Disaster Medicine and Public Health Preparedness

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Letter to the Editor

Cite this article: Khadka S, Saleem M, Usman M, et al. (2022) Medical preparedness and response aspect: Role of pharmacists in disaster management. *Disaster Med Public Health Prep* 16: 1723–1724. doi: https://doi.org/10.1017/dmp.2021.217.

First published online: 18 August 2021

Keywords:

Disaster management; emergency preparedness; response; pharmacists; disaster planning

Corresponding author:

Sitaram Khadka,

Email: sitaramkhadka5693@gmail.com or sitaram.khadka@naihs.edu.np

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Medical Preparedness and Response Aspect: Role of Pharmacists in Disaster Management

Sitaram Khadka PharmD^{1,2}, Mohammad Saleem PhD², Muhammad Usman PhD³, Furqan K. Hashmi PhD², Santoshi Giri MSc⁴, Muhammad Abdul Jabar Adnan PharmD⁵ and Usman Rashid Malik MPhil⁶

¹Shree Birendra Hospital, Nepalese Army Institute of Health Sciences, Kathmandu, Nepal; ²Punjab University College of Pharmacy, University of the Punjab, Lahore, Pakistan; ³Institute of Pharmaceutical Sciences, University of Veterinary and Animal Sciences, Lahore, Pakistan; ⁴Nepal Public Health Research and Development Center, Kathmandu, Nepal; ⁵Department of Sports Sciences and Physical Education, Punjab University, Lahore, Pakistan and ⁶School of Pharmacy, Xian Jiatong University, Xian, China

Disaster is a dreadful event that can disrupt the normal pattern of existence. The main goal of disaster management is to achieve effective recovery through rapid response avoiding losses from hazards. Health care facilities with a multispecialty team, including pharmacists, are a prime pillar for disaster management. Complications of diseases and interruptions in patient care may lead to more catastrophic events in disaster. Despite the fact that pharmacists can be an accessible health care provider in times of disaster in the community, they are usually considered only in providing supply chain management (SCM) and dispensing of medicines and related items and not regarded as valued providers of clinical services in many low- and middle-income countries. Pharmacists play a pivotal role of clinical to managerial aspects in disaster management, here they get involved in devising the hazard relief strategies as preventive measures in the pre-disaster phase, focus on response plan during the disaster, and provide care for patients not only through timely administration or distribution of medications, but also through regular counseling and ensuring adherence to therapy after the disaster.²

Pharmacists directly provide medical logistic support, health care delivery, and preventive measures as a managerial role (**Supplementary file**). The treatment of patients and designing the disaster response plans for SCM of pharmaceuticals as well as patient care activities are provided by the pharmacists from clinical settings. The community pharmacists can be the immediate source for triaging and referring patients, providing first aid, emergency refilling of medications, vaccinations, and taking preventive measures.³ Pharmacists from different governmental and non-governmental organizations are also involved in the relief efforts and in humanitarian aids.

The roles of pharmacists in disaster management around the globe such as the development of drug algorithms and screening tools during anthrax crisis (2001, USA); medication management and patient care amid the SARS outbreak (2003, Canada); triaging, medical record, and medical logistic activity during Hurricane Katrina (2005, USA); patient care, medical logistic services, and psychosocial support in the earthquake (2005, Pakistan; 2011, Japan; and 2015, Nepal); and Indus valley flooding (2010, Pakistan) are exemplary projections of the handy potential in few countries.⁴ The extended pharmacy services including triaging, preventive services, assuring SCM, tele-pharmacy health services, and supporting for possible therapeutic options by continuously being involved in researching the repurposing of drugs and alternative medicines during COVID-19 pandemic are already covered in literature.^{4,5} Pharmacists' knowledge regarding drugs and clinical skills can be used by the nations to immunize their population in case of disasters as a huge mass has to be covered at a time in such a scenario.

The inclusion of pharmacists in the emergency response medical team, disaster risk management committee, and hospital mass casualty management team in different settings as practiced in different developed countries and in developing countries like Nepal is a global need. The regular mock drill, different tabletop exercises, health service outreach programs, and rescue operations will strengthen their role in the preparedness and response aspect of disaster management. Pharmacists can appropriately use the advanced information gateways such as tele-pharmacy health services; service-driven software such as pharmaceutical information management system⁶; and assistant secretary for preparedness and response – technical resources, assistance center, and information exchange as innovative approaches for effective disaster management. However, the roles of pharmacists in disaster management seem not to have progressed beyond the traditional role of SCM in many places representing underutilized professional clinical resources. This is because most of the pharmacists generally are not well trained in disaster medicine and emergency preparedness aspects as part of their initial qualifications,

1724 S Khadka *et al*.

which can be one of the major barriers in engaging the pharmacists in disaster management activities, especially in low- and middle-income countries.²

The inclusion of medical preparedness and response activities in curricula, experimental training, and the concrete framework of legal authority will enable the pharmacists to practice disaster management. Though pharmacists are an integral part of the disaster management team with clearly outlined roles and responsibilities in some countries, most of the low- and middle-income countries are lacking with such facilities. In such a scenario, with the unified team of health care professionals in interprofessional collaboration, pharmacists provide a prime contribution in medical preparedness and response aspect to communities during an emergency response for disaster management.

Supplementary material. To view supplementary material for this article, please visit https://doi.org/10.1017/dmp.2021.217

Author Contributions. SK contributed in concept and manuscript write-up. MS, MU, and FKH guided in drafting the manuscript and reviewed the manuscript. SG, MAJA, and URM assisted in the literature search and write-up of the manuscript.

Conflict(s) of Interest. The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this paper.

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