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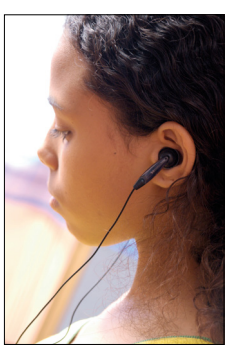
Trauma and post-traumatic stress disorder: children should be seen and heard

Experiencing trauma in childhood and adolescence—crucial periods for our developing brains and self-identity—has long been recognised as a risk factor for the development of psychopathology. In *The Lancet Psychiatry*, Stephanie Lewis and colleagues[1] present data from a twin-cohort study in England and Wales, the Environmental Risk study, with measures of trauma, psychopathology (including post-traumatic stress disorder [PTSD]), risk behaviours, and clinical service use. One of the many strengths of this study is the high rates of participation at follow-up. The research team should be lauded for their endeavour: this study is influential research that is of immediate value to clinicians and policy makers. Similar studies are now needed in other countries alongside validation of the risk calculator in independent cohorts.

A key finding from Lewis and colleagues' sample[1] is that almost a third of children were exposed to trauma, either directly or vicariously, within the range of internationally previously reported prevalence.[2,3] This finding indicates the need to determine the population level interventions capable of preventing trauma. Notably, and in keeping with the adult literature,[4] of traumatised children who go on to develop PTSD, the highest risk index trauma was of an interpersonal nature—ie, child maltreatment—reported in nearly half of the participants with PTSD. Clinicians and researchers must also establish whether interventions targeting risk factors[1,3] and resilience factors[5] for PTSD are beneficial, such that when a child is victimised the likelihood of developing psychopathology can be reduced. Since the response of significant others, including family members, to a child's disclosure of trauma affects the child's subsequent risk of psychopathology,[6] a further target could be to increase social support and enable adults to respond to trauma disclosures in such a way that reduces stigmatisation, shame, and guilt. At a cognitive level, these interpersonal processes are thought to influence the manifestation of a constellation of negative beliefs about the self associated with shame, including, for example, "It was my fault", "I'm a bad person", and "I am defective". Together these negative self-schemata predict the subsequent development of more complicated psychopathology[7] and self-injury.[8]

As found in Lewis and colleagues' study,[1] trauma is not necessarily equivalent to PTSD. The trauma can be potentially associated with illnesses other than PTSD, capable of causing a trail of anguish in its wake. Trauma survivors had high rates of all measured adverse mental health outcomes, with odds ratios greatest for drug dependence (3·52, 95% CI 1·36–9·12) and psychotic symptoms (2·64, 1·38–5·04). Given the potentially complex nature of mental health problems experienced by childhood trauma survivors alongside poor prognosis and high readmission rates, this population would likely benefit from expert psychiatric trauma services.

From a global perspective, there is growing divergence between the ICD and DSM criteria for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PTSD. The ICD-11 will focus on core symptoms (re-experiencing, avoidance, and persistent threat) whereas DSM-5 includes additional combinations of symptoms.[9] From a neurobiological perspective, these constructs are unlikely to be equivalent. Clinicians using the ICD should therefore be careful when applying the research literature using DSM-5 criteria to their own practice and vice versa.[9] Furthermore, childhood trauma exposure is a significant risk factor for the ICD-11 diagnosis of complex PTSD and there is a scarcity of published research for this new diagnosis. This is important clinically, as much of the evidence for PTSD treatments is based on single event adult trauma, rather than multiple event traumas during childhood and adolescence, which are thought to be associated with complex PTSD.

Recent progress has been made in the understanding of the effects of childhood maltreatment on the brain.[10] The challenge for neuroscience is to understand the specific mechanisms through which developmental trauma can alter neurocognitive systems to induce latent vulnerability to mental illness so that these can be targeted therapeutically.[11] Candidate target circuits include memory processing and the dopaminergic system. Urgent research is needed to understand these underlying mechanisms—both in young people and in adults.

As is the case in many countries, a further important finding from Lewis and colleagues' study[1] is the huge unmet clinical need for most trauma survivors in England and Wales. Unfortunately, it is probable that undiagnosed PTSD follows most young people into adulthood—even in those using secondary care psychiatric services.[12] Lewis and colleagues propose a new screening tool to address this problem. Although further research is needed to show the use of such an approach, any screening is only ever to going be effective if appropriate treatment is available. The relentless under-resourcing of psychiatric services, and particularly Child and Adolescent Mental Health services, in England is a national disgrace and as such currently precludes the rollout of any imaginable future screening programme. For most trauma survivors who are not able to access assessment and treatment, the internalised meaning communicated by this societal neglect is likely to be one that perpetuates victimhood and worsens outcome. Policy makers would therefore be wise to be compassionate and improve the provision of health care for all survivors of childhood and adolescent trauma.

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