Defense Health Agency (DHA) Clinical Communities Speaker Series

Resource List-August 2019

Innovations in Health Care from Select Centers of Excellence and Communities of Practice Groups

Disasters and Mental Health: Impact, Vulnerability, and Early Interventions

Numerous studies describe the occurrence of post-traumatic stress disorder following disasters, but less is known about the risk of major depression. The study, Risk of Depressive Disorder Following Disasters and Military Deployment: Systematic Review with Meta-analysis aimed to review the risk of depressive disorders in people surviving disasters and in soldiers returning from military deployment. The authors concluded disasters and combat experience substantially increased the risk of depression.

The Centers for Disease Control and Prevention (CDC) defines mental illness as conditions that affect a person's thinking, feeling, mood or behavior, such as depression, anxiety, bipolar disorder, or schizophrenia. Such conditions may be occasional or long-lasting (chronic) and affect someone's ability to relate to others and function each day. The CDC noted when coping with mental illness during and after a disaster, that it is natural to experience different and strong emotions. Coping with these feelings and getting help when needed will help individuals, their family, and community to recover from a disaster. CDC went on to recommend impacted individuals to connect with others, to take care of your physical health, rest when needed, to stay informed, to avoid too much exposure to news, and to seek professional help when needed as self-care techniques for emotional health post disaster.

Disasters have substantial consequences for population mental health. Social media data present an opportunity for mental health surveillance after disasters to help identify areas of mental health needs. In the study, A Novel Surveillance Approach for Disaster Mental Health the authors aimed to identify specific basic emotions from Twitter for the greater New York City area during Hurricane Sandy, which made landfall on October 29, 2012, and to detect and map spatial temporal clusters representing excess risk of these emotions. The authors went on to concluded that social media data should be used for mental health surveillance after large scale disasters to help identify areas of mental health needs and to guide us in our knowledge where we may most effectively intervene to reduce the mental health consequences of disasters.

In the article, Disaster Mental Health Epidemiology: Methodological Review and Interpretation of Research Findings the authors interpreted disaster mental health research findings in the context of research methods. Results of different studies varied greatly by several main characteristics of research methods, especially methods of psychiatric assessment, sampling and exposure group determination, and consideration of confounding variables. In conclusion, many complexities in conducting disaster mental health research have limited the understanding and interpretation of available knowledge needed to inform efforts to plan and carry out effective mental health responses to disasters. Thoughtful interpretation of findings in the context of research design and methods is vital to accurately understand the types, prevalence, and predictors of anticipated mental health effects of disasters. A wealth of knowledge from disaster mental health research has accumulated in recent decades, but more research is still needed to resolve inconsistent findings through methodological refinements.

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