The Knowledge and Practice on Safe Handling of Anticancer Drugs Among Staff of Government Hospitals in Sri Lanka

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Healthcare workers are exposed to anticancer drugs unnecessarily and they suffer from unwanted side effects due to lack of knowledge and improper handling of anticancer drugs. This study investigated the knowledge and practice on the safe handling of anticancer drugs among nurses and pharmacists in government hospitals with cancer treatment facilities. A cross-sectional study was conducted at the National Cancer Institute, Maharagama and the Teaching Hospitals at Kandy and Karapitiya. A self-administered questionnaire, containing standard methods to measure knowledge, practice, and challenges for safe handling of anticancer drugs, was used to collect data from 203 participants. Chi-squared test was used to assess the association among knowledge and practice. There were 17 pharmacists and 186 nurses in the sample. Although, 191 (94%) participants had adequate knowledge, only 52 (26%) participants had special training on the safe handling of anticancer drugs. Many participants showed a good level of safe handling practice in receiving, storage and administration of drug and cytotoxic waste disposal. However, among 72, 62 (86%) participants did not do well in preparation practices and among 102 participants 100 (98%) participants did not do well in cleaning practices. There was no significant association between knowledge and practices on safe handling of anticancer drugs (p value= 0.84). Unavailability of Personal Protective Equipment (PPE), less opportunity for training, lack of supervision and high workload were the main challenges reported. Although, pharmacists and nurses had adequate knowledge, the standard level of safe handling practices was not performed. Therefore, proper training, guidelines, procedures, and PPE are essential for enhancing safe handling practices.

Keywords: Anticancer drugs, safe handling, occupational exposure