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Psychiatric morbidity after a major yet transient disaster

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Disasters affect mental health.[1] Post-traumatic stress disorder (PTSD), the most widely studied post-disaster psychiatric morbidity, is reported to affect 30–40% of individuals with direct exposure to the disaster, 10–20% of rescue workers, and 5–10% of the affected community. PTSD has been associated with many factors, including sociodemographics and other characteristics, event exposure, social support, and personality traits.[2] Mental health workers now respond to major disasters based on these findings. However, much of the post-disaster research has methodological limitations, such as lack of information pertaining to predisaster mental health status, short observation periods, high attrition rates, and absence of control groups.[3,4] Moreover, most previous studies have relied on self-reported psychological reactions with little use of psychiatric diagnoses through clinical assessment. Post-disaster epidemiological studies face a number of challenges related to feasibility and ethics considerations, and these limitations are typically evident. However, in *The Lancet Psychiatry*, Filip K Arnberg and colleagues[5]addressed these methodological challenges and provide new insights.

Arnberg and colleagues followed Swedish survivors (8762 adults and 3742 children and adolescents) of the 2004 Indian ocean tsunami for 5 years. They examined the prevalence of psychiatric morbidity in this population using the Swedish patient register and compared with diagnoses in a control group matched for age, sex, and other possible confounders. Although the prevalence of psychiatric disorders was small among the study population (547 [6·2%]), exposure to the disaster increased the risk for stress-related disorders in adults (adjusted HR 2·27, 95% CI 1·96–2·62) and children and adolescents (1·79; 1·30–2·46), especially PTSD (7·51; 5·47–10·3X and 2·83, 1·44–5·54, respectively), independently of pre-tsunami psychiatric morbidity. Compared with unexposed matched individuals, risk of alcohol abuse or dependence was markedly increased among men (1·30, 1·03 –1·64). The authors noted increased risk of suicide attempts in women (1·65, 1·08–2·53) and of uncertain suicide attempts in boys (2·26, 1·33–3·89). The risk of stress-related disorder was highest during the first 3 months after the disaster, but increased risk of stress-related disorders was shown beyond 1 year after the disaster only in adults.

The importance of post-disaster psychiatric morbidity has been highlighted by international guidelines.[6] An estimate reports that the post-disaster prevalence of psychiatric disorders typically doubles, although this is moderated by pre-disaster prevalence, socioeconomic and cultural factors, available resources, and both formal and informal support.[7] Arnberg and colleagues[5] found that direct exposure to the disaster significantly increased the risk of developing PTSD (adjusted HR compared with the unexposed group 14·6, 95% CI 8·60–24·90), supporting this estimate. Although not all cases were captured in the Swedish patient register and the reported proportion of patients with mental health disorders does not show the exact prevalence, the increased prevalence of other psychiatric morbidities, such as suicide attempts of both definite and uncertain intent, unipolar depression, and alcohol abuse or dependence, were similar to that of PTSD. Accordingly, mental health communities should develop strategies not only for PTSD, but also for a range of mental health problems. Findings from the paper draw attention to the clinical importance of long-term health consequences in adults and indicates a need for further investigation for PTSD with delayed expression[8] in addition to other disorders, such as adjustment disorder, in this later phase.

The study by Arnberg and colleagues[5] provides a rare

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opportunity to examine the effects of exposure to a major yet transient traumatic event. As the authors discuss, the study population was unique in that the tsunami survivors were typically of high socioeconomic status and were repatriated from the disaster site to their relatively safe home environments soon after the disaster. This makes the work even more valuable because the population had minimal influence from secondary stressors, thereby elucidating the direct psychiatric consequences of the disaster. After most disasters, the context of the event (eg, property damage, bereavement, and additional life stressors) continues to affect participants' psychological state and recovery. Unfavourable socioeconomic status is also a well-documented risk factor for post-psychiatric morbidity, and people with lower socioeconomic status are disproportionately affected by disasters.[9] Further investigation of the support needed among both demographic groups in disaster-affected areas will be necessary to develop more effective interventions in the field.

The information resulting from this paper should guide clinicians and service planners when developing interventions for disaster survivors, focusing on disorder type and timing. Specifically, stress-related disorders and other mental health problems should be the focus during the early post-disaster phase while long-term attention might be needed for adult survivors.

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I declare no competing interests.

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