

Characteristics of medical teams responding to disasters: a scoping review



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Every day there are reports of disasters that are occurring throughout the world, since the new millennium alone we have seen a number of disasters that have caused significant damage with death tolls and casualty rates exceeding hundreds of thousands. This can overwhelm and potentially collapse local health systems. In response, teams are sent to provide emergency medical assistance to those injured, as well as provide basic medical care while “normal” health system functioning is re-established.¹ Unlike traditional health care settings, the disaster response setting presents a myriad of additional challenges including issues with limited resources, knowledge of the local context and language, security concerns, amongst others.² To be effective, these teams need to be high functioning in order to overcome these challenges. The question this poses is: “what are the characteristics of these teams, and how are they developed?”

To answer this question, a scoping review of the literature was conducted.³⁻⁴ Unlike a systematic review, the purpose of a scoping review is to provide an overview of the literature, and map it out in order to inform further research in the subject area, in a field where limited research exists.

Using eight databases, a scoping review was conducted over the period of February to May 2015, and reviewed published articles since 2005, yielding

32 relevant articles. A large number of these articles were from the United States, while the remaining articles was concentrated on the 2004 tsunami in Asia, and the 2010 earthquake in Haiti. One of the significant limitations was that most of the articles were written from the perspectives of the responders.

Next, an inductive thematic analysis of the articles was conducted,⁵ intended to abstract common themes from the various articles to identify characteristics. The following four groups of characteristics were identified: 1) adaptability, creativity, flexibility, improvisation, and innovation, 2) experience and training, 3) leadership and command structure, 4) stress and coping. Although the articles did not provide much understanding of how the characteristics were developed, the articles did shed light on their interdependence,⁶⁻⁷ a finding which parallels previous organizational research.⁸

The findings suggest that for the team to be able to overcome challenges by demonstrating characteristics of adaptability, creativity, flexibility, improvisation and innovation, the team needs a strong foundation of members with prior experience, and training.⁹⁻¹¹ As well, teams need strong leadership and a clear command structure so team members understand their roles and responsibilities within the team structure.^{10,12,13}

Global Health Relevancy

The unpredictable and volatile nature of disasters creates a significant barrier for in-depth rigorous research of the medical teams who respond to them. The identified characteristics, their interdependence, and the similarity they have to previous research helps to inform future research in the field of disaster response. Furthermore, these findings could also be compared with the significant breadth of literature that exists on health care teams and team functioning in general, and that research and concepts could potentially be applied to improve the development of future medical teams in disaster settings.