Introduction

Each year, over 200 million people are impacted by disasters.¹ Those exposed to disasters may be at risk of physical, mental, and behavioral health impacts. Disasters have been linked to an increased burden of mental and behavioral disorders in affected communities. Research suggests that anywhere from one third to one half of those exposed to disasters could develop mental distress such as post-traumatic stress disorder (PTSD), depression, or anxiety disorders.²⁻⁴ Estimates show that 5-10% of all survivors will need significant clinical care.³ While most survivors recover from mental and behavioral health impacts within the weeks following the disaster, some may have symptoms months and even years after the disaster.²,³ This factsheet provides an overview of disaster-related mental health impacts from the current literature.

Culture Context

Much of the research on the mental and behavioral health impacts of disasters uses Western frameworks, diagnostic tools, and interpretations. The literature thus may misrepresent the morbidity, sequelae, and healing/coping mechanisms related to mental distress in non-Western contexts.

- Mental disorders like PTSD and depression may manifest differently across cultures. Not accounting for cultural differences might lead to flawed or unproductive research and treatment processes.³⁻⁵
- Diagnostic tools may not be culturally sensitive, leading to potential misinterpretation or under-estimation of mental distress.³
- Stigma can cause people to hide their illness and potentially seek treatment outside of “professional” healthcare settings, such as religious or traditional healers.⁶
Mental Health Impacts of Disasters

The most well-documented manifestations of mental distress post-disaster are stress-related diagnoses, such as PTSD, depression, and generalized anxiety. However, the prevalence of depression and anxiety tends to drop in the months after a disaster. Still, at least in the short term, disaster-exposed populations have shown higher rates of PTSD, anxiety, and depression than those who were not exposed. Other documented impacts include perceived stress, psychological distress, death anxiety, panic disorder, phobias, prolonged grief disorder, and remorse, as well as associated sleep disorders.

Evidence is mixed around post-disaster suicidal ideation. While some studies have found declines in suicidal ideation post-disaster, others have reported that rates drop shortly after a disaster and then increase above the norm several months later. Rates tend to be higher for those who have experienced or are currently experiencing a mental disorder.

Mental and behavioral health impacts rarely occur in isolation from each other; for example, individuals with disaster-related PTSD also often experience depression, anxiety and/or substance abuse disorders. Mental health comorbidities are common both in the general and disaster-exposed population, and having an additional disorder can increase the risk of developing a chronic disorder.

Disasters can also reduce self-reported happiness and life satisfaction. Disasters that harm the natural environment (such as wildfires) may cause ecological grief, eco-anxiety, or solastalgia. These “ecosystem distress syndromes” are an emerging category in the literature and suggest that disasters can have varied mental health impacts related to one’s attachment to place.

Major individual risk factors for mental health disorders include family or personal history of mental health disorder, previous trauma, exposure to high temperatures of ambient heat, low social support, or being female. Certain characteristics of the disaster and the response and recovery process can also increase the prevalence of mental health impacts; these include the extent of personal damages (such as the amount of property lost), how long it takes to return to perceived normalcy, and the level of perceived ineffectiveness of help post-disaster.

Repeated exposures to major disasters increase the risk of developing adverse mental health outcomes. Even exposure to less severe disasters (such as moderate flooding) is a risk factor. Experiencing one kind of disaster makes one more likely to experience mental health impacts from disasters of any kind.
Infrastructure/ Health Care Impacts

In the wake of a disaster, survivors may experience additional lifestyle changes that have important implications for their future wellbeing and mental and emotional health. For example, exposure to multiple kinds of abuse is also more likely after a disaster. Sexual violence and abuse increase in prevalence post-disaster, particularly for women under 18. Those who have lower socioeconomic status or are experiencing food or shelter insecurity are more likely to suffer abuse. These childhood traumas may also reduce one’s psychological resilience to disasters across a lifetime, increasing the risk of re-victimization later in life.

Intimate partner violence (IPV) occurrence and severity may increase post-disaster, both in the short and long term. Losses in safe housing, social support systems, and community networks can worsen pre-existing abuse. IPV victimization itself is associated with heightened risks of depression and PTSD both pre- and post-disaster.

Damages to property and infrastructure can impact the likelihood of developing mental distress and its severity. For at least one year post-disaster, displacement has been shown to increase rates of depression, anxiety, and PTSD. After the Great East Japan Earthquake, those who had more significant property loss experienced more severe symptoms for longer. In addition to level of property loss, the impact of displacement on psychological vulnerability is also dictated by distance displaced; type of temporary housing (such as a shelter or apartment) and the time spent in it; the number of moves after the event; disruption of mental and behavioral health care (such as an inability to access medications); loss of family or friends; and social network disruption. Following the Great East Japan Earthquake, property damage and the loss of mental and behavioral health care access were shown to be particularly impactful; in contrast, people who experience loss of friends or family members tend to recover more quickly.
Responders

Responders and recovery workers may also be at risk of mental distress due to their contact with survivors and work in the affected area. Some disaster workers may be victims themselves or have close personal connections with victims. Identifying victims as friends, working on traumatic events, and a lack of social support can contribute to mental and behavioral health impacts.\textsuperscript{35,36} Reported rates of these impacts tend to be higher among volunteers than professional workers.\textsuperscript{36} Still, professional workers are impacted as well. Medical responders, particularly nurses, experience increased rates of depression and PTSD post-disaster, in part due to a lack of institutional preparedness that can result in inadequate or inappropriate forms of communication, social support, and training.\textsuperscript{37}
References


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