therapy with a Trauma-Focus (CBT-TF) is a widely evidenced effective treatment of choice for PTSD, however there are limitations to its availability and uptake, which may be addressed through internet-based CBT (i-CBT), including Guided Self-Help (GSH). No comparative trials have been undertaken to date, precluding firm decisions regarding its delivery as an alternative to face-to-face therapy in the National Health Service (NHS). *Objective:* To determine the potential efficacy of GSH i-CBT for mild to moderate PTSD. *Method:* 'Spring', a GSH i-CBT for mild/moderate PTSD, was developed at Phase I, following Medical Research Council guidance, with significant input from individuals with lived-experience of PTSD and professional stakeholders. At Phase II (2012-2014), 42 adults with DSM-5 PTSD, mild/moderate severity, to a single traumatic event, were randomised to immediate or delayed treatment. The primary outcome measure was reduction in PTSD symptoms using the Clinician Administered PTSD Scale (CAPS-5). *Results:* Post-treatment, the GSH group had significantly lower clinician assessed PTSD symptoms than the delayed-treatment group (between-group effect size Cohen's $d = 1.86$). *Conclusions:* Phase II results indicated potential for 'Spring' GSH and a strong rationale for 'RAPID', a multi-centre pragmatic RCT combined with process evaluation, of 'Spring' GSH versus Individual CBT-TF. RAPID is recruiting 192 individuals and aims to determine clinical and cost-effectiveness of GSH as a treatment option for routine use for mild/moderate PTSD.

Enhancing psychotrauma treatment with a smartphone application

Nannette Mathyi¹, Natalie Simon², Helen Niemeyer³ and Andreas Maercker⁴

¹Psychotrauma department, Amsterdam University Medical Centers, the Netherlands; ²Division of Psychological Medicine and Clinical Neurosciences, Cardiff University School of Medicine, UK; ³Klinisch-Psychologische Intervention, Freie Universität Berlin, Germany; ⁴The Division of Psychopathology & Clinical Intervention, University of Zurich, Switzerland

Background: Mobile health apps have the potential to improve PTSD treatment as being widely available, low-cost tools that may help transfer acquired skills to the patient's home setting (Olf, 2015). However, empirical evidence for the add-on effects to regular treatment is scarce. We developed a protocol for implementing the SUPPORT Coach (a smartphone application) in PTSD treatment. **Objective:** To investigate the feasibility of the SUPPORT Coach in PTSD treatment and the add-on effect on PTSD symptom reduction. **Method:** In this ongoing pilot-randomized controlled trial, clinicians receive a blended training on the integration of SUPPORT Coach app in PTSD treatment. The protocol with homework assignments in between therapy sessions for the patient was co-created within a team of clinicians to optimally align with real-life clinical practice. PTSD patients will be randomized into the intervention group and receive general and personalized homework assignments on the SUPPORT Coach app (n=30), or into the control group receiving treatment as usual (n=30). PTSD symptoms (PCL-5) and feasibility (log file-analyses) are assessed at baseline and during the first 12 treatment sessions. **Results:** We will demonstrate the blended training for clinicians and we will show preliminary findings on app usage and user satisfaction with the SUPPORT Coach app during treatment of the first 20 patients. **Conclusions:** Preliminary findings will be discussed with respect to the feasibility of the implementation of the SUPPORT Coach as an add-on to PTSD treatment and perceived usability/ helpfulness for patients.

Internet-based cognitive-behavioral therapy for reducing post-traumatic stress after intensive care in patients and their spouses: a randomized controlled trial

Helen Niemeyer¹, Romina Gawlytta^{2,3}, Maria Boettche^{1,4}, Jenny Rosendahl^{2,3} and Christine Knaevelsrud¹

¹Freie Universität Berlin, Germany; ²Institute of Psychosocial Medicine and Psychotherapy, Jena University Hospital, Germany; ³Integrated Research and Treatment Center, Center for Sepsis Control and Care, Jena University Hospital, Germany; ⁴Berlin Center for Torture Victims, Zentrum ÜBERLEBEN, Germany

Background: Post-traumatic stress disorder (PTSD) is a common consequence of intensive care treatment. An established internet-based cognitive-behavioral therapy (iCBT) manual for PTSD was adapted to meet the particular needs of patients and their spouses after intensive care and was complemented by a couple therapy component. **Objective:** To determine the efficacy of iCBT for PTSD after intensive care. **Method:** Couples in which one or both of the partners suffered from PTSD due to one partner having survived a severe sepsis and/or the spouse being traumatized by the partner's critical illness were suitable for inclusion. Diagnoses were assessed by the CAPS-5. Partner/s with PTSD received iCBT comprising two weekly 50-minute writing assignments over a 5-week-period (10 essays in total) with semi-standardized feedback by therapists. Couples were randomized to a treatment versus waitlist condition. In the group which received the treatment immediately, an additional supportive letter was written by the spouse in which positive and resource-oriented feedback was provided to the partner. The WL group received treatment after five weeks without the couple treatment component. Pre-, post- and follow up assessments (three months) were conducted. **Results:** Twenty-four couples were included. The treatment is still ongoing for the last couples. Results will be presented in detail at the conference. A preliminary finding is that hitherto no dropout occurred. **Conclusions:** The findings will be discussed with respect to their relevance for the treatment of PTSD after intensive care and with respect to the efficacy of adding a couple treatment component to iCBT.

S6.7 Trauma-Focused Therapies in the Treatment of Comorbid PTSD and Substance Use Disorders

Debra Kaysen¹, Denise Hien², Annett Lotzin³ and Katherine Mills⁴

¹University of Washington, USA; ²Columbia University, USA; ³University Medical Center Hamburg-Eppendorf, Germany; ⁴University of Sydney, Australia

Track: Intervention Research & Clinical Studies

Addressing treatment of comorbid posttraumatic stress disorder (PTSD) and substance use disorders (SUDs) is of high clinical and public health import. Untreated PTSD is associated with poorer SUD treatment outcomes (Mills et al., 2005). In recent reviews, trauma focused behavioral interventions for comorbid PTSD/SUD have been found effective for reducing PTSD symptoms and substance use (Simpson et al., 2017). However, results are inconsistent, highlighting the population complexities and need for further treatment development research. As such, this symposium highlights new potential directions in approaching PTSD and SUD treatment, including use of EMDR to augment residential SUD treatment, exposure-based therapy for adolescents with PTSD/SUD, and use of a cognitively-based PTSD therapy as compared to a substance focused treatment. Dr. Hien, a leading PTSD/SUD treatment expert, will provide a brief introduction to theories of comorbidity and following the presentations, discuss the clinical implications of these studies and future directions for the field.

Effectiveness of EMDR in patients with substance use disorders and comorbid PTSD: Results of a randomized controlled trial

Annett Lotzin¹, Laycen Chuey-Ferrer², Arne Hofman³, Peter Liebermann³ and Ingo Schäfer¹

¹University Medical Center Hamburg-Eppendorf, Germany; ²AHG Clinic Dormagen, Germany; ³EMDR-Institute Germany

Background: Eye Movement Desensitization and Reprocessing (EMDR) is an evidence-based treatment for posttraumatic stress disorder (PTSD). However, it is unclear whether EMDR shows a comparable effectiveness in patients with substance use disorders (SUD) and comorbid PTSD. In this trial, we examined the effectiveness of EMDR combined with SUD treatment in reducing PTSD symptoms in patients with SUD and PTSD. *Methods:* N = 158 patients with SUD and comorbid PTSD admitted to a German addiction rehabilitation center specialized for the treatment of patients with SUD and comorbid PTSD were included. Patients received either EMDR, added to skills-based SUD/PTSD treatment (TAU), or TAU alone. The primary outcome is change from baseline in PTSD symptom severity as measured by the Clinician-Administered PTSD Scale at 6-month follow-up. Patients were assessed at admission, at end of treatment, and at 3- and 6-month follow-up. We expect that EMDR plus TAU will be more effective in reducing PTSD symptoms than TAU alone. Mixed models will be conducted using an intention-to-treat and per-protocol approach. *Results:* Our preliminary analysis indicates that both treatment groups improved in PTSD symptoms at post treatment compared to pre-treatment. The treatment groups did not differ in their effectiveness in reducing PTSD symptoms. *Conclusion:* EMDR combined with SUD treatment, as well as non-trauma-focused PTSD treatment combined with SUD treatment, seem to show comparable effects in reducing PTSD symptoms in an intensive inpatient rehabilitation treatment setting.

Trialling exposure-based therapy for adolescent traumatic stress and substance use: Challenges and observations from a randomised controlled trial

Katherine Mills¹, Maree Teesson¹, Sudie Back², Emma Barrett¹, Vanessa Cobham³, Sarah Bendall⁴, Sean Perrin⁵, Brady Kathleen² and Joanne Ross⁶

¹University of Sydney, Australia; ²Medical University of South Carolina, USA; ³University of Queensland, Australia; ⁴University of Melbourne, Australia; ⁵Lund University, Sweden; ⁶University of New South Wales, Australia

Background: For up to 50% of adolescents experiencing PTSD, the course of their illness is further complicated by co-occurring substance use. Despite this, evidence-based integrated treatment options for adolescents with this comorbidity remain sparse. To address this gap, we are conducting an RCT examining the efficacy of exposure-based therapy for co-occurring PTSD and substance use among adolescents. In this paper, we discuss some of the challenges associated with conducting an RCT in the population group and early observations from the trial. **Method:** 100 adolescents aged 12-18yrs will be recruited. Participants are randomised to receive up to 16 sessions of i) the integrated exposure-based treatment (COPE-A) or ii) supportive counselling (control). Blind interviews are conducted at baseline, 4- and 12-months. Substance use and PTSD are measured each therapy session. **Results:** To date, 20 people have been referred to the study with 17 were screened for eligibility. 13 were eligible to participate with 9 consented and allocated to a condition. Challenges to trial execution include issues relating to the population group itself, involvement of parents/guardians and other health care providers, logistics, ethical and governance approvals, resources. **Discussion:** Although there are significant challenges involved in conducting a trial such as this, they are by no means insurmountable. The study findings will improve our understanding of how to best treat PTSD and substance during this critical developmental period. By intervening early in the trajectory of these disorders it may be possible to prevent the severe and long-lasting burden associated with comorbidity across the lifespan.

Cognitive Processing Therapy And Relapse Prevention in the Treatment of PTSD and Comorbid Alcohol Use Disorders

Debra Kaysen¹, Tracy Simpson², Charles Fleming¹, Anna Jaffe¹ and Isaac Rhew¹

¹University of Washington, USA; ²Center of Excellence in Substance Abuse and Treatment (CESATE), VA Puget Sound Health Care System, Seattle, USA

Background: Prior research has not adequately addressed to what extent treatment of PTSD or Alcohol Use Disorders (AUD) may change comorbid symptoms. Moreover, although exposure based PTSD treatments have been tested in treating PTSD/AUD, cognitively based PTSD treatments have not been examined. **Method:** This study evaluated longitudinal changes in PTSD and alcohol use associated with Cognitive Processing Therapy (CPT) or Relapse Prevention (RP). PTSD/AUD participants recruited from VA and the community were randomized to CPT (n=41), RP (n=38), or assessment only (AO, n=22). Individuals receiving AO were then re-randomized to CPT (total n=53) or RP (total n=47) to allow us to evaluate sustained change following active treatment. **Results:** The post-treatment comparisons to AO demonstrated individuals who received CPT had statistically significant improvements in PTSD and alcohol cravings whereas individuals who received RP significantly differed from AO only on cravings. There was a significant main effect for time but no time x treatment interaction in days engaged in any drinking or heavy episodic drinking, such that all groups improved over time. For long-term outcomes, all individuals improved over time for both PTSD and drinking outcomes, with no significant differences between CPT and RP. **Discussion:** Based on our findings, both trauma-focused and alcohol-focused interventions have utility in treatment of PTSD/AUD. Each intervention may have a role depending on the specific needs of the client. The challenges of conducting CPT and RP to address PTSD/AUD will be discussed, as well as some of the lessons learned over the course of the clinical trial.

Sunday 16th 2019

Day #3

10:00 11:15 Parallel session #7

S7.1 When families cope with traumatic stress: Looking beyond the individual survivor

Danny Horesh, Rivka Tuval-Mashiach, Sara Freedman and Moshe Bensimon

Bar Ilan University, Israel

Track: Assessment & Diagnosis

For years, trauma research has focused mainly on the individual survivor, failing to acknowledge important systemic aspects. However, the past two decades have seen a surge in research examining the implications of trauma within the family system (e.g., secondary traumatization). The four talks in this symposium present findings from highly heterogeneous family samples, exposed to trauma at various life stages. Rivka Tuval-Mashiach will discuss a unique Israeli study, examining the emotional reactions of Israeli parents to their child's military service. Moshe Bensimon will discuss the effects of one family member's incarceration on his/her siblings and parents. Sara freedman will share findings pertaining to mothers' and fathers' postpartum PTSD. Finally, Danny Horesh will explore the role of self-compassion as a potential resilience factor among wives of ex-POWs. Together, these presentations will shed light on the complex family dynamics associated with traumatic exposure. The presentations 'will be preceded by a general introduction.

Reciprocal Influences between Distress Symptoms of Parents and their Combat Soldiers child

Rivka Tuval-Mashiach and Shahr Bitton,

Bar Ilan University, Israel

Background: Military service is considered a turbulent period for soldiers, and includes challenges that can trigger distress. Alongside the soldier's experience it can also be a complex period for the parents. The experience of soldiers' parents, around the world, has been mostly ignored. *Objective:* The purpose of this research-in-progress is to prospectively examine the emotional responses and distress of Israeli soldiers' parents before and during the service of their child. Additionally, the research examines a model of reciprocal influences between the child's and parents' distress and adjustment to military service. *Methods:* Participants distress was assessed using measures of anxiety, depression, perceived stress, well-being and somatization. Participants filled out questionnaires at 2 time points: 3 months before and 6 months after recruitment. So far, 233 families completed the questionnaire before recruitment and 101 completed the questionnaire both before and after recruitment. *Results:* Preliminary results show that distress measures were low than clinical thresholds. Before recruitment, distress levels of family members are highly correlated between all family members. This correlation significantly weakens or disappears after recruitment. When examining predicting effects between family members, findings are different between the distress measures. Father's somatization and general anxiety before recruitment predicts mother's somatization and general anxiety after recruitment, and both son's and mother's well-being before recruitment predict father's well-being after recruitment. *Conclusions:* There is evidence of reciprocal influences between parents and their children in the context of military service. Parental emotional experience should be considered when trying to understand the military service experience in the familial context.

Childbirth, Trauma and the Family: Mothers, Fathers and Baby Bonding

Sara Freedman¹, Shani Reshef¹, Anna Golubitsky¹ and Carolyn Weiniger²

¹Bar Ilan University, Israel; ²Tel Aviv Medical Center, Israel

Background: Postpartum PTSD is well documented, although the timing of symptom onset, the role of other potentially traumatic events, and PTSD symptoms amongst fathers are less well understood. The two studies presented here aimed to investigate these issues. **Methods:** These two questionnaire studies with IRB approval enrolled women who delivered between two and twelve months previously (Study 1) and male partners of women who had delivered in the same time frame (Study 2). Participants were recruited via targeted internet sites. 168 women and 160 men completed online questionnaires regarding prior exposure to traumatic events, fear of childbirth, and PTSD and depression symptoms. **Results:** 7.3% of mothers reported probable PTSD. Most women reported a worst trauma that was not childbirth, and more than half of these reported symptoms prenatally. Clinical levels of fear of childbirth were associated with postpartum PTSD. Emergency caesarean, requesting an epidural and feeling that pain treatment was not helpful were related to postpartum PTSD. PTSD and depression were related to poorer bonding with the baby. Levels of PTSD in fathers was 6.6%, and was related to planned caesarean, whereas fathers' fear of childbirth was related to emergency caesarean. **Conclusions:** Both mothers and fathers should be routinely assessed for PTSD and fear of childbirth. Specifically, since PTSD during pregnancy elevates the risk for adverse pregnancy outcomes, women should also be assessed during pregnancy. Elevated levels of fear of childbirth in both mothers and fathers may have implications for subsequent pregnancy care and outcomes.

An Offspring's Incarceration as a Family Traumatic Crisis: Familial Pains of Imprisonment

Moshe Bensimon, Moran Benisty and Natti Ronel

Bar Ilan University, Israel

Background: Findings show that family members of prisoners tend to perceive the incarceration period as a traumatic crisis, and their choices for coping with it stems from their subjective points of views, as well as the quantity and quality of the resources they possess. In the past few decades, most of the research about imprisonment's effects on the prisoner's close circles, has focused on spouses and children. However, very little attention has been given to the prisoner's parents and siblings' experiences. **Objective:** The goal of the current study was to investigate and comprehend what parents and siblings of incarcerated men encounter regarding their economic, social and mental perceptions and experiences during and after an incarceration of their son/brother. **Method:** The methodology employed in this research was based on the phenomenological approach of qualitative research in order to comprehend the unique subjective experiences of parents and siblings of incarcerated men. Content analysis of semi-structured interviews with 17 parents and 10 siblings of incarcerated men led to the construction of several themes. **Results:** The findings show that similar to their imprisoned son or brother, family members feel deprived of their rights to liberty, autonomy, financial goods, sense of security and social relationships, all of which may contribute to the development of a traumatic family crisis. **Conclusions:** Relying on Sykes' (1958) theory of Pains of Imprisonment, it is suggested to broaden the theory to include parents and siblings' pains of imprisonment that are economic, social and mental ones.

Taking care of myself, taking care of him: Self-compassion and secondary traumatization among wives of Israeli ex-POWs

Danny Horesh¹, Roni Shemesh¹, Zahava Solomon² and Rony Kapel Lev-Ari¹

¹Bar Ilan University, Israel; ²Tel-Aviv University, Israel

Background: While secondary traumatization was previously investigated among wives of ex-prisoners of war (POWs), its underlying mechanisms are not fully understood. Self-Compassion (SC) -

defined as being in touch with one's own suffering, while relating to it with kindness and without judgment – may be an important resilience factor for women living with traumatized veterans. *Objective:* We aimed to examine the role of SC as a buffer in the face of secondary traumatization among ex-POWs' wives. We also examined SC's complex associations with two interpersonal variables, Empathy and Differentiation of Self (spousal fusion), which are known to be associated with secondary traumatization. *Method:* 161 wives of Israeli veterans from the Yom Kippur War participated: 106 ex-POWs' wives, and 55 matched controls, whose spouses fought in the war but were not POWs (Age: M=63.63, SD=5.08). Participants completed questionnaires measuring SC, empathy, self-differentiation, PTSD, and general psychiatric symptoms. *Results:* First, ex-POWs' wives reported higher PTSD and general distress levels, as well as lower SC, than controls. Second, SC was negatively associated with secondary PTSD symptoms and general psychiatric symptoms. Finally, the positive associations between wives' empathy and spousal fusion and psychological distress were moderated by several SC domains, including mindfulness and self-kindness. *Conclusions:* Our findings highlight SC's importance as a resilience factor in the face of secondary traumatization. SC may facilitate emotion regulation, and enable the spouse positive investment in oneself following years of emotional depletion as a caregiver. SC is thus a promising therapeutic target for those living with traumatized veterans.

S7.2 Predicting PTSD: Evidence from prospective neurobiological studies

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Track: Biological & Medical

Posttraumatic stress disorder (PTSD) is associated with neuroendocrine dysregulation, morphological and functional brain alterations, and altered psychophysiological responses. However, only few longitudinal studies have investigated the role of these markers in the development of the disorder. This symposium brings together early-career researchers aiming to identify the neurobiological markers potentially predicting the development of PTSD following exposure to different types of trauma. First, Ms. Yulan Qing will present the long-term changes in cortisol output in response to humanitarian aid deployment and how they relate to stress-related symptomatology. Then, Dr. Yann Quidé will present data on the neurobiological (cortisol, brain morphology/function) consequences of exposure to sexual assault in females. The third speaker, Dr. Sanne van Rooij will present evidence for the use of a psychophysiological marker recorded in the Emergency Department as a predictor of PTSD development. Finally, Prof. Wissam El-Hage will facilitate and lead the discussion on the topic.

Decreased awakening cortisol over the course of humanitarian aid deployment is associated with stress-related symptoms: a prospective cohort study

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Background: Internationally deployed humanitarian aid (HA) workers are at risk for traumatic and chronic stress, and consequently stress-related psychopathology. Therefore, HA deployment may lead to long-term changes in neuroendocrine stress reactivity. **Objective:** We investigated whether awakening cortisol changed upon deployment; and whether this was associated with lifetime childhood and adulthood traumatic stressors, current deployment-related traumatic and chronic stressors and within-person changes in stress-related symptomatology upon deployment. **Methods:** From a prospective study among expatriate HA workers (n=214) from 19 international NGOs, we included n=86 participants (68% females, 33±8 years) who completed questionnaires and cortisol assessments at three points: pre-deployment, early post-deployment and 3-6 months post-deployment. At each assessment, cortisol parameters were calculated from two saliva samples: at awakening and 30 minutes post-awakening. **Results:** Linear mixed models showed significant decreased awakening cortisol over time (bs: -.036 (SE=.011) to -.008 (SE=.003), all ps<.007). Cortisol was significantly predicted by three-way interactions between lifetime stressors, deployment stressors and time, with the smallest decrease over time in those with limited lifetime and current stressors (all ps<.05). The change in cortisol was no longer significant upon inclusion of stress-related symptoms in the model. Moreover, a sharper cortisol decrease was significantly associated with higher anxiety (p=.004) and PTSD symptoms (p=.049) across assessments. **Conclusions:** This is the first study indicating decreased awakening cortisol after HA deployment. The exact decrease within participants depended on the amount of lifetime and current stressors. Importantly, when taking changes in stress-related symptomatology into account, we found these accounted for the attenuated awakening cortisol.

Neurobiological markers of the development of PTSD in sexually assaulted females

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Background: Exposure to sexual assault is a significant risk factor to develop posttraumatic stress disorder (PTSD). However, the neurobiological modifications occurring early post-trauma and leading to the development of PTSD are poorly understood. **Objectives:** Identify these early neurobiological modifications in a cohort of females exposed to sexual assault. **Methods:** Participants were 25 females recruited three weeks following exposure to sexual assault (T1) and 19 age-matched Controls. Among the victims, 10 participants met (PTSD) and 15 did not meet (TEC) DSM-IV criteria for PTSD 6 months post-trauma (T2). At both visits, participants underwent structural and resting-state functional magnetic resonance imaging, and salivary cortisol was collected through the day. **Results:** At T1, the victims had smaller hippocampal volumes, lower intrinsic connectivity (IC) in the posterior cingulate cortex (PCC) and higher IC in the right occipital pole (rOP), but no difference in cortisol, compared to controls. At T2, neither hippocampal volume, functional connectivity nor cortisol levels significantly differed between the PTSD, TEC and control groups. However, the PTSD group had significantly smaller hippocampal volumes and higher IC in the rOP at T1 compared to the control group (but not TEC), and the TEC group had increased IC in the PCC at T1 compared to the control (but not PTSD) group. **Conclusions:** Our results indicate that smaller hippocampal volume and increased IC in the occipital pole may be relevant neurobiological markers of the later development of PTSD following exposure to sexual assault, and may be considered as potential targets for early interventions.

Predicting PTSD risk versus resilience in recently traumatized civilians

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Background: Exposure to traumatic events results in post-traumatic stress disorder in 10-20% of individuals. Early predictors of risk are needed to identify the most vulnerable individuals for early interventions. **Objective:** Study potential biological predictors for PTSD risk versus resilience in recent trauma survivors. **Method:** Skin conductance response (SCR) was measured during trauma recollection in the Emergency Department (ED) within hours after experiencing a criterion A trauma (N=95). Two months later an MRI scan was collected during a fear conditioning paradigm (N=28). PTSD symptoms were assessed 6 months after trauma with the PTSD symptom scale. **Results:** SCR significantly correlated with PTSD symptom severity ($r=0.41$ $p<0.0001$), and was also the most significant predictor among demographic and clinical predictors for PTSD diagnosis at 6 months. The AUC for the ROC curve analysis for SCR on PTSD diagnosis was 0.81 ($p<0.0001$). Second, more hippocampal activation correlated positively with trait resilience at time of scan ($r=.48$, $p=.01$), and was observed in individuals who did not meet DSM-IV criteria for PTSD 6 months post-trauma ($t(21)=2.16$, $p=.04$). **Conclusions:** This prospective study points to an easily obtained biomarker in the immediate aftermath of trauma that can be disseminated to predict risk for PTSD. The more mechanistic MRI approach shows the importance of the hippocampus in promoting resilience in the aftermath of trauma, which is supported by our prior studies in both chronically and recently traumatized civilians. Larger studies are needed to integrate the different biomarkers.

S7.3 Unaccompanied refugee minors in Europe: Fostering resilience

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Track: Child Trauma

In recent years, a growing number of unaccompanied refugee minors reach Western European countries in search for safety and well-being. Many of them are from Eritrea, Syria and Afghanistan, and have been confronted with war, violence and hardships in their home countries and during the journey. These minors face psychosocial challenges and drastic changes within their social-ecological environment upon arrival in Europe. Although they are strong, the prospect of an uncertain future without the support of family members, may undermine their resilience. Are effective clinical interventions available? The current symposium offers three international presentations of studies conducted in different populations of URM's in Europe: Belgium, Norway and Germany. Together, presenters bridge the gap between the needs of URM's and appropriateness of mental health interventions, throughout Europe. Marieke Sleijpen will introduce the symposium by providing an overview of the literature on resilience in URM's.

Evidence-Based Psychotherapy for Unaccompanied Refugee Minors with PTSD: Findings from a Pilot Study

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Background: Unaccompanied refugee minors (URMs) resettled in Europe suffer from high rates of posttraumatic stress symptoms (PTSS). There is a lack of research regarding studies on treatment and long-term follow-ups for this group of patients. Trauma-focused cognitive behavioral therapy (TF-CBT) is recommended in guidelines as first line treatment for children and adolescents and has proven its efficacy in samples with heterogeneous cultural backgrounds. **Objective:** We aimed at testing the feasibility and efficacy of individual manualized TF-CBT for URM's with the involvement of their professional caregivers and with assessments at post-treatment, 6-weeks-, and 6-months after therapy. **Method:** We analyzed the completer sample of $n=19$ male URM's ($Mage=17.1$; $SD=1.0$),

predominately from Afghanistan and all with uncertain residence status. Measures were a clinical interview (Kinder-DIPS), the Child and Adolescent Trauma Screen (CATS), Mood and Feelings Questionnaire (MFQ), and Strengths and Difficulties Questionnaire (SDQ) in self- and proxy-report. *Results:* Participants and caregivers reported significantly reduced PTSS at all assessments post-treatment with high effect sizes. Significant reductions in depressive and behavior symptoms were reported by caregivers only. The examination of individual trajectories of PTSS indicated an increase for those who received a refusal of asylum application after the end of therapy. *Conclusions:* The present study provides evidence for the feasibility of evidence-based psychotherapy with URM. Furthermore, it shows preliminary evidence for the efficacy of TF-CBT in reducing PTSS. Asylum proceedings contribute to a deterioration of psychotherapy outcomes.

Effectiveness of a group-based trauma-focused intervention among URM: The role of context

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Background: Unaccompanied minor asylum-seekers and refugees (URMs) have higher risk for post-traumatic stress-symptoms (PTSS) than other children do. Evidence-based interventions to promote coping with trauma-reactions in this group are needed. Teaching Recovery Techniques (TRT) is a selective, manualized, group-based intervention that has proven effective in reducing post-traumatic stress symptoms (PTSS) among trauma-exposed children in countries of war and disaster (Smith, Dyregrov, & Yule, 2014). We need more evidence about the program's effectiveness among URM in European refugee-receiving contexts. *Objective:* To present and discuss findings from a study that evaluated if participation in TRT-groups reduced PTSS among URM in Norway. We also included a group of accompanied asylum-seeking minors (AAMs). *Method:* We screened AAMs and URM in asylum-centers and resettlement municipalities for PTSS. Children with clinical range symptom levels were offered participation in TRT-groups. Eighteen TRT-groups involving 170 children were distributed either to an intervention or to a wait-list control condition. We assessed the children's PTSS immediately prior to the TRT intervention, 2 weeks and 2 months after TRT had finished. *Results:* There was a reduction in PTSS following TRT among AAMs and URM who had been granted residence in Norway, but not among the asylum-seeking URM and URM with temporary Leave to Stay. *Conclusions:* Care conditions and asylum proceedings appear to represent important context for the effectiveness of TRT in reducing PTSS.

Reference

Smith, P., Dyregrov, A., & Yule, W. (2014). CHILDREN AND WAR. Teaching recovery techniques. Bergen, Norway: Children and War Foundation.

ChildMove: Experiences and coping strategies of unaccompanied minors transiting through Europe

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Background: Since early 2015, the media continuously confront us with images of refugee children drowning in the Mediterranean, surviving in appalling conditions in camps or walking across Europe. Within this group of fleeing children, a considerable number is travelling without parents, the unaccompanied refugee minors. While the media images testify to these flight experiences and their possible huge impact on unaccompanied minors' wellbeing, there has been no systematic research to fully capture these experiences, nor their mental health impact. *Objective:* This paper presents first findings from the ERC-Starting Grant project ChildMove, in particular on how unaccompanied minors present themselves in relation to current mobility regimes and migration policies. *Method:* As one of

the subsamples of ChildMove, 40 unaccompanied minors were sampled in Italy and follow-up longitudinally. At different measurement moments, they completed self-report interviews on current and past experiences and emotional wellbeing, and narrated about these experiences in in-depth interviews. *Results:* Unaccompanied minors report about a range of difficult experiences along their trajectories, as also different ways to cope with the challenges they meet in their changing living contexts. These coping ways are often impacted by the (perceived) mobility regimes and migration policies in their countries of transit and (temporary) destination. *Conclusion:* The findings show how current migration policies in Europe seriously impact unaccompanied minors' wellbeing and force them to take stance in relation to current migration policies.

S7.4 Incorporating culture in psychotrauma assessment, treatment and research

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Track: Transcultural & Diversity

In transcultural psychiatry, the outline for cultural formulation (OCF) (DSM-IV) was designed as format for structured gathering of information on cultural and contextual aspects of mental health problems to enhance cultural sensitive diagnosis and treatment. This symposium aims to give an overview of practical implementation, research and potential outcomes for treatment of the OCF in the case of psychotrauma. A general introduction provides a brief overview of research on clinical experiences of use of the OCF. Moreover, it outlines the development of the Cultural Formulation Interview (DSM-5), which is a structured set of open-ended questions to enhance the gathering of sociocultural information. Three presentations will successively deliberate on the pros and cons of practical implementation of the OCF in a mental health organization, the question on how clinicians use information of an OCF in treatment(planning), and finally the relevance of cultural identity is distinguished in trauma treatment and research.

Interrelationships between cultural identity and trauma-related psychopathology

Simon Groen

GGZ Drenthe, the Netherlands

Background: The experience of Potentially Traumatic Events, post-migration stress, and acculturation difficulties are recognized to be risk factors for psychopathology for refugees and asylum seekers. Clinical experience has shown that cultural identity is an underestimated component of the outline for cultural formulation, which offers cultural and contextual information that is valuable for treatment plans. *Objective:* This mixed-methods study aims to investigate interrelationships between cultural identity and psychopathology among refugee and asylum seeker patients and consider various aspects of cultural identity that are relevant for understanding the impact of trauma. *Method:* Questionnaires were employed among 57 Afghan and Iraqi refugee patients to gather data on posttraumatic stress symptoms, anxiety and depression symptoms, post-migration living problems, acculturation difficulties and sociodemographic confounders. Semi-structured interviews within the same group of 57 patients were conducted to specify cultural identity aspects and how these may be related to stress before and after migration. *Results:* Multivariate linear regressions show that post-migration living problems are significant both for PTSD and for anxiety/depression. Qualitative content analysis revealed that cultural identities of the participants were confused by all risk factors for psychopathology on a personal, (ethnic) group and societal level. *Conclusions:* Clinicians could benefit from an identity-focused approach to trauma treatment by distinguishing changes for the person, the social group, and position within society.

Introduction to the cultural formulation in DSM

Janneke Peelen

Pro Persona, the Netherlands

Background: To assess cultural factors that may affect the clinical encounter, psychiatrists have worked together with anthropologists to find structural ways to solve the problem. This resulted in the inclusion of the cultural formulation (CF) in DSM-IV in 1994. Fifteen years later, the CF was found to be underutilized for a number of reasons, such as a lack of guidelines. In DSM-5, a Cultural Formulation Interview (CFI) was introduced as an answer to this shortcoming. *Objective:* The aim of this project is to explore the tension between the creation of such a culturally sensitive instrument and the need in clinicians who work with an increasing culturally diverse patient population. *Methods:* A literature review was performed to gather information on the arguments in the creation process of the CF, arguments in the critique on the CF, and arguments in the creation process of the CFI. *Results:* The CF was designed after the gathering of clinical experience and a literature search, which resulted in four components in DSM-IV: cultural identity, cultural explanations of the illness, cultural factors in the psychosocial environment and cultural elements in the relation between patient and clinician. In DSM-5 the CF was slightly adapted. In the DSM-5 CFI, however, cultural definition of the problem is the first component. Cultural identity is shifted to cultural perceptions of cause, context, and support. *Conclusion:* The question remains whether these adaptations have improved the implementation process in clinical practice.

Symptoms versus context: lessons learned from a large-scale implementation of the Cultural Formulation Interview

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Background: Adopting the Cultural Formulation in the clinical practice is thought to enhance shared decision making and to facilitate culturally and contextually informed trauma treatment. There is, however, little known regarding its implementability in large-scale psychiatric services. *Objective:* This project aimed to evaluate the implementation of the Cultural Formulation Interview (CFI) in a large-scale mental health organization in the Netherlands, and to identify barriers to its correct adoption in the clinical practice. *Method:* The implementation of the CFI was facilitated by developing an online course, an advanced training of team coaches, (digital) resources on the CFI, and redesigning the standard intake format, using CFI questions. The implementation was evaluated by calculating the percentage of intakes in which the CFI questions have been administered. Barriers to implementation were identified, using an online survey among 150 clinicians, and semi-structured interviews with key stakeholders, clinicians, and administrators. Data were analyzed, using qualitative and quantitative methods. *Results:* Overall, the CFI was administered only in 13.80% of the intakes. The available training resources were minimally consulted by teams and there was a general dissatisfaction with the perceived sudden transition of the intake format towards a more context- and person-centered assessment. Fifty percent of the respondents believed that the CFI had no added value during the intake and 61% viewed it as only relevant for ethnic minority patients. *Conclusions:* Adequate implementation of the Cultural Formulation requires a fundamental rethinking of the intake assessment, shifting it from a symptom oriented approach towards a context- and person-centered one, and an active commitment of managers.

S7.5 Work Stressors and Psychological Outcomes in Diverse Occupational Settings: Findings from the CONTEXT programme

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Track: Public Health

First responders and professionals who work with survivors of trauma are exposed to variety of potentially distressing situations and are at an increased risk of adverse mental health outcomes as a result of their work. To investigate the unique stressors and trauma exposures experienced, the COllaborative Network for Training and EXcellence in psychoTraumatology (CONTEXT), is conducting innovative implementation research. CONTEXT aims to advance scientific knowledge regarding psychological responses to trauma across varying populations and contexts. In this symposium a range of experiences and outcomes from various organisational collaborations (Danish Children's Centres, the Red Cross Red Crescent and the Police Service of Northern Ireland) will be described. By understanding the specific risk factors associated with adverse mental health outcomes each study aims to translate research into practice. This will be accomplished by the development of recommendations towards specific interventions that mitigate trauma-risk and maintain the well-being of workers in international contexts.

Profiling and predicting help-seeking behaviour among trauma exposed UK firefighters

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Background: Support for trauma-exposed firefighters, while offered, is not mandatory to avail of. Several firefighters refrain from seeking help; perhaps due to underlying work culture expectations. As such, investigating help-seeking behaviour is crucial to determine viable support options. *Objectives:* (i) Identify groups of UK firefighters characterised by similar patterns of help-seeking behaviour, (ii) describe membership of these groups using information about their trauma exposure histories, help-seeking attitudes etc. *Method:* Data from a nation-wide survey of UK firefighters (N=1,312) were analysed. Latent class analysis was used to identify groups of firefighters characterised by the same help-seeking behaviours. Multinomial logistic regression analysis was used to determine whether a range of factors (e.g. trauma history, seniority, roles) predicted class membership. *Results:* Five distinct help-seeking classes were identified. Class 1 represented group most likely to avail of occupational health support services; Class 2 constituted the smallest group and represented firefighters who sought psychological support independently from occupational support/GP; Class 3 represented firefighters who confided in close friends; Class 4 represented those who relied on fellow firefighters and spouses; while Class 5, largest group (48.7%) were those who confided in fellow colleagues, friends and family. Class membership varied depending on officers' trauma history, help-seeking attitudes and job status. *Conclusions:* UK firefighters' help-seeking behaviour varies greatly according to their roles and experience as fire officers, trauma history and their attitudes towards help-seeking. These findings have potential benefit for those who wish to provision support for emergency service personnel at risk of trauma related mental ill health.

Organizational and operational risk-factors of burnout and secondary traumatisation in a sample of Danish child-protection workers

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Background: Working with survivors of child-abuse increases the risk for burnout and secondary traumatisation. Theories on the development of these syndromes commonly emphasise organisational factors and operational factors, such as indirect exposure to client trauma, respectively. While evidence also supports a relationship between operational factors and burnout, empirical research is sparse on the suggested relationship between organisational factors and secondary traumatisation. Furthermore, while burnout and secondary traumatisation are theoretically distinguished, evidence suggests that they share a considerable overlap when investigated empirically. Research investigating whether the empirical overlap extends to include correlates of the syndromes is warranted. *Objective:* 1) To assess the relationship between organisational factors and secondary traumatisation, and 2) to assess differences and similarities in associations between organisational and operational factors, and burnout and secondary traumatisation. *Methods:* A survey using previously validated measures was conducted based on a sample of Danish professionals working with survivors of child-abuse. Multidimensional aspects of organisational and operational factors were assessed. These were used to predict scores on measures of burnout and secondary traumatisation using multivariate multiple regression. *Results:* Preliminary results indicated a significant proportion of the variance in both burnout and secondary traumatisation was explained by organisational and operational factors. There was evidence of specificity with particular organisational and operational factors predicting either burnout or secondary traumatisation. *Conclusion:* Burnout and secondary traumatisation are related constructs but may have both shared and specific origins. This has implications for organisational strategies to ameliorate the psychological consequences of working with survivors of child-abuse.

The relationship between organisational support and mental health of humanitarian volunteers, a multi-country analysis

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Background: Volunteer humanitarian workers are at risk for mental disorders compared to paid staff. Challenging working environment, highly stressful conditions, limited training and preparedness, and being affected as their communities by same conditions as those they help have been shown as factors contributing to the volunteers mental health morbidity (Samantha K. Brooks, Dunn, Amlôt, Greenberg, & Rubin, 2016; Thormar et al., 2010). Both Research and anecdotal reports emphasise the role of organisational support to maintain humanitarian workers' mental health, especially volunteers (S. K. Brooks et al., 2015; IASC, 2007). However, there is a dearth of evidence on whether such support can predict the mental health of Humanitarian volunteers. *Objective:* To investigate relationships between organisational support factors, perceived psychological stress, and indicators of mental status among a sample of Red Cross Red Crescent (RCRC) National Societies (NSs) volunteers in the middle east and North Africa (MENA) region. *Methods:* through a collaboration between the IFRC PS Centre and the IFRC MENA region office, Arabic speaking NSs were contacted, and their volunteers are invited to fill an online-based survey measuring perceived organisational support, perceived supportive supervision, teamwork, perceived psychological stress, generalised anxiety disorder, depression, and mental wellbeing. Data collection will be completed in Feb 2018, and structural equation modelling procedures will be employed in the analysis. *Expected results:* We are expecting that organisational factors will scientifically predict mental health. *Conclusions:* Investigating the interrelationship

between the study variable will be quite useful for the RCRC NSs in developing better volunteer care structures.

S7.6 Traumatized refugees: Mental health, treatment and the workplace

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Track: Intervention Research & Clinical Studies

The mental health care of traumatised refugees is associated with various treatment-related challenges and possible burdens for the staff involved in the treatment process. The symposium will therefore focus on different aspects of psychiatric care for refugees. In the first presentation, the concept of "fear of sleep" in traumatised refugees will be presented and its association with mental health and sleep disorders will be examined in a cross-sectional study. In the second presentation, an evaluation of a transdiagnostic intervention program for emotional regulation problems for traumatized refugees (Skills-Training of Affect Regulation - a culture sensitive approach: STARC) will be presented. The third presentation will give a systematic overview of the mental health of interpreters working in the psychiatric care of refugees, and associated risk and protection factors. The symposium includes three individual presentations with the possibility to discuss each presentation as well as a general discussion.

Fear of Sleep in a sample of traumatized adult refugees in Germany

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Background: It has been known for quite some time that insomnia is associated with a poorer quality of life and, in the case of psychiatric illness, with a worse course of the illness. In PTSD, sleep disturbances are often considered a hallmark feature, which seems justified by the fact that between 60-90% of individuals with PTSD experience insomnia. One rather new construct, which has come up repeatedly in the last few years and which could potentially help disentangle the complicated relationship between sleep disturbances and PTSD symptoms is fear of sleep (FoS). FoS might play a role in the onset and maintenance of insomnia symptoms. This study seeks to disentangle the relationship between PTSD and sleep difficulties further by focusing on FoS in a sample of refugees that have come to Germany during the years of 2015-2017. *Method:* 53 patients were included in this study and completed different self-report measures on insomnia (ISI), Fear of Sleep (FOSI-SF) and psychopathology (PCL-5, HSCL-5). *Results:* Results indicate that higher FoS is associated with higher PTSD symptom severity ($R^2=.44$), more severe depression symptoms ($r=.43$), increased suicidality ($r=.56$), and more severe anxiety symptoms ($r=.41$). *Conclusion:* FoS should be taken into consideration more to help traumatized refugees promote their sleep quality and efficiency, which in turn might enable them to engage better in trauma-focused treatment, function better psychologically overall and to integrate better into society.

Effectiveness of a Transdiagnostic Group Intervention for Emotion Regulation with Refugees: A Pilot Randomized Controlled Trial with Young Afghans

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Background: In response to the high rates of comorbidity as well as the various structural barriers to providing mental health care among refugees, targeting transdiagnostic processes such as emotion regulation in as a low-threshold group therapy appears particularly promising in this vulnerable, underserved group. Refugio Munich, a treatment centre for refugees, developed the “Skills-Training of affect regulation – a culture sensitive approach: STARC”. In 14 sessions, strategies to improve emotional clarity as well as to regulate strong emotions efficiently are conveyed in a culture-sensitive way. *Objective:* Based upon a previous pilot study, we evaluated STARC in a randomized controlled trial. We hypothesize an improvement in emotion dysregulation as well as across a broad set of symptom categories (PTSD, psychological distress, anger reactions). *Method:* 42 male Afghan refugees (Mage = 18.50; range:15-21) were randomized to treatment or wait-list. Before, after and at 3 months follow-up, participants completed different self-report measures on emotion dysregulation (DERS) and psychopathology (GHQ-28, PCL-5, DAR-5). *Results:* Results from the completer analyses showed that compared to wait-list (N = 20), STARC (N = 15) significantly reduced emotion dysregulation (Δ dSTARK-WL = 0.87), psychological distress (Δ dSTARK-WL = 1.49), and posttraumatic stress symptoms (Δ dSTARK-WL = 1.25), but not anger reactions (Δ dSTARK-WL = 0.39). ITT and follow-up analyses are yet to be completed. *Conclusion:* STARC appears to be a promising, transdiagnostic group intervention. It can be viewed as a valuable initial low-threshold component in a stepped-care approach. Findings need to be replicated in larger samples, with active control groups and independent clinical assessment.

Mental health of interpreters in refugees’ mental healthcare: A systematic review

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Background: Interpreters are mainly required in the healthcare of refugees due to language barriers in the host countries. Studies investigating the interpreters’ psychological wellbeing and work experiences showed increased emotional stress, difficulties in handling the traumatic content of their assignments and managing the relationship to client and provider (Miller, Martell, Pazdirek, Caruth, & Lopez, 2005). Additionally, the work conditions appear to be demanding because of low pay, lacking supervision or preparation beforehand (Holmgren, Søndergaard, & Elklit, 2003). *Objective:* The presented systematic review focuses on the mental health of interpreters in refugees’ mental healthcare and related risk and protective factors. *Method:* A systematic search was performed in PsycINFO, PsycARTICLES, PSYINDEX, Web of Science and Pubmed. 4664 hits remained after removal of duplicates. Titles, abstracts and full texts will be independently screened for eligibility criteria by two researchers. Only German and English literature will be included. Eligible studies include quantitative, qualitative and mixed-methods studies as well as case studies and grey literature, which examined mental health aspects or work experiences of interpreters in refugee mental healthcare settings. Participants are supposed to be interpreters for spoken languages interpreting for adult refugees or asylum seekers. Interpreting family members and dual-role interpreters are excluded, also reviews and meta-analyses. *Results and Conclusions:* Data will be analysed descriptively and presented as well as risk and protective factors related to interpreters’ mental health.

11:30 12:45 Parallel session #8

S8.1 Consequences of early adversity for mental health and neurobiological phenotypes across the lifespan: exposure type and timing matter

Mirjam van Zuiden¹, Tanja Jovanovic², Christian Schmahl³ and Sanne van Rooij^{1,2}

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Track: Biological & Medical

Early life adversity can impact mental health throughout life, including vulnerability for symptom development upon later life trauma exposure. This is likely caused by developmental programming of neurobiological emotion processing and stress reactivity. Only recently researchers have started to investigate how timing and type of exposure may impact exact negative consequences. This is pivotal for opening up avenues for future interventional strategies aimed at alleviating negative consequences of early life adversity. The presenters (Schmahl, van Rooij, van Zuiden) will discuss how effects of early adversity on mental health and related phenotypic (brain function and volume, stress reactivity) depend on type and timing of exposure. Early exposure in combined presentations uniquely covers critical sensitive developmental periods from prenatal to late childhood, and spans outcomes from childhood through mid to late adulthood, promoting a lifespan perspective to observing consequences of early adversity. Findings are subsequently integrated by a discussant (Jovanovic).

Impact of trauma on brain structure and function dependent on trauma type and developmental period

Sanne van Rooij¹, Jennifer Stevens¹, Ryan Smith¹, Xinyi Yang¹, Anais Stenson² and Tanja Jovanovic¹

¹Emory University, USA; ²Wayne State University, USA

Background: Early life stress and trauma are thought to impact the brain's fear circuitry, however, most studies assessing the effect of trauma are retrospective. A developmental shift in this fear circuitry, resulting in more prefrontal inhibition, is thought to occur around age 10, but effects of interaction with trauma exposure is unclear. *Objective:* Investigate effects of exposure to specific traumatic events versus ongoing traumatic neighborhood violence on brain structure and function in 8-9 and 10-14 year old children. *Method:* Children were recruited through an ongoing study in a highly traumatized, inner-city population. Exposure to specific traumatic events was assessed with the TESI. Traumatic violence exposure was measured with the VEX-R. Functional and structural MRI scans were collected. Freesurfer v5.3 was used to assess bilateral hippocampal volume. An emotional Go/NoGo fMRI task was used to measure response inhibition in the amygdala, hippocampus and vmPFC (N=27). *Results:* The number of traumatic events correlated negatively with hippocampal volume ($r=-.35$, $p=.022$), whereas violence exposure correlated positively with amygdala ($r=.33$, $p=.026$) and hippocampal ($r=.33$, $p=.026$) activation during response inhibition. The correlations were driven by the younger children (hippocampal volume, $r=-0.52$, $p=0.020$, amygdala activation, $r=0.46$, $p=0.016$, hippocampal activation, $r=0.53$, $p=0.004$) and were absent in older children. *Conclusions:* These findings suggest a differential impact of trauma type and developmental period on brain structure and function. In younger children, amygdala and hippocampal activation could indicate an adaptive brain response to violence exposure, whereas maturation of prefrontal inhibition potentially explains the absence of this relation in older children.

Are there effects of childhood and adolescent maltreatment on brain volume and function during sensitive time periods?

Christian Schmahl, Julia Herzog, Janine Thome, Traute Demirakca, Sophie Rausch, Martin Bohus and Stephanie Lis

Central Institute of Mental Health, Germany

Background: Deleterious effects of childhood maltreatment and early deprivation on brain volume are widely reported. Yet, there is an upcoming interest in the type and timing of maltreatment, as first evidence points to differential effects on brain volume and function. *Objective:* The current effort aims

at taking a closer look on the link between type and timing of childhood maltreatment and measures of brain volume and function. *Method:* In a sample with a history of adverse childhood experiences, with (N=42) and without (N = 26) PTSD, we assessed exposure to early life maltreatment from age 3 up to 17 using the Maltreatment and Abuse Chronology of Exposure interview (MACE). Covariations of MACE severity at different ages with brain volume was calculated in traumatized subjects by applying conditional random forest regression. Emotion processing was measured with an Emotional Stroop Task and a Sternberg working memory task (EWMT). *Results:* Bilateral amygdala volume was best predicted by maltreatment at age 13, while right amygdala volume was additionally predicted by maltreatment at age 10. With respect to the right hippocampal volume, best prediction was found by MACE severity at age 10, 11, and 13. Crucially, trauma type modulated this effect, as neglect severity was more important during this sensitive period. *Conclusion:* The present investigation confirms previous findings on the relationship between brain volume and trauma exposure during sensitive periods. Preliminary results on the relationship between type and timing of trauma exposure and functional responses to emotional stimuli will be presented.

Prenatal adversity impacts the effects of childhood and adulthood trauma exposure on late life PTSD symptom severity

Mirjam van Zuiden, Lotte Hilberdink, Miranda Olff, Tessa Roseboom and Susanne de Rooij

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Background: Childhood adversity is an important risk factor for PTSD upon adult trauma exposure. Prenatal adversity, in utero stress exposure, is a potent inducer of developmental programming of neurobiological stress systems. As prenatal adversity remains highly prevalent, it is important to investigate whether it changes adult PTSD vulnerability upon trauma exposure later in life (i.e. second hit), as previously observed for childhood adversity. *Objective:* Investigate whether in utero undernutrition increases vulnerability for PTSD symptoms upon later life trauma and whether this depends on timing of exposure during pregnancy. *Method:* We included participants from the Dutch Famine Birth Cohort Study, born in Amsterdam around the famine period at the end of World War II. N=592 participants (age: 72-74, 37.8% undernutrition exposed) filled out questionnaires on childhood (CTQ) and adulthood (LEC5) trauma exposure, and PTSD symptoms (PCL5). *Results:* Prenatal undernutrition moderated the association between childhood and adulthood trauma and PTSD severity, with exact effects depending on exposure timing and sex. Effects were most pronounced for men exposed in mid gestation, for whom both childhood (b(se): -.79(.32), p=.014) and adulthood (b(se): -.08(.05), p=.036) trauma resulted in increased PTSD symptom severity compared to non-prenatally exposed participants. Associations remained significant after controlling for demographic, pregnancy and birth characteristics. *Conclusions:* Prenatal adversity was associated with higher PTSD symptom severity upon a second hit of adversity, specifically during childhood or during mid-to-late adulthood. Timing of gestational exposure influenced exact effects, which may reflect the importance of specific sensitive periods related to developmental timing of neurobiological stress systems.

S8.2 Traversing the bridges between childhood interpersonal trauma exposure and mental health outcomes in adulthood: Studies examining the effects of diverse traumas types on complex outcomes

Julian Ford¹, Patricia Kerig, Ruby Charak³ and Shane Adams^{4,5}

¹University of Connecticut, USA; ³The University of Texas Rio Grande Valley, USA; ⁴John Jay College of the City University of New York, USA; ⁵The Graduate Center of the City University of New York, USA

Track: Child Trauma

This symposium brings together three independent teams of researchers devoted to advancing our understanding of the ways in which specific forms of childhood interpersonal trauma exposure are related to negative mental health outcomes in adulthood. These phenomena are studied in a diverse array of multinational samples—including a nationally representative sample in the UK, incarcerated men and women, and an ethnically diverse college student sample in the US. These presentations all make important distinctions between typologies of traumatic experiences, with the first two particularly pointing to the specific effects associated with repeat traumatization, in the form of revictimization or polyvictimization. The third presentation adds an additional facet to the trauma exposure construct by demonstrating the significance of traumatic experiences arising in the context of family violence, which are not always captured in our nomothetical net. The symposium will begin with a general introduction that highlights and integrates these intriguing themes.

Lifetime interpersonal victimization profiles and mental health problems in a nationally representative panel of trauma-exposed adults from the UK

Ruby Charak¹, Maria Louison Vang², Menachem Ben-Ezra³ and Thanos Karatzias⁴

¹The University of Texas Rio Grande Valley, USA; ²Ulster University, UK; ³Ariel University, Israel; ⁴Edinburgh Napier University, School of Health and Social Care, Edinburgh, UK

Background: Exposure to traumatic events during childhood and adulthood has been associated with negative psychological outcomes (Charak et al., 2016); however, there is a dearth of research on revictimization, that is, experiences of victimization in both childhood and adulthood. *Objective:* The current study examined different patterns of lifetime victimization based on six types of childhood adversities, and physical and sexual assault during adulthood, via latent class analysis (LCA) with age and gender as covariates in the latent class model. Further, the present study assessed differences across these latent classes in symptoms of depression, anxiety, and DSM-5 posttraumatic stress disorder. *Method:* An adult sample was recruited online through a research panel representative of the UK population (n = 1,051). The mean age of the sample was 47.18 years (SD = 15.00, range = 18-90 years; 68.4% female). *Results:* The LCA identified five classes, namely, overall revictimization (8.3%), sexual revictimization (13.7%), physical revictimization (12.5%), childhood maltreatment (25.9%), and limited victimization (39.7%). There were significantly more male in the physical victimization class and significantly more females in the sexual revictimization and childhood maltreatment classes. The overall revictimization class had elevated scores in anxiety, depression, and posttraumatic stress symptoms, followed by the childhood maltreatment class compared to the other classes. Further, the overall revictimization class had nearly a 17-fold increase in the risk of PTSD, followed next by the childhood maltreatment class. *Conclusions:* Findings provide implications for understanding patterns of lifetime victimization and how interventions may be targeted to address psychological outcomes.

Latent Class Analysis (LCA) of Trauma History Profiles of Incarcerated Adults

Julian Ford, Damion Grasso and Grace Chan

University of Connecticut, USA

Background: 1.5 million adults are incarcerated U.S. prisons [1], 5-6% clinically diagnosed with PTSD, 15-20% with affective disorders [2]. *Method:* Incarcerated men (N=307) and women (N=201), 42% White, 35% Black, 21% Hispanic, completed the Traumatic Events Screening Instrument (TESI) and the Structured Clinical Interview for DSM-IV (SCID). Current prevalence for men/women respectively was: PTSD (6%/22%), anxiety disorders (28/36%), affective disorders (15/32%), and borderline PD (13%/29%) (Trestman et al., 2007, J. American Academy of Psychiatry Law. *Results:* A 2-class LCA solution was optimal (LMR=229.4, p < .001, AIC = 5697.47, BIC = 5802.68) although entropy was low (.64). Class 1 (low trauma; 72% of the sample) had low (< .20) rates of exposure to all forms of trauma

in childhood and adulthood. Class 2 (poly-victims) had high rates of exposure to physical assault (>.70), traumatic loss, non-interpersonal trauma, and community/family violence (> .50) in adulthood, and childhood physical and sexual abuse (> .50). Women were over-represented as poly-victims (68% vs. 29% low trauma). Poly-victims had a 4-5 times higher relative risk of a current or lifetime diagnosis of PTSD and affective disorder, and 2-3 times higher for anxiety or borderline personality disorder ($p < .001$). In a multivariate logistic regression controlling for gender and education, current PTSD, affective disorder, and borderline personality disorder each were associated with poly-victim class membership. *Conclusion:* The importance of identifying poly-victims with trauma histories extending across the lifespan, and addressing PTSD when treating incarcerated adults for affective and borderline personality disorders, is discussed.

References

[1] https://www.bjs.gov/content/pub/pdf/p16_sum.pdf

[2] <https://www.bjs.gov/content/pub/ascii/imhprpji1112.txt>

A latent class analysis of types of home violence: Distinguishing between adverse life events and traumatic events

Shane Adams^{1,2} and Maureen Allwood¹

¹John Jay College of the City University of New York, USA; ²The Graduate Center of the City University of New York, USA

Background: Research on the mental sequelae of youth exposure to violence often focuses on victimization within the home or on witnessing domestic violence. However, it is not always clear which types of violence rise to the classification of traumatic events (APA, 2013) and which remain classified as non-traumatic adverse life-events. Previous research demonstrates that PTSD symptoms are not limited to criterion A1 traumas (Long et al., 2008; Shevlin & Elklit, 2008), which may indicate an imprecise nosology of what constitutes trauma. *Objective:* Latent class analysis will be used to identify heterogeneous classifications of home violence exposure (HVE). Classes will be examined in association with PTSD and depressive symptoms to clarify whether there are distinctions between adverse life-events and trauma. *Method:* The current study included 988 college students (Mage=19.96, SD=3.51; 74.1% female) who completed a 32-item HVE measure and measures of PTSD and depressive symptoms. *Results:* Participants reported an average of 7.52 HVE with differential associations between types of HVE and PTSD and depressive symptoms. Findings suggest that some HVE are traumatic while others are associated with fewer symptoms and adjustment problems. *Conclusions:* The current study offers a unique opportunity to address the paucity of knowledge concerning classifications of potentially traumatic events that occur within the context of the home.

S8.3 Extending the focus beyond trauma in the treatment of victims of sexual exploitation

Linda Verhaak, Sanne de Kleijn, Rina Ghafoerkhan, Saskia Bieleveldt and Jannetta Bos

Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Track: Transcultural & Diversity

This symposium discusses psychological treatment approaches tailored to specific needs of migrated victims of sexual exploitation. Treatment for this group is mostly trauma-focused. However, mental health consequences of individual life histories and psychological problems resulting from traumatic experiences other than PTSD, may require a treatment focus beyond trauma. Personalized treatments are tailored to variations in psychological profiles and take patient preferences into consideration. In

this symposium we present: a) cognitive behavioral therapy aiming at prevention of revictimization after sexual exploitation; b) disgust and the implications for treatment; disgust is a strong emotional reaction to sexual violence frequently unresponsive to trauma-focused treatment; c) Psychomotor therapy and Recovery of Intimacy – the importance of raising body awareness and to increase a positive experience of intimacy and sexuality; d) Schematherapy for victims of childhood abuse, human trafficking and forced migration. A program has been developed that consists of group schematherapy and psychomotor therapy.

Prevention of Revictimization after Sexual Exploitation - Results from a Feasibility Study of a Behavioural Training

Rina Ghafoerkhan

Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Background: Victims of sexual exploitation often have experienced several forms of (childhood) sexual abuse prior to the exploitation. In the general population there is strong scientific evidence indicating that being a victim to sexual violence puts one at-risk for future sexual victimization. People who have been victimized by sexual exploitation are referred our mental healthcare outpatient clinic for trauma-focussed therapy. Additionally, we developed a 10-session module addressing this cycle of sexual revictimization in an attempt to work towards prevention of future revictimization. *Objective:* Raising awareness on dynamics of sexual violence among victims of sexual exploitation. Tailoring treatment to the broader needs of traumatized victims of sexual exploitation. *Methods:* A feasibility and acceptability study will be carried out in 2019 among 12 female victims of sexual exploitation. Outcome measures will be increased knowledge, self-efficacy, interpersonal functioning, emotion regulation, mood and post-traumatic stress symptoms. Additionally, interviews will be carried out among therapists and patients to evaluate the module. *Results and discussion:* In this presentation preliminary findings on the feasibility study will be presented. As well as an overview of the content of the behavioural training and implications for clinical practice.

Psychomotor therapy and Recovery of Intimacy – the importance of raising body awareness and to increase a positive experience of intimacy and sexuality

Saskia Bieleveldt

Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Background: Victims of human trafficking, conflict-related sexual violence or sexual abuse have often a disturbed body experience. The devastating effects of sexual trauma on how both men and women experience their body are well documented. Research suggests that sexual complaints may persist after otherwise effective trauma treatment in victims of sexual violence. Still the mainstream interventions for the treatment of sexual trauma are mainly cognitively oriented. In our team for sexual violence and exploitation we incorporate psychomotor and sensorimotor therapy, to address the wisdom and importance of the body. Additionally, we offer 'Recovery of intimacy' which aims at increasing positive body experience and experience of intimacy and sexuality. Research of the module 'Movement in Trauma' has shown that when psychomotor therapy was added to the treatment a reduction on trauma-related complaints and psychopathology was shown. *Objective:* To raise awareness of the importance of multi-disciplinary work in the field of complex trauma, especially of bridges between body-focused and cognition-focused interventions. *Methods:* The content of our therapy and modules are based on psychomotor therapy, sensorimotor therapy and trauma sensitive yoga. These are all experience based methods. *Results:* We work in a multi-disciplinary environment. Psychomotor therapy is mostly done in addition to the common trauma-focused therapy. *Discussion:* How to integrate body oriented methods in the mainstream cognitive trauma focused methods. In

which phase of the therapy can body oriented therapy play an important role in the recovery of trauma.

Schema therapy for female victims of early childhood (sexual) abuse and/or exploitation, human trafficking and forced migration

Linda Verhaak and Sanne de Kleijn

Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Background: This presentation will inform participants about a specialized treatment that was developed for victims of early childhood trauma and/or recent sexual abuse, resulting in posttraumatic stress symptoms, often accompanied by borderline personality traits or disorder. The patient population is a migrant group of refugees, asylum seekers and victims of human trafficking. Treatment is offered by an interdisciplinary team comprising a psychomotor therapist, a psychiatrist, a social worker and a clinical/ mental health care psychologist. Cognitive, behavioural, emotion-focused, and physical interventions are based on the Farrel and Shaw mode model, worldwide known as an evidence-based intervention for patients suffering from personality problems and/or chronic fear- and mood disorders, who do not respond well enough to other forms of treatment. *Methods:* We offer a schema therapy day treatment program which combines a mainly cognitive and experience-based group part and a psychomotor therapy group part, focussing on reinforcing resources and emotion regulation strategies. This program's objective is to break through avoidant coping strategies in order to facilitate trauma treatment, enable exposure to intense early emotions, and help patients to start understanding, finding coping strategies for, and possibly fulfilling unfulfilled childhood needs. Besides this program there is optional psychotropic treatment, social work support and individual trauma treatment (EMDR/ NET/Imaginary Rescripting) at a different day of the week. A culturally sensitive attitude is essential, and interventions are transculturally adjusted. *Results:* In this presentation we will share clinical experiences. We are open to discuss what is to be considered best-practice in offering treatment to this population.

Disgust and symptoms of PTSD: Implications for treatment

Jannetta Bos

Centrum 45 & Equator Foundation, Arq Psychotrauma Expert Group, the Netherlands

Twenty years ago the British Journal of Psychiatry published an editorial entitled "Disgust: The forgotten emotion in psychiatry" (Phillips et al., 1998). This has sparked an increasing attention for the possible role of disgust in various types of psychopathology, including Post Traumatic Stress Disorder (PTSD). This contribution discusses how disgust-based mechanisms might play a role in the etiology and persistence of PTSD symptoms, and how these mechanisms might be addressed in clinical practice. The added value of taking the role of disgust-based mechanisms into account will be further illustrated by clinical case descriptions. In addition to trauma therapy I would like to share information about a 2 sessions intervention developed by Jung and Steil (Jung & Steil, 2013) for patients who are still experiencing disgust, although they have been treated for the traumatic experiences related to disgust. The intervention is meant for patients who experienced sexual abuse during childhood and/or adulthood. Overview of the lecture: 1. Short introduction: latest research about disgust 2. Clinical case descriptions 3. Description of the intervention. In case more time is permitted, I can show the intervention in a roleplay.

References

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Jung K, Steil R. A randomized controlled trial on cognitive restructuring and imagery modification to reduce the feeling of being contaminated in adult survivors of childhood sexual abuse suffering from posttraumatic stress disorder. *Psychother Psychosom.* 2013;82(4):213-20. doi: 10.1159/000348450. Epub 2013 May 22.

S8.4 War, society and emotions. Dealing with traumatic pasts in Europe

Rolf J. Kleber¹, Dean Ajdukovic², Anna Menyhért³ and Ilse Raaijmakers³

¹Utrecht University, the Netherlands; ²University of Zagreb, Croatia; ³The Jewish University in Budapest, Hungary; ⁴Arq Center of Excellence on War, Persecution and Violence, the Netherlands

Track: Public Health

Millions of people have been affected by wars and violent conflicts in 20th century Europe. To this day individuals, communities and countries live with the memories of these troubled pasts and the emotions that come with it. In some cases one could even speak of an accumulation of troubled pasts: for example, the countries that were part of the former Republic of Yugoslavia experienced two World Wars, the communist authoritarian regime and the Balkan wars in the span of ten decades. How are troubled pasts used to deepen perceived divisions and legitimize radicalization or inclusion? What psychological processes can contribute to mutual understanding, resilience and the acknowledgement of troubled pasts? These questions have become more urgent in the present political climate. This symposium presents a multidisciplinary perspective on the way European societies deal with troubled pasts. The presentations are followed by a discussion.

Linking psychological trauma and troubled past in Europe

Dean Ajduković

University of Zagreb, Croatia

Background: Instances of collective trauma in Europe over the past 100 years have impacted intergroup relations, collective narratives and family memories. The question is: Has the distant trauma from the troubled past been left behind? *Objective:* To analyse how the past collective psychological trauma is reflected in the lives of survivors and their families. *Method:* Comparative analysis of politically motivated organised violence served to link it to collective psychological trauma in a transgenerational perspective using the case of violent dissolution of former Yugoslavia and political oppression in some other countries. *Results:* Implications of wars and oppression on psychological trauma went largely unrecognised as a mental and public health issue until 1990's. Some survivors of historical trauma still lack social legitimacy to seek treatment because they were on the losing side in the conflicts. *Conclusions:* Experiences of oppression and wars are not only historical facts, but in many instances a living burden for survivors and their offspring which affect current lives. The links between organised violence and psychological trauma is better understood now in the populations, but the mechanisms, such as the change in the worldview, through which past trauma affects the current social contexts need further research.

Commemorating World War II in Europe: old war, new rituals

Ilse Raaijmakers

Arq Center of Excellence on War, Persecution and Violence, the Netherlands

Background: Europe is currently in the run-up to the celebration of the 75th anniversary of liberation from Nazi Germany. But the ways in which World War II is commemorated vary widely between countries. In some countries commemorations are ubiquitous, in others World War II is hardly

remembered in public. For some societies – e.g. the Netherlands, UK – commemorating World War II can cause cohesion and inclusion, for others – e.g. Hungary, Poland – it is a much more divisive experience (Langenbacher, Niven and Wittlinger, 2013). *Objective:* This paper makes an international comparison between rituals of commemorating World War II, especially of commemorating the Holocaust. *Method:* It is based on literature research and semi-structured interviews with experts from 10 different countries (Europe, Australia, USA and Israel) on commemorating the Holocaust in their respective homelands. Commemorative rituals are analyzed by looking into their context, performance and effect. *Results:* This paper illustrates that countries with an accumulation of troubled pasts tend to have a more contested commemorative culture. At the same time, rituals of commemorating different troubled pasts can strengthen each other (Rothberg, 2009). *Conclusions:* The comparison also makes clear that commemorating this troubled past is still very much evolving. In different countries new rituals are being developed to deal with traumatic legacies often in dialogue with victims or their descendants. Some of these developments may show the way for countries and individuals that are still struggling with troubled pasts.

Transcultural and Transgenerational Trauma Policy in Europe: Processing Peregrinating Traumatic Legacies in the Digital Age in the Context of Intra-European East-to-West Migration

Anna Menyhért

The Jewish University in Budapest, Hungary

Background: Central-Eastern European post-communist countries with a troubled past are part of the European memory community. The need for transnational dialogue about historical traumas has been acknowledged in memory studies (Assmann, 'From Collective Violence to a Common Future: Four Models For Dealing With the Traumatic Past,' 2009). However, the impact of the increase in migration and refugee influx into Europe has not been taken into account. *Objective:* This paper will investigate the way unprocessed personal and national traumas 'relocate' together with migrants, having yet unrecognized social-emotional consequences for host societies. *Method:* The paper is part of a larger interdisciplinary and cross-sectorial project investigating cultural trauma policy practices in European countries. It does textual and rhetorical analyses of migrant narratives on social media; based on the methodology of digital trauma studies developed by the speaker (Menyhért, "There is No Future Here'. Digital Trauma Processing in Hungarian Migrants' Blogs, 2018). *Results:* The paper will show how 1) historical/trans-generational traumas relocate via migration; 2) how host societies react to the traumatic past of immigrants; 3) how the digital can lead us back to the pre-digital past, to traumatic legacies, in a productive way that fosters dialogue. *Conclusions:* In the European landscape of populist political tendencies unprocessed historical traumas are being used for coaxing support, thus there is an urgent need for new ways of revisiting and reconciling traumatic legacies. Host societies need new ways of dialogic understanding of the traumatic past of newcomers.
