

Disaster Psychiatry: What Psychiatrists Need to Know

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The mental health implications of disasters on individuals and communities are enormous. Psychiatrists play a key role in helping to mitigate and lessen the traumatic burden and in fostering resiliency efforts.

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Disasters and public health emergencies, such as epidemics, can lead to significant community-wide disruptions. Appreciation of the psychiatric consequences of disasters and public health emergencies has increased significantly in the past decade. The most commonly reported symptoms after a disaster are sleeplessness; anxiety; depression; and constant, overwhelming bereavement.¹ [Posttraumatic stress disorder](#) (PTSD), [major depressive disorder](#) (MDD), and substance abuse are more prevalent in communities in which traumatic events have occurred.²⁻⁴ The Institute of Medicine Committee on Responding to the Psychological Consequences of Terrorism noted the importance of focusing not only on disaster pathologies but also on disaster stress behaviors.

Psychiatric disorders do not affect all individuals who have experienced a disaster; however, they are at increased risk for distress behaviors that have equally significant and long-term consequences. Distress behaviors include increased smoking, chronic irritability, and even overwork.^{5,6} Disasters and public health emergencies engender a wide range of public health concerns. Psychiatrists have a key role in disaster response: competency in addressing the psychiatric needs in post-disaster communities is critical. A broad public health approach in caring for the victims and the overall community after a disaster is essential.

Stress factors

Disasters place additional stress on preexisting social frictions along cultural, economic, or political lines. Feelings of marginalization by individuals and communities may be exacerbated in the aftermath of the event. Such stresses can contribute significantly to individual and population responses after disasters, including concerns of backlash toward specific cultural groups. Professionals may also feel they are being marginalized. Such was the case with some health care workers during the severe acute respiratory syndrome (SARS) outbreak: some community members worried that they would contract the disease because their clinician had been exposed to patients with SARS.⁷

Several factors can influence psychiatric risks after disasters. The nature of the disaster can contribute at both individual and community levels. Small-scale or localized disasters (eg, aviation

disaster, mass shooting) may be time-limited; other disasters (such the aftermath of a hurricane, an epidemic, or ongoing terrorism) may persist over a longer period.

The resulting number of deaths, severity of injuries, and property destruction, as well as the size of the affected geographic area, can influence how at-risk individuals and communities fare. In general, people seem to respond better to natural disasters than to man-made disasters.⁸ A history of psychiatric disorder or trauma potentially increases risks. Additional individual risk factors include sex and age, actual and perceived level of support, and coping skills. There are also community risk factors, such as trauma experience, disaster response experience, level of social support, and community leadership.

As disaster responders, psychiatrists can take leadership roles on multidisciplinary teams to help organize and provide post-disaster psychiatric care.⁸ They can provide direct assessment and needed interventions. As such, every psychiatrist has a vested interest in acquiring basic competency in disaster psychiatry.

To better understand how psychiatric care can be integrated into the overall disaster response process, it is important to conceptualize the 3 phases of a disaster:

- Pre-event phase: the focus is on disaster education, mitigation, and preparedness
- Acute response phase: the acute or actual disaster response; this phase can last hours to weeks, depending on the nature of the event
- Post-event phase: disaster recovery; this phase can last for months or years, again depending on the severity of the event

► The prevalence of major depressive disorder, posttraumatic stress disorder, and substance abuse is increased in communities that have experienced traumatic events.

► For many patients, stress may not be directly related to disaster itself but rather to post-disaster chaos.

► Licensure and credentialing represent an important medicolegal challenge for psychiatrists who do disaster work. Know the requirements of the state where you will be doing the volunteer work. The American Psychiatric Association can provide information regarding licensure in disasters.

► Self-deployment to a disaster can add to chaos, prevent adequate distribution of health resources, and expose you to danger (eg, aftershocks from earthquakes, exposure to chemical/biological/radiological events).

Pre-event phase

This phase involves learning more about the mental health effects of disasters and some potential interventions. It is important to learn about risk factors and factors that can help mitigate disaster stress. It is crucial to know who is part of the disaster response hierarchy in the community, including agencies that respond to disasters and their responsibilities. These agencies include first responders, such as police and fire departments and emergency medical services, as well local and state health departments and emergency management agencies.

Psychiatrists who work in hospitals or institutional settings need to know what disaster plans are in place as well as how they can participate in the planning process. Individual psychiatrists can identify agencies that they can volunteer for in the event of a disaster. Finally, it is important that psychiatrists discuss a potential crisis plan with their patients. The plan should include information on how the patient can manage his or her mental health and how to obtain medication and treatment after a disaster.

Acute phase

People experience a spectrum of reactions as a result of traumas ([Table 1](#)). Disaster stress reactions encompass physical, emotional, cognitive, behavioral, and spiritual areas ([Table 2](#)). The psychiatrists can provide triage and interventions for those who are in distress. Helping affected individuals obtain basic needs, including food and shelter, is an important early intervention.

Pandya and colleagues¹ studied the experiences of volunteer disaster psychiatrists who helped survivors of the 9/11 attack in New York City for 2 months after the event. These volunteers evaluated each patient, provided information about symptoms, and referred survivors to nonprofit organizations and other medical professionals for follow-up care. Most survivors were perceived to have a psychiatric diagnosis and a substantial proportion received psychotropic medication. The authors note that this suggests potential specific roles for psychiatrists that are unique and different from roles of other mental health professionals in the early post-disaster setting.

Psychiatrists must not self-deploy to disasters. This will only add to the chaos because the strained health care systems and infrastructure are likely to be unable to handle excessive volunteers.

Self-deployment also prevents the appropriate distribution of scarce health resources and puts the psychiatrist at physical risk from, for example, possible aftershocks from earthquakes or exposure in chemical/biological/radiological events. Such exposures can be minimized by working with organized groups or hospitals.

Psychiatrists often need to assume unfamiliar roles in disaster response and to work in unfamiliar and often chaotic settings. They may need to assume a more direct medical care provider role. While psychiatrists are not expected to treat outside of their scope of practice and training, they may be called on to provide basic medical care. To help affected individuals address post-disaster needs, psychiatrists may need to assume a more social work function as well. They may have to work in harsh surroundings in which basic infrastructure (such as electricity or running water) is no longer intact. In some cases, shelter may be a bunk in a tent. Before volunteering for disaster response, psychiatrists need to ensure that their patient and clinical responsibilities are met. Following a disaster, patients in distress often seek out their psychiatrists.

Post-event phase

Psychiatrists continue to play significant roles for individuals who present with post-disaster psychiatric symptoms. Diagnoses may include MDD, anxiety disorders, PTSD, and substance abuse. Psychiatrists provide much needed interventions, including trauma counseling, cognitive-behavioral therapy, and psychopharmacological management. In addition, many patients may present with somatic complaints, including respiratory, cardiac, and GI issues. It is important for psychiatrists to collaborate closely with primary care providers. Psychiatrists can also continue to partner with community leaders and schools concerning education about the psychiatric consequences of disasters, including distress behaviors.

Psychological First Aid (PFA) is an effective intervention that helps affected individuals deal with post-disaster stress by mobilizing resources and support.^{9,10} PFA does not presume that diagnosable psychopathology will develop in all survivors. It is available to those at risk for significant distress. PFA responds to the presenting symptoms and circumstances with specific and easily applied interpersonal and psychosocial interventions. It promotes adaptive and appropriate short- and long-term coping and problem-solving skills. PFA includes assessment of needs and concerns of affected individuals; it connects survivors with social supports and provides information about distress reactions and coping. It also provides links to collaborative services.¹¹

For those individuals who have more severe symptoms of distress or functional impairments, additional interventions that include cognitive-behavioral techniques may be applicable. In some instances, psychiatric medication (ie, an SSRI or a benzodiazepine) may be warranted ([Table 3](#)).^{12,13} Before prescribing a medication, a full psychiatric assessment is critical to ascertain target symptoms, past medical and psychiatric history, and—most important—what follow-up the patient will have. Aftercare may be done by the initial psychiatrist or by a referral to other psychiatric providers, mental health facilities, or primary care providers.

Despite the potentially chaotic nature of post-disaster psychiatric care, informed consent should be obtained from patients. Stress that medication is meant to reinforce, not replace, general coping skills. The effects on treatment compliance of post-disaster conditions, such as potential abuse of psychotropics, displacement issues, and shifting priorities of survivors need to be considered.¹⁴

Medicolegal issues

Numerous medicolegal challenges arise for psychiatrists doing disaster work. First and foremost is the issue of licensure and credentialing.¹⁵ Despite a disaster, many states maintain the need for licensure for physicians working in the state where the disaster has occurred—this may even apply to those who practice telemedicine. In many instances, the state licensing board may grant specific time-limited waivers; it is therefore important to check with the jurisdiction where you will be working regarding licensure requirement. You can also contact the American Psychiatric Association for information regarding licensure in disasters.

To ensure a minimum standard of care, psychiatrists may need to provide documentation of their training when they volunteer. It is prudent to have copies of your license and credentialing information. It is also advisable to contact your malpractice insurance provider regarding coverage while doing volunteer work. Insurance providers may or may not offer protection. The insurance provider can also help identify ways to mitigate medical legal risks.

Despite the chaotic nature of disaster psychiatric work, it is important for psychiatrists to maintain confidentiality. Some patients might worry about being stigmatized because they sought psychiatric care. Although efforts to maintain confidentiality should be made, the exchange of information with disaster response agencies will help individuals who need post-disaster services. Obtain the patient's permission to exchange such information.

Special populations

The United States is an increasingly diverse society, and as such, disasters often can have effects across various cultural groups and special populations. Effective assessment of and intervention for psychiatric needs require an awareness of cultural strengths and confines.¹⁶ There should be an awareness of the differing expressions of grief among various cultural groups. Past individual and community trauma history among cultural groups should also be appreciated. Language barriers require the use of translators. Other cultural factors include perception and receptiveness toward mental health as well as variations in help-seeking behavior. Somatization of psychiatric symptoms is prevalent among some cultural groups.¹⁷ Community cohesion and an extended family support network can be sources of strength and positive influence in post-disaster resilience.

Children and the elderly also have special needs after a disaster. Children are extremely vulnerable to psychiatric distress in such settings.^{18,19} Their reactions to and distress following disasters may be atypical relative to those of adults. Sudden arrests of developmental progress; loss of developmental achievements; and changes in sleep, appetite, family and peer relationships, and academic performance can all suggest psychiatric distress. In addition, children's distress may reflect parental distress. Any post-disaster psychiatric intervention ideally includes what remains of the pre-disaster family unit.

The elderly are also at increased risk in disasters.²⁰ Many become more isolated and have significant medical comorbidity as well as other disabilities. Cognitive processing is often slowed, and as a result, the elderly have difficulty in understanding and navigating post-disaster health and human services. There are numerous other special populations; they include first responders, individuals with disabilities, and rural versus urban populations because the respective populations may have varying degrees of social support and identity. Psychiatrists need to appreciate strengths, resiliencies, and challenges that influence the effects of disasters on these highly vulnerable populations.

Self-care issues

One of the most challenging issues of post-disaster psychiatry is self-care of disaster responders. This group is at risk for secondary psychiatric distress in association with their intense and traumatic work.^{21,22} Psychiatrists are exposed to significant secondary traumatization when they provide care to those affected by the disaster. They hear stories of loss that evoke feelings of sadness and helplessness. Moreover, psychiatrists and their families may be direct victims of disasters and experience extreme disruptions in their lives. Yet, they continue to care for others affected by disasters.

It is important to monitor your own well-being:

- Take adequate breaks
- Get enough sleep
- Get proper nutrition
- Consult regularly with colleagues to monitor your well-being
- Pursue stress-coping skills, including exercise
- Seek professional help if you experience psychiatric distress and symptoms; remember, you are not immune from the psychiatric consequences of disasters

It is important to ensure not only your own well-being but also the well-being of your family and loved ones.^{14,23}

Conclusion

The mental health implications of disasters on individuals and communities are enormous. While there is increasing appreciation for these risks, ongoing research is needed to further identify the full impact of disasters on the mental health of communities as well as to provide evidence-based interventions. Early and rapid mental health interventions help promote individual and community recovery. Psychiatrists play a significant role in helping to mitigate and lessen the traumatic burden; their involvement is a vital component of any community resiliency efforts.

Reaction	Physical	Emotional	Behavioral	Social
Stress	Increased heart rate, blood pressure, and breathing rate	Shock, disbelief, denial, anger, fear, guilt, shame, embarrassment, and helplessness	Staying in the area, seeking shelter, or fleeing	Seeking support from family and friends
Shock	Stupor, numbness, and dissociation	Feeling overwhelmed and unable to think or act	Freezing or paralysis	Isolation and withdrawal
Denial	Feeling numb and disconnected	Refusing to believe what happened	Acting as if nothing happened	Avoiding people and places associated with the event
Anger	Increased heart rate and blood pressure	Feeling angry and resentful	Aggression and hostility	Blame and accusations
Guilt	Feeling heavy and exhausted	Feeling responsible for the event	Self-blame and self-criticism	Isolation and withdrawal
Fear	Increased heart rate and blood pressure	Feeling scared and anxious	Avoidance and escape	Seeking safety and protection
Helplessness	Feeling weak and exhausted	Feeling unable to do anything	Passivity and inaction	Isolation and withdrawal
Confusion	Feeling disoriented and dizzy	Feeling unable to think clearly	Disorientation and loss of direction	Seeking help and support
Exhaustion	Feeling tired and drained	Feeling overwhelmed and unable to cope	Slowed movements and lack of energy	Isolation and withdrawal

Table 1	Issues associated with disasters
	Loss of family members, friends, animals, home, work
	Direct or indirect injuries (medical, psychiatric)
	Displacement because of evacuation or inability to evacuate
	Feelings stemming from actual event
	Frustrations from response and recovery efforts (ie, benefits, community left behind)
	Overall chaos caused by disaster

Table 2

Table 1

Table 2	Pharmacological options following a disaster
Target symptoms	Potential pharmacological agents
Insomnia	Diphenhydramine, eszopiclone, rameltekt, trazodone, doxepin, zolpidem
Anxiety	Lorazepam, clonazepam, diazepam and other benzodiazepines, buspirone, hydroxyzine, propranolol
Depression	Paroxetine, sertraline, fluoxetine, venlafaxine, nortriptyline

Table 3

References:

- Pandya A, Katz CL, Smith R, et al. Services provided by volunteer psychiatrists after 9/11 at the New York City family assistance center: September 12-November 20, 2001. *J Psychiatr Pract*. 2010;16:193-199.
- Adams RE, Boscarino JA, Galea S. Alcohol use, mental health status and psychological well-being 2 years after the World Trade Center attacks in New York City. *Am J Drug Alcohol Abuse*. 2006;32:203-224.
- Math SB, Girimaji SC, Benegal V, et al. Tsunami: psychosocial aspects of Andaman and Nicobar islands. Assessments and intervention in the early phase. *Int Rev Psychiatry*. 2006;18:233-239.
- Coker AL, Hanks JS, Eggleston KS, et al. Social and mental health needs assessment of Katrina evacuees. *Disaster Manag Response*. 2006;4:88-94.
- Institute of Medicine, National Academy of Sciences. *Preparing for the Psychological Consequences of Terrorism: A Public Health Strategy*. Washington, DC: National Academies Press; 2003.
- Norris FH, Friedman MJ, Watson PJ, et al. 60,000 disaster victims speak: part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry*. 2002;65:207-239.
- Person B, Sy F, Holton K, et al; National Center for Infectious Diseases/SARS Community Outreach Team. Fear and stigma: the epidemic within the SARS outbreak. *Emerg Infect Dis*. 2004;10:358-363.
- Ursano RJ, Fullerton CS, Norwood AE. Psychiatric dimensions of disaster: patient care, community consultation, and preventive medicine. *Harv Rev Psychiatry*. 1995;3:196-209.
- Medical Reserve Corps, National Center for Child Traumatic Stress Network, National Center for Post Traumatic Stress Disorder. *Psychological First Aid Field Guide*. 2007.
- Hobfoll SE, Watson P, Bell CC, et al. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry*. 2007;70:283-315.
- Ng AT, Kantor E. Psychological first aid. In: Stoddard FJ, Katz CL, Merlino JP, eds. *Hidden Impact: What You Need to Know for the Next Disaster: A Practical Mental Health Guide for Clinicians*. New York: Jones and Bartlett, Publishers; 2009:115-122.
- Jones K. Psychopharmacology. In: Stoddard FJ, Katz CL, Merlino JP, eds. *Hidden Impact: What You Need to Know for the Next Disaster: A Practical Mental Health Guide for Clinicians*. New York: Jones and Bartlett, Publishers; 2009:149-164.
- Friedman M. The role of pharmacotherapy in early interventions. In: Blumenfield M, Ursano RJ, eds. *Interventions and Resilience After Mass Trauma*. Cambridge, UK: Cambridge University Press; 2008:107-126.
- Ng A. Disaster psychiatry and psychiatric emergency services. In: Glick RL, Berlin JS, Fishkind AB, Zeller SL, eds. *Emergency Psychiatry: Principles and Practice*. Philadelphia: Lippincott Williams & Wilkins; 2008:455-466.
- Kantor E. Liability. In: Stoddard FJ Jr, Katz CL, Merlino JP, eds. *Hidden Impact: What You Need to Know for the Next Disaster: A Practical Mental Health Guide for Clinicians*. New York: Jones and Bartlett, Publishers; 2009:195-206.
- Ng AT. Cultural diversity in the integration of disaster mental health and public health: a case study in response to bioterrorism. *Int J Emerg Ment Health*. 2005;7:23-31.

17. Marsella AJ, Christopher MA. Ethnocultural considerations in disasters: an overview of research, issues, and directions. *Psychiatr Clin North Am*. 2004;27:521-539.
18. Rosen CS, Cohen M. Subgroups of New York City children at high risk of PTSD after the September 11 attacks: a signal detection analysis. *Psychiatr Serv*. 2010;61:64-69.
19. McLaughlin KA, Fairbank JA, Gruber MJ, et al. Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years postdisaster. *J Am Acad Child Adolesc Psychiatry*. 2009;48:1069-1078.
20. Sakauye KM, Streim JE, Kennedy GJ, et al. AAGP position statement: disaster preparedness for older Americans: critical issues for the preservation of mental health. *Am J Geriatr Psychiatry*. 2009;17:916-924.
21. Pfefferbaum B, Tucker P, North CS, et al. Persistent physiological reactivity in a pilot study of partners of firefighters after a terrorist attack. *J Nerv Ment Dis*. 2006;194:128-131.
22. Palm KM, Polusny MA, Follette VM. Vicarious traumatization: potential hazards and interventions for disaster and trauma workers. *Prehosp Disaster Med*. 2004;19:73-78.
23. Ng AT. The role of emergency psychiatry in disaster management. *Psychiatr Issues Emerg Care Settings*. 2004;3(1):20-26.

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