

## **Knowledge and perception on radiation among medical students in a Malaysian public university**

### **ABSTRACT**

**Background:** Radiation can be found in various forms which include both in natural and manmade sources and is being used in modern technology as two major types which are ionizing and non-ionizing radiation. Radiation without doubt has potential benefits in medicine in terms of diagnosis and treatment modality, however has negative impacts to patients and medical workers if not properly used. Being future doctor that will deal with this technology, this study aimed to determine the knowledge and perception on radiation among medical students.

**Materials and Methods:** This research was a cross sectional study design that was conducted in a public university between 4th of April to 8th of August 2016. The data were collected randomly from 519 medical students through self-administrated questionnaires. The collected data were analysed by IBM SPSS@ software package version 22.0.

**Result:** The response rate was 99.2%. Respondents had low level of knowledge on radiation were 51.7% and 51.1% of respondents had poor perception on radiation. The presence of experience on radiation among respondents showed high knowledge on radiation ( $p < 0.001$ ). Higher Year of study among respondents also showed high knowledge on radiation ( $p < 0.001$ ). There was significant association between experience on radiation and perception status ( $p = 0.006$ ) and also significant association between year of study and perception status ( $p < 0.001$ ).

**Conclusion:** Overall, more than half of respondents showed low level of knowledge and poor perception on radiation. Therefore, certain measures and efforts must carry out to raise the knowledge and perception related to radiation among medical students.

**Keyword:** Radiation; Knowledge; Perception; Medical students