

Disaster and Attitudinal Vulnerability: A Systematic Conceptual Review

*Senavirathna¹ C and Rajapaksha¹ S

¹Gampaha Wickramarachchi University of Indigenous Medicine, Sri Lanka

*Corresponding author – Email: chinthani@gwu.ac.lk

Abstract

Natural hazards represent a destructive force that poses a significant risk to human life, property, and the economy, among other aspects. The impact of natural hazards on the economy and human populations is profound. Various attitudes, beliefs, and behaviors are linked to different demographic groups, some of which may be more susceptible to these hazards than others. In developing nations, catastrophic natural events like tsunamis can deliver a sudden blow to their development trajectory, leading to a costly and challenging recovery process. A key contemporary challenge in disaster preparedness involves the effective application of soft measures, focusing on assessing local awareness, knowledge, perception, and attitudes towards disasters. The primary research inquiry in this investigation pertains to understanding the existing knowledge surrounding attitudinal vulnerability to disasters. The aims of this study include conducting an extensive review of current knowledge on attitudinal vulnerability in disasters and identifying potential avenues for future research. PRISMA framework and guidelines have been followed to conduct this systematic conceptual review. Total of 128 articles were initially identified from the Scopus database using the key words “Disaster”, “Vulnerability” and “attitude”. Review protocol has been developed according to the PRISMA guidelines. Analysis method used in this study was keyword co-occurrence utilizing the VOSviewer software (Version 1.6.20). The principal discoveries of this theoretical manuscript encompass the delineation of forthcoming avenues for research and areas of research deficiency, such as knowledge lacunae, empirical deficiencies, contextual deficiencies, and methodological deficiencies. A comprehensive framework is imperative to grasp the extent of the matter, encompassing both the technical and social repercussions. Subsequent research endeavours should concentrate on the amalgamation of Blockchain and the internet of things to facilitate real-time data utilization in the realm of disaster readiness. Initiatives aimed at enhancing disaster preparedness should specifically target younger demographics for enhancement purposes. In conclusion, the influence of past experiences on current and future preparedness needs to be explored enhancing public attitudes and knowledge of climate change and disaster risk.

Keywords: Attitudinal vulnerability; attitude; disaster; PRISMA Method