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Knowledge And Awareness of Radiation Protection and Diagnostic Reference Level among Radiographers in Western Coast Region Sabah Hospital

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Introduction: Computed Tomography (CT) is a crucial diagnostic imaging modality which exposes patients to high amounts of ionising radiation. However, knowledge and awareness of radiation protection and diagnostic reference level (DRLs) among radiographers remain inconsistent. This study determines the knowledge and awareness of radiation protection and DRLs among CT radiographers in government hospitals at Western Coast Region of Sabah. **Methods:** This research used a cross-sectional study conducted in three hospitals which involved 71 radiographers who work with CT scan. The questionnaire consists of three sections which are demographic information, knowledge and practice of radiation protection and DRLs. The questionnaires were distributed through Google Forms and shared via online platforms. Total scores for each section were calculated and the results of knowledge and awareness were divided into three levels. **Results:** Findings indicate that 62.0% (n = 44) of radiographers demonstrated high knowledge on radiation protection and DRLs, while 19.7% (n = 14) had moderate knowledge, and 18.3% (n = 13) had poor knowledge. However, awareness levels towards the issue were significantly lower, with 50.7% (n = 36) demonstrating poor awareness, 36.6% (n = 26) moderate awareness, and only 12.7% (n = 9) high awareness. **Conclusions:** These findings show a high knowledge but poor awareness on radiation protection and DRLs among radiographers who involve in CT examination. Strengthening the need for structured training programs and continuous medical education could help to enhance and update radiographer's knowledge and indirectly help to improve awareness and practice when dealing in CT examination.

Keywords: Diagnostic Reference Levels (DRLs), computed tomography (CT), radiographers, knowledge and awareness levels, Western Coast Region of Sabah