

Abstract

Background

Disasters significantly threaten health systems in disaster-prone areas like Ratnapura, making hospital preparedness essential for effective emergency response as one of the front line sectors involved. This study was conducted to determine the factors associated with disaster preparedness among doctors and nurses at Teaching Hospital Ratnapura

Methodology

A descriptive cross- sectional study was conducted among 138 doctors and nurses at Teaching Hospital Ratnapura from 06/2025-12/2025. Participants were selected using simple random sampling. Data were collected using a self-administered questionnaire based on the validated Disaster Preparedness Evaluation Tool. Sociodemographic, professional, institutional and external factors were assessed. SPSS version 23 was used to analyze data. Descriptive statistics, chi-square tests and t-tests were applied with statistical significance set at $P < 0.05$.

Results

Of the participants, 50% were doctors and 50% were nurses with a mean age of 37.9 ± 7.3 years. Overall, 50.7% demonstrated good disaster preparedness. Male gender was significantly associated with better preparedness ($P < 0.01$). Key professional factors significantly associated with disaster preparedness included awareness of roles in the hospital disaster plan ($P < 0.001$), participation in disaster drills ($P < 0.01$) and regular knowledge update ($P < 0.01$). Institutional factors such as availability of disaster plan ($P < 0.001$), and formal disaster training ($P < 0.001$) were also significantly associated. Awareness of national disaster policies ($P < 0.01$) and stakeholder coordination ($P = 0.001$) showed significant associations among external factors.

Conclusion and recommendations

Disaster preparedness among doctors and nurses at Teaching Hospital Ratnapura was found to be moderate and influenced by multiple professional, institutional and external factors. Strengthening preparedness requires regular simulation drills, sustained institutional support, effective communication systems and continuous evaluation to ensure readiness for future disasters.

Key words- Disaster preparedness, hospital emergency response, Healthcare workers