Tools for Disaster Research in the Model of the Sendai Framework

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The Sendai Framework for Disaster Risk Reduction 2015-2030¹ was finalized and approved at the United Nations World Conference in Sendai, Japan, on March 18, 2015. With broad support and contribution by global partners and nations, the Sendai Framework has been adopted as fundamental policy for the United Nations Office for Disaster Risk Reduction (Geneva, Switzerland). The Sendai Framework is an expansion and refinement of the international Hyogo Framework for Action² that was introduced in 2005.

The Sendai Framework supports the elements of the Hyogo Framework and introduces a new emphasis on health resilience at the community and global levels. While disaster management continues to be an issue of importance, the Sendai Framework has shifted emphasis to disaster risk reduction. The Sendai Framework principles include the reduction of disaster risks, preventing new risks, limiting existing disaster risks, and strengthening community and global disaster resilience. The Sendai Framework is an important shift in standards for disaster health and medicine with the adoption of health prevention rationales as the primary means to address the risks of disaster as opposed to reaction to the disaster ("the disease") after it has occurred.

The Sendai Framework identifies states (national and local governments) as having primary responsibility for disaster risk reduction and emphasizes the necessity for an "all-of-society" approach and inclusion in addressing the hazards of disasters. The Sendai Framework is designed to address all types of hazards, including epidemiological and climate-change-related events.

To aid with the application of the Sendai Framework into research, two new resources have been developed. First is the Indicators for Terminology for Disaster Risk Reduction³ adopted at a 2016 international conference held in Mexico as a follow-up to the final Sendai Framework conference in Japan. The implementation of a standard disaster language dictionary is an important tool for disaster research. Variation in terminology has been a continual problem for disaster researchers and publishing editors because

different special groups in the disaster theater have special terms and often develop terminology that is not universally accepted. The Sendai Frameworks follow-up conference efforts to standardize indicators and terminology represent a step forward for research in disaster health and medicine. Since the first attempt to define the term "disaster" by the World Health Organization (Geneva, Switzerland) in the 1940s, shifts and vagueness in terminology has hindered disaster research efforts.

A second important development for disaster research has been the development and completion of the US National Library of Medicine (NLM; Bethesda, Maryland USA) Resource Guide for Disaster Medicine and Public Health. This database provides researchers with robust access to the "grey" literature that is often key to conducting valid disaster research. This new database compliments the indexed databases such as MedLine that contain scholarly manuscripts published in the formal scientific literature. The NLM Resource Guide for Disaster Medicine and Public Health is a database of Internet links to disaster medicine and public health documents. These documents include the resources available from more than 700 organizations and are directed to health and medical professionals with inclusion of guidelines, research reports, conference proceedings, training programs, fact sheets, web sites, and databases.

The adoption of the Sendai Framework redirects attention to the importance of disaster risk reduction. This refocus is in line with the overall principles of health and medicine and importantly will predict the future direction of disaster research. Disaster response and recovery research has dominated the disaster literature, but the Sendai Framework emphasis on disaster risk reduction is appropriate for emphasis in future research. The addition of standardized indicators and terminology, as well as a robust database that complements indexed databases by providing broadened access to disaster health and medicine literature, have the potential to improve validity of disaster research with better ability to translate research into application for local and global communities.

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