Fact Sheet: The Impact of Pandemic Disease on Mental Health

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Treatment and Resilience

- Traumatic events are harrowing, but a growing body of evidence suggests that most adults exposed to such events are resilient.
  - The following factors significantly increase resilience:
    - A cohesive community
    - Altruistic behavior of the community leaders
    - Minimal displacement
    - A strong social support network, including an intact system of family support
    - Minimal materialistic needs paired with the availability of resources
    - Religious faith and spirituality[1]
  - In healthcare settings, features that have been protective against traumatic stress include feeling supported by supervisors and having information.
  - Because only a small percentage of people exposed to a traumatic event go on to develop psychiatric disorders, researchers are examining biological and demographic predictors of potential vulnerability. Features of interest include:
    - Preexisting psychiatric history[2]
    - The severity or "dose" of exposure to the traumatic event[3]

Research is ongoing but trauma is immediate, so disaster psychiatrists are exploring ways of mitigating immediate suffering to prevent psychiatric morbidity. [4]

- Since most studies thus far have been preliminary and small, a relative scarcity of scientific information underlies existing interventions.[5]

[1] Math, S. B., Nirmala, M. C., Moirangthem, S., & Kumar, N. C. (2015). Disaster Management: Mental Health Perspective. *Indian journal of psychological medicine*, *37*(3), 261–271.

[2] North, C. S., Smith, E. M., & Spitznagel, E. L. (1994). Posttraumatic stress disorder in survivors of a mass shooting. *The American journal of psychiatry*, 151 (1994), 82-88; Schnurr, P. P., Friedman, M. J., & Rosenberg, S. D. (1993). Preliminary MMPI scores as predictors of combat-related PTSD symptoms. *The American journal of psychiatry*, 150 (1993), 479; Helzer, J. E., Robins, L. N., & McEvoy, L. (1987). Post-traumatic stress disorder in the general population. *New England Journal of Medicine*, *317*(26), 1630-1634.

[3] Green, B. L., & Lindy, J. D. (1994). Post-traumatic stress disorder in victims of disasters. *Psychiatric Clinics*, *17*(2), 301-309; Carr, V. J., Lewin, T. J., Webster, R. A., Kenardy, J. A., Hazell, P. L., & Carter, G. L. (1997). Psychosocial sequelae of the 1989 Newcastle earthquake: II. Exposure and morbidity profiles during the first 2 years post-disaster. *Psychological medicine*, *27*(1), 167-178; Lima, B. R., Chavez, H., Samaniego, N., Pompei, M. S., Pai, S., Santacruz, H., & Lozano, J. (1989). Disaster severity and emotional disturbance: implications for primary mental health care in developing countries. *Acta Psychiatrica Scandinavica*, *79*(1), 74-82.

[4] Katz, C. L., Pellegrino, L., Pandya, A., Ng, A., & DeLisi, L. E. (2002). Research on psychiatric outcomes and interventions subsequent to disasters: a review of the literature. *Psychiatry research*, *110*(3), 201-217.

Nevertheless, useful interventions are well-delineated, and may be used in the context of a pandemic.

- **Emergent interventions** are those that take place in the minutes to hours following a cataclysmic event.[6]
    - Activities generally focus on the disaster site, such as hospitals to which the injured have been evacuated. A psychiatrist's basic medical skills may be critical in the emergency room as patients are triaged and loved ones are offered guidance. In this manner, it may be possible to make a useful contribution in the first minutes to hours of the disaster.[7]
- **Acute interventions** begin after the emergent activities have resolved, and are more suited to the circumstances surrounding a pandemic.
    - These are supportive techniques used to identify and buttress people's ego strengths, and work to promote their overall functioning[8]
    - Most begin within hours after a disaster and can last for several months. Goals of acute interventions include decreasing exposure to secondary stressors (e.g., struggles to obtain insurance monies, difficulties in obtaining housing, and encouraging the media to shift attention to stories focusing on recovery and rebuilding rather than the disaster itself.)
    - The "toolkit" derived from disaster psychiatry includes the following acute interventions.
        - **Debriefings**[9]
            - Debriefings are group discussions that occur within 48–72 hours after an event. They are often requested by personnel on the ground, particularly first responders.
            - Debriefings are utilized on the presumption that immediate processing gives individuals the ability to cognitively. restructure events, making the memories less traumatic.
            - Some studies suggest that debriefing is beneficial; others that it may produce harm by needlessly re-exposing individuals to the event.[10]

[5] Katz, C. et al. (2002).
[6] Norwood, A. E., Ursano, R. J., & Fullerton, C. S. (2000). Disaster psychiatry: principles and practice. *Psychiatric Quarterly*, *71*(3), 207-226.
[7] *Ibid.*
[8] Winston, A., Pinsker, H., & McCullough, L. (1986). A review of supportive psychotherapy. *Psychiatric Services*, *37*(11), 1105-1114.
[9] Katz, C. et al. (2002).
[10] This finding has not been replicated consistently and is at odds with clinical observations that people who undergo debriefings often express comfort in having done so. (Katz. General Disaster Psychiatry)

- Disaster psychiatrists recommend that debriefing be utilized with flexibility in format, and that it be presented as an *optional* opportunity to receive support and psychoeducation.[11]

- **Individual Psychotherapy**
  - Psychodynamic psychotherapies can be useful to help influence people's reaction to crisis. Though generally used in long-term settings, it can also be utilized for short-term care.[12]
- **Cognitive Behavioral Therapy (CBT)**
  - In CBT, individuals work directly with a practitioner to change harmful patterns of thinking and behavior. [13] Strategies can include: [14]
    - Learning to recognize distortions in thinking
    - Using problem-solving skills to cope with difficult situations
    - Using role playing to prepare for potentially problematic interactions with others
    - Learning to calm one's mind and relax one's body
  - CBT is the most validated psychotherapy for posttraumatic stress disorder (PTSD); among the approaches used to treat patients after a trauma, it remains the only approach that has been subjected to rigorous study. [15]

- Other approaches that are commonly used but less well-validated include:
  - **Group Psychotherapy**
    - No quantitative data exists to demonstrate efficacy. Studies that address the use of group therapy after disasters remain entirely descriptive.[16]
  - **Pharmacotherapy**
    - There is a relative scarcity of research on acute medication management for trauma and disaster victims.[17]

[11] Garakani, A., Hirschowitz, J., & Katz, C. L. (2004). General disaster psychiatry. *Psychiatric Clinics*, *27*(3), 391-406.

[12] Katz, C. L., & Nathaniel, R. (2002). Disasters, psychiatry, and psychodynamics. *Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, *30*(4), 519-529.

[13] After a trauma, individuals' views of themselves and their world can sometimes become dysfunctional and overly rigid. Garakani, A., Hirschowitz, J., & Katz, C. L. (2004). General disaster psychiatry. *Psychiatric Clinics*, *27*(3), 391-406.

[14] "What is Cognitive Behavioral Therapy?" American Psychological Association, July 2017.

[15] Garakani, A. et al. (2004).

[16] *Ibid.*

    - In the absence of clear positive data, some practitioners shy away from medication use, out of concern that they may interfere with psychological processing of the trauma.[18]
    - Some studies have suggested that tricyclic antidepressants may be effective in the treatment and potentially prevention of PTSD.[19]
- **Eye movement desensitization and reprocessing (EMDR)**
    - EMDR is a structured therapy in which the patient focuses deeply on a trauma memory while performing a series of eye movements associated with a reduction in the vividness and emotion wrought by the memories.[20]
    - The purpose is to help trauma victims to become desensitized from troubling memories and to alter their responses to memories of the event.
    - The scientific basis of EMDR is questionable, given that eye movements appear to be incidental to the benefits that may derive from the prolonged internal image exposure required by the technique.[21]

[17] Katz, C. et al. (2002).

[18] Lundin, T. (1994). The treatment of acute trauma: Post-traumatic stress disorder prevention. *Psychiatric Clinics of North America*, *17*(2), 385-391.

[19] Marshall, R. D., & Pierce, D. (2000). Implications of recent findings in posttraumatic stress disorder and the role of pharmacotherapy. *Harvard Review of Psychiatry*, *7*(5), 247-256; Blaha, J., Svobodova, K., & Kapounkova, Z. (1999). Therapeutical aspects of using citalopram in burns. *Acta chirurgiae plasticae*, *41*(1), 25-32.

[20] "Eye Movement Desensitization and Reprocessing (EMDR) Therapy" American Psychological Association, May 2017.

[21] Lohr, J. M., Kleinknecht, R. A., Tolin, D. F., & Barrett, R. H. (1995). The empirical status of the clinical application of eye movement desensitization and reprocessing. *Journal of behavior therapy and experimental psychiatry*, *26*(4), 285-302.