How well can post-traumatic stress disorder be predicted from pre-trauma risk factors? An exploratory study in the WHO World Mental Health Surveys

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Although a number of studies have been carried out to examine prospective predictors of PTSD among people recently exposed to traumatic experiences (TEs), most were either small or focused on a narrow sample, making it unclear how well PTSD can be predicted in the total population of people exposed to TEs. The current report investigates this issue in a large sample based on the World Health Organization (WHO)'s World Mental Health Surveys. Retrospective reports were obtained on the predictors of PTSD associated with TE exposures in representative community surveys carried out in 24 countries. Machine learning methods (random forests, penalized regression, super learner) were used to develop a model predicting PTSD from information about TE type, socio-demographics, and prior histories of cumulative TE exposure and DSM-IV disorders. DSM-IV PTSD prevalence was 4.0% across the TE exposures. 95.6% of these PTSD cases were associated with the 10.0% of exposures classified by machine learning algorithm as having highest predicted PTSD risk. The exposures were divided into 20 ventiles (20 groups of equal size) ranked by predicted PTSD risk. PTSD occurred after 56.3% of the TEs in the highest-risk ventile, 20.0% of the TEs in the second highest ventile, and 0.0-1.3% of the TEs in the 18 remaining ventiles. These patterns of differential risk were quite stable across demographic-geographic sub-samples. These results demonstrate that a sensitive risk algorithm can be created using data collected in the immediate aftermath of TE exposure to target people at highest risk of PTSD. However, validation of the algorithm is needed in prospective samples, and additional work is warranted to refine the algorithm both in terms of determining a minimum required predictor set and developing a practical administration and scoring protocol that can be used in routine clinical practice.
ICD–11 is under development, and current proposals include major changes to trauma-related psychiatric diagnoses, including a heavily restricted definition of PTSD and the addition of complex PTSD (CPTSD). We aimed to test the postulates of CPTSD in samples of community participants and trauma-exposed military veterans. CPTSD prevalence estimates were 0.6% and 13% in the community and veteran samples, respectively; one quarter to one half of those with PTSD met criteria for CPTSD. There were no differences in trauma exposure across diagnoses. A factor mixture model with two latent dimensional variables and four latent classes provided the best fit in both samples: Classes differed by their level of symptom severity but did not differ as a function of the proposed PTSD versus CPTSD diagnoses. These findings should raise concerns about the distinctions between CPTSD and PTSD proposed for ICD–11.


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This study provides a content analysis of all bills introduced in U.S. Congress that explicitly mentioned PTSD. All bills and bill sections mentioning PTSD were coded to create a legislative dataset. Bills that addressed traumatic stress, but did not mention PTSD, were also identified as a comparison group. One hundred sixty-one PTSD explicit bills containing 382 sections of legislative text were identified, as were 43 traumatic stress, non-PTSD bills containing 55 sections (the 2 categories were mutually exclusive). Compared to traumatic stress, non-PTSD sections, PTSD explicit sections were far more likely to target military populations and combat exposures. PTSD, as a discrete diagnostic entity, has been largely defined as a problem unique to combat exposure and military populations in federal legislation. Research is needed to understand knowledge and perceptions of PTSD among policy makers and the public to inform science-based advocacy strategies that translate the full spectrum of PTSD research into policy.

Tonic Immobility Among Survivors of Sexual Assault

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While tonic immobility (TI) is a phenomenon well known and documented in the animal world, far less is known about its manifestation in humans. Available literature demonstrates that TI is significantly associated with less hopeful prognoses when compared with survivors who did not experience TI. If survivors who experience TI are at increased risk for “depression, anxiety, posttraumatic stress disorder (PTSD), and peritraumatic dissociation” and respond more poorly “to standard pharmacological treatment for PTSD”, the implications for treatment are significant, suggesting that TI “should be routinely assessed in traumatized patients”. Literature indicates that “TI is thought to be particularly relevant to survivors of rape and other sexual assault” and that “sexual assault is a trauma that appears to entail virtually all of the salient elements associated with the induction of TI in nonhuman animals, namely, fear, contact, and restraint”. Describing the phenomenon as it is experienced by survivors is especially important because the ability to accurately understand and describe the nature of the phenomenon is the first step toward accurately identifying, diagnosing, and treating the sequelae of such a response. This study examines the experience of TI from the perspective of 7 women who survived a sexual assault accompanied by

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The aim of this cross-national study was to investigate both postevent distress and growth in firefighters following distressing incidents. A sample of firefighters from predominantly European countries recalled a work-related distressing incident. Two hierarchical regression analyses were run to reveal predictors of postevent distress and growth, respectively. Predictors included person pre-event characteristics, objective (e.g., type of incident, time since incident, fatalities) and subjective (e.g., perceived life-threat, peri-event distress, most distressing aspect) incident features, and the participant’s country. Postevent distress was measured by the Impact of Event Scale—Revised (IES-R) and growth by the Posttraumatic Growth Inventory-Short Form (PTGI-SF). The final models explained 29% of the variation in postevent distress and 26% in growth. Postevent distress and growth were predicted by different variables. Country differences were found after controlling for all other variables.

Posttraumatic stress disorder and alcohol dependence: Does order of onset make a difference?

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This study compared treatment-seeking participants who developed PTSD prior to developing alcohol dependence (AD: “PTSD-first”) with participants who developed AD prior to developing PTSD (“AD-first”) on demographics, clinical presentation, and response to treatment for PTSD and AD. All participants received BRENDA, a medication management and motivational enhancement intervention and were randomly assigned to either prolonged exposure (PE) for PTSD plus BRENDA or BRENDA alone and to either naltrexone (NAL) for AD or placebo (PBO). Results showed that participants with AD-first were more likely to report low income, meet criteria for antisocial or borderline personality disorder, report an index trauma of physical assault, compared to those with PTSD-first. Conversely, participants with PTSD-first were more likely to report an index trauma of sexual assault or a combat experience. Notably, no group differences were observed in treatment outcome despite some differences in clinical presentation.

Is there a common pathway to developing ASD and PTSD symptoms?

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Little is known about whether there are common pathways to the development of acute stress disorder (ASD) and PTSD. Research suggests that a common path to ASD and PTSD may lie in peritraumatic responses and cognitions. The results of structural equation modeling in a national sample of Danish bank robbery victims show that peritraumatic panic, anxiety sensitivity, and negative cognitions about self were significant common risk factors for both ASD severity and PTSD severity when controlled for the effect of the other risk factors. The strongest common risk factor was negative cognitions about self. Future research should focus on replicating these results as they point to possible areas of preventive and treatment actions against the development of traumatic stress symptoms.

**Evaluation of the Dimensions of Anger Reactions-5 (DAR-5) Scale in combat veterans with posttraumatic stress disorder**

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The Dimensions of Anger Reactions-5 (DAR-5), as a concise measure of anger, was designed to include the assessment of anger in routine post-trauma screening procedures, its brevity minimizing the burden on client and practitioner. This study examined the psychometric properties of the DAR-5 with a sample of male veterans diagnosed with PTSD. The DAR-5 demonstrated internal reliability, along with convergent, concurrent and discriminant validity against a variety of established measures. Support for the clinical cut-point score of 12 suggested was observed. The results support considering the DAR-5 as a preferred screening and assessment measure of problematic anger.

**Progress towards understanding the genetics of posttraumatic stress disorder**

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This review summarises the literature on the genetics of PTSD including gene–environment interactions (GxE), epigenetics and genetics of treatment response. Numerous genes have been shown to be associated with PTSD using candidate gene approaches. Genome-wide association studies have been limited due to the large sample size required to reach statistical power. Studies have shown that GxE interactions are important for PTSD susceptibility. Epigenetics plays an important role in PTSD susceptibility and some of the most promising studies show stress and child abuse trigger epigenetic changes. Much of the molecular genetics of PTSD remains to be elucidated. However, it is clear that identifying genetic markers and environmental triggers has the potential to advance early PTSD diagnosis and therapeutic interventions and ultimately ease the personal and financial burden of this debilitating disorder.
Development of Exposure to Combat Severity Scale of the Combat Experiences Questionnaire (CEQ)

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The current study aimed to develop the first section of a self–report measure (Combat Experiences Questionnaire–CEQ), and to explore its psychometric properties on Portuguese Overseas War Veterans. The Exposure to Combat Severity Scale (CEQ–A), assesses the exposure severity to objective scenarios related to military combat, common to contemporary and older theatres of operations. Studies included structural analysis through Rash Model, internal consistency, convergent validity, temporal reliability and sensitivity to differentiate war Veterans with and without war–related PTSD. The scale’s structure presented adequate fit to the data, adequate psychometric properties, and discriminant ability. Thus, the CEQ–A is a valid and reliable tool presenting diverse combat scenarios to assess severity of combat exposure in war Veterans.

Correlations Between Sexual Abuse Histories, Perceived Danger, and PTSD Among Intimate Partner Violence Victims

Jackie Brown, Mandi L. Burnette, Catherine Cerulli

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http://jiv.sagepub.com/content/early/2014/10/15/0886260514553629.abstract

This article examines the contributions of childhood abuse histories and sexual assault to PTSD symptoms among women experiencing IPV. Findings suggest childhood abuse experiences account for more variance in PTSD symptoms than adult sexual assault. Clinical implications are discussed.

Real-World Barriers to Assessing and Treating Mental Health Problems With IPV Survivors A Qualitative Study

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Barriers to assessing and treating mental health problems with intimate partner violence (IPV) survivors were identified with qualitative responses from IPV helping professionals who participated in an online survey question. Data were analyzed using a concept mapping approach, which resulted in following eight distinct clusters: (a) unsure, (b) limited IPV specific resources, (c) barriers to access, (d) systems-taboos, (e) immediate crisis needs, (f) fear-stigma, (g) offender’s control and (h) cultural concerns. The opinions expressed in these clusters help to better explain logistic, relational, and intrapersonal obstacles that can limit women IPV survivors’ ability to receive care for mental health conditions. Extending previous
Is implementation of the 2013 Australian treatment guidelines for posttraumatic stress disorder cost-effective compared to current practice? A cost-utility analysis using QALYs and DALYs

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This study aimed to assess, from a health sector perspective, the incremental cost-effectiveness of three treatment recommendations in the most recent Australian Clinical Practice Guidelines for PTSD. The interventions assessed are trauma-focused cognitive behavioural therapy (TF-CBT) and selective serotonin reuptake inhibitors (SSRIs) for the treatment of PTSD in adults and TF-CBT in children, compared to current practice in Australia. Economic modelling, using existing databases and published information, was used to assess cost-effectiveness. A cost-utility framework using both quality-adjusted life-years (QALYs) gained and disability-adjusted life-years (DALYs) averted was used. Costs were tracked for the duration of the respective interventions and applied to the estimated 12 months prevalent cases of PTSD in the Australian population of 2012. Simulation modelling was used to provide 95% uncertainty around the incremental cost-effectiveness ratios. Consideration was also given to factors not considered in the quantitative analysis but could determine the likely uptake of the proposed intervention guidelines. Results indicate that TF-CBT is highly cost-effective compared to current practice. In adults, 100% of uncertainty iterations fell beneath the $50,000/QALY or DALY value-for-money threshold. Using SSRIs in people already on medications is cost-effective, but has considerable uncertainty around the costs and benefits. While there is a 13% chance of health loss there is a 27% chance of the intervention dominating current practice by both saving dollars and improving health in adults. The three Guideline recommended interventions evaluated in this study are likely to have a positive impact on the economic efficiency of the treatment of PTSD if adopted in full. While there are gaps in the evidence base, policy-makers can have considerable confidence that the recommendations assessed in the current study are likely to improve the efficiency of the mental health care sector.

Meta-Analysis of Psychological Treatments for Posttraumatic Stress Disorder in Adult Survivors of Childhood Abuse

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The current meta-analysis exclusively focused on studies evaluating the efficacy of psychological interventions for PTSD in adult survivors of childhood abuse. Sixteen randomized controlled trials meeting inclusion criteria could be identified that were subdivided into trauma-focused cognitive behavior therapy (CBT), non-trauma-focused CBT, eye movement desensitization and reprocessing, and other treatments (interpersonal, emotion-focused). Results showed that psychological interventions are efficacious for PTSD in adult survivors of childhood abuse. Effect sizes remained stable at follow-up. As the heterogeneity between studies was large, we examined the influence of two a priori specified moderator variables on treatment efficacy. Results showed that trauma-focused treatments were more efficacious than non-trauma-focused interventions, and that treatments including individual sessions yielded larger effect sizes than pure group treatments. As a
whole, the findings are in line with earlier meta-analyses showing that the best effects can be achieved with individual trauma-focused treatments.

Translational Evidence for a Role of Endocannabinoids in the Etiology and Treatment of Posttraumatic Stress Disorder

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Recently, an accumulating body of evidence has implicated the endocannabinoid system in the etiology of PTSD, and targets within this system are believed to be suitable for treatment development. Herein, we describe evidence from translational studies arguing for the relevance of the endocannabinoid system in the etiology of PTSD. We also show mechanisms relevant for treatment development. There is convincing evidence from multiple studies for reduced endocannabinoid availability in PTSD. Brain imaging studies show molecular adaptations with elevated cannabinoid type 1 (CB1) receptor availability in PTSD which is linked to abnormal threat processing and anxious arousal symptoms. Of particular relevance is evidence showing reduced levels of the endocannabinoid anandamide and compensatory increase of CB1 receptor availability in PTSD, and an association between increased CB1 receptor availability in the amygdala and abnormal threat processing, as well as increased severity of hyperarousal, but not dysphoric symptomatology, in trauma survivors. Given that hyperarousal symptoms are the key drivers of more disabling aspects of PTSD such as emotional numbing or suicidality, novel, mechanism-based pharmacotherapies that target this particular symptom cluster in patients with PTSD may have utility in mitigating the chronicity and morbidity of the disorder.

Implementing collaborative primary care for depression and posttraumatic stress disorder: Design and sample for a randomized trial in the U.S. military health system

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The aim of this study is to describe the design and sample for a randomized effectiveness trial of collaborative care for PTSD and depression in military members attending primary care. The STEPS-UP Trial (STEpped Enhancement of PTSD Services Using Primary Care) is a 6 installation (18 clinic) randomized effectiveness trial in the US military health system. Study rationale, design, enrollment and sample characteristics are summarized. Military members attending primary care with suspected PTSD, depression or both were referred to care management and recruited for the trial. Those who gave permission to contact for research participation and met eligibility criteria, completed baseline assessments and were randomized to 12 months of usual collaborative primary care versus STEPS-UP collaborative care. Implementation was locally managed for usual collaborative care and centrally managed for STEPS-UP. Research reassessments occurred at 3-, 6-, and 12-months. Baseline characteristics were similar across the two intervention groups. STEPS-UP will be the first large scale randomized effectiveness trial completed in the US military health system, assessing how an implementation model affects collaborative care impact on mental health outcomes. It promises lessons for health system change.