

ABSTRACT

Introduction : Recent outbreaks suggested that healthcare-associated transmission of Ebola and MERS CoV disease is high due to close contact with an infected person. In response to increasing travel and trade, disease transmission across the world is high. Hence, an epidemic in one part of the world could be a threat to the other part. Therefore, preparedness in managing Ebola and MERS CoV patients at each healthcare institution is crucial. Medical and nursing officers are the front-line staff in managing an outbreak and risk their lives when handling the patients at the hospital. Therefore, assessing preparedness, knowledge, and attitudes in managing Ebola and MERS CoV patients is essential in identifying any bottlenecks and improve the quality of service.

Objectives : The study was conducted with the objectives of assessing the preparedness, knowledge, and attitudes in managing Ebola and MERS patients among medical and nursing officers in the National Institute of Infectious Diseases.

Methods : A descriptive cross-sectional study was carried out at the National Institute of Infectious Diseases. The study consisted of a review of health facility infrastructure, availability of equipment, outbreak surveillance and assessing the knowledge and attitudes in managing Ebola and MERS patients among medical and nursing officers. A total of 180 study participants consisting of 40 medical officers and 140 nursing officers were included for the study. A self-administered questionnaire was used to assess the knowledge, attitudes, and preparedness of medical and nursing officers. A checklist administered by the principal investigator was used to assess the hospital preparedness. Data were analyzed by using Statistical Package for Social Sciences software. Ethics clearance was obtained from the Ethics Review Committee, Post Graduate Institute of Medicine.

Results : Availability of personal protective equipment for Ebola/MERS CoV outbreak management such as PPE for standard and droplet precautions, impermeable gowns, N95 masks, and eye protection ware was adequate. However, there were no Airborne Infection Isolation Rooms available. Regular evaluation and updates on, hospital infection control protocols and procedures for Ebola disease are being carried out but not for MERS CoV. Similarly, protocols and procedures for screening and minimizing healthcare personnel exposure for Ebola disease is available but not for MERS CoV.

The response rate was 73.8%. Half of the study participants (n=67, 50.4%) had not received training on Ebola/MERS CoV patient management and nearly half (n=60, 45.1%) of the study participants did not know the type of PPE that has to be worn when managing Ebola/MERS CoV patients. Moreover, most (n=88, 67.2%) of the study participants did not know the notification process of Ebola/MERS CoV infection.

A majority (n=30, 93.8%) of medical officers and 65 (64.4%) nursing officers reported more than 50% in the total knowledge score in managing Ebola disease, while out of 32 medical officers 26 (81.2%) and among 99 nursing officers 52 (51.5%) scored more than 50% in the total knowledge score related to the MERS CoV. Nearly one-third (n=42, 31.8%) of the study participants indicated that they are reluctant in managing Ebola/MERS CoV patients, and 25 (18.8%) indicated that they might not come to the hospital if there is MERS CoV/Ebola patient.

Conclusions and recommendations : Most of the study participants had satisfactory knowledge and attitudes in managing an outbreak of Ebola/ MERS CoV disease but there were gaps. Conducting regular training programmes, simulation exercises and drills are essential in improving the knowledge and skills among medical and nursing officers. Improving isolation rooms facilities should be done on a priority basis in this specialized hospital.

Keywords: Ebola, MERS CoV, knowledge, attitudes, preparedness