

Radiation protection literacy and its associated factors among healthcare workers in Negeri Sembilan

ABSTRACT

Background: Ionizing radiation can be an occupational hazard that need protection when in the form of particle which can produce biological changes to cells, tissues or organs. About 19.7% of worldwide average radiation dose is due to the medical use of radiation. In Malaysia, about 700,000 X-ray examinations were performed in 2014. The objective of this study is to assess the level and predictors for radiation protection literacy among healthcare workers in Negeri Sembilan. **Materials and Methods:** A cross-sectional study was conducted in health facilities in Negeri Sembilan from April 2018 to June 2018 among 151 healthcare workers. Respondents were selected based on their workplace using proportionate stratified random sampling method and data was obtained using validated self-administered questionnaire that focused on knowledge, attitude and practices on radiation protection. Data were analyzed using IBM SPSS version 23.0. **Result:** 52.3% of respondents had high knowledge, 80.8% had positive attitude and 56.3 % had good practice on radiation protection. Significant predictors for high knowledge were the use of radiation hazard monitoring device and being a radiation worker meanwhile for positive attitude was received medical surveillance. Significant predictors for good practice were the use of radiation hazard monitoring, being a radiation worker, being a health professional and being a health associate professional. **Conclusion:** Attitude on radiation protection among healthcare workers in Negeri Sembilan was still positive despite knowledge and practice was marginal. Future radiation protection awareness programme, education and training should be strengthen in order to improve radiation protection literacy among healthcare worker in Negeri Sembilan.

Keyword: Radiation protection literacy; Healthcare worker; Knowledge; Attitude; Practice