



Radiology Education and the Quality of Care: Radiation Dose

Melissa R. B. Foster

The purpose of this quantitative, quasi-experimental study was to analyse whether the education of radiology personnel mandated by the American Registry of Radiologic Technologists (ARRT) affects the quality of care delivered to radiology patients. One area of radiology quality of care was focused on the findings presented in this study: radiation dosage. Three groups of study participants were used. The participants were chosen and divided into groups based on their radiology background, non-radiology medical background, or lack of medical background. All study participants were required to complete an assessment asking participants what radiation dosage and shields they would use for a standard set of radiographic examinations. A training video was shown to those participants with no radiology background prior to the assessment. The data provided by each group was compared to determine similarities and variances between the groups and ANOVA calculations were

completed. Differences were found between the assessments completed by members of all three groups. The results support the perception that ARRT-mandated education does affect radiation dosage chosen in the care of radiology patients.

Keywords: Radiology, radiology education, patient care quality, radiation dosage, mAs, kVp, ARRT certification, American Registry of Radiologic Technologists.

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Author Affiliations

Winston-Salem State University, Winston-Salem, NC, USA