

A Questionnaire Survey Reviewing Radiographers' Knowledge of Computed Tomography Exposure Parameters

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Abstract : Despite the tremendous advancements that have been generated by Computed Tomography (CT) in the field of diagnosis, concerns have been raised about the potential cancer induction risk from CT because of the exponentially increased use of it in medicine. This study aims at investigating the application and knowledge of practicing radiographers in Jordan about CT radiation. In order to collect the primary data of this study, a questionnaire was designed and distributed by social media using a snow-balling sampling method. The respondents (n=54) have answered 36 questions including the questions about their demographic information, knowledge about Diagnostic Reference Levels (DRLs), CT exposure and adaptation of pediatric patients exposure. The educational level of the respondents was either at a diploma degree (35.2%) or bachelor (64.8%). The results of this study have indicated a good level of general knowledge between radiographers about the relationship between image quality, exposure parameters, and patient dose. The level of knowledge related to DRL was poor where less than 7.4 percent of the sample members were able to give specific values for a number of common anatomical fields, including abdomen, brain, and chest. Overall, Jordanian radiographers need to gain more knowledge about the expected levels of the dose when applying good practice. Additional education on DRL or DRL inclusion in educational programs is highlighted.

Keywords : computed tomography, CT scan, DRLs, exposure parameters, image quality, radiation dose

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