

## Awareness regarding Radiation Protection among the Technicians Practicing in Bharatpur, Chitwan, Nepal

**Authors :** Jayanti Gyawali, Deepak Adhikari, Mukesh Mallik, Sanjay Sah

**Abstract :** Radiation is defined as an emission or transmission of energy in form of waves or particles through space or material medium. The major imaging tools used in diagnostic radiology is based on the use of ionizing radiation. A cross-sectional study was carried out during July- August, 2015 among technicians in 15 different hospitals of Bharatpur, Chitwan, Nepal to assess awareness regarding radiation protection and their current practice. The researcher was directly engaged for data collection using self-administered semi-structured questionnaire. The findings of the study are presented in socio-demographic characteristics of respondents, current practice of respondents and knowledge regarding radiation protection. The result of this study demonstrated that despite the importance of radiation and its consequent hazards, the level of knowledge among technicians is only 60.23% and their current practice is 76.84%. The difference in the mean score of knowledge and practice might have resulted due to technicians's regular work and lack of updates. The study also revealed that there is no significant ( $p>0.05$ ) difference in knowledge level of technicians practicing in different hospitals. But the mean difference in practice scores of different hospital is significant ( $p<0.05$ ) i.e. i.e. the cancer hospital with large volumes of regular radiological cases and radiation therapies for cancer treatment has better practice in comparison to other hospitals. The deficiency in knowledge of technicians might alter the expected benefits, compared to the risk involved, and can cause erroneous medical diagnosis and radiation hazard. Therefore, this study emphasizes the need for all technicians to update themselves with the appropriate knowledge and current practice about ionizing and non-ionizing radiation.

**Keywords :** technicians, knowledge, Nepal, radiation

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