

Current Status of Quality Assurance in Relation to Ionizing Radiation in Diagnostic Imaging Departments in Sri Lankan Hospitals

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Ionizing radiation is used to diagnose diseases in modern medicine. Improper handling of ionizing radiation may contribute to a large amount of unnecessary radiation doses to patients and staff. Quality assurance in radiography helps to provide a successful service with proper radiation protection and good image quality. Sri Lanka Atomic Energy Regulatory Council is the main professional body responsible for quality assurance in radiography. Radiographers are responsible for performing needed quality assurance procedures according to the recommendations. This study aims to assess the level of knowledge and current state of quality assurance within selected radiology departments. A qualitative study was done with a distribution of a questionnaire among the participants. Survey data were analyzed using descriptive statistics and sample t-test. Twenty-five radiographers from three government hospitals participated in the study. Both demographic data and knowledge on quality assurance were assessed. The overall knowledge on quality assurance activities was insufficient ($p > 0.05$). The mean score of correct answers was 5.06 out of 11 questions. There was no correlation between quality assurance knowledge and work experience ($p > 0.05$). Participants did not obtain a proper training on quality assurance. The study identified a lack of quality assurance programs within the selected hospitals. Although the atomic Energy Regulatory Council has established quality assurance programs, manuals and exposure charts are not used in diagnostic imaging departments. The absence of quality assurance activities and functional supervisory structures for diagnostic imaging services in Sri Lanka could have adverse effects on quality service delivery. This survey should be done island-wide to determine the urgent need for robust actions to implement realistic quality assurance programs in diagnostic radiology.

Keywords: Diagnostic radiology, Quality assurance, Radiographers