A Descriptive Study to Identify the Knowledge Regarding Medical Devices Related Injuries to Patients among Staff Nurses of D Y Patil Hospital Kolhapur with View to Develop an Informational Booklet

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1. Background

A medical device can be any instrument, apparatus, implement, machine, appliance, implant, and reagent for in vitro use, software, material or other similar or related article, intended by the manufacturer to be used, alone or in combination for a medical purpose

Patient care technology has become increasingly complex; transforming the way nursing care is conceptualized and delivered. Before extensive application of technology, nurses relied heavily on their senses of sight, touch, smell, and hearing to monitor patient status and to detect changes. Over time, the nurses' unaided senses were replaced with technology designed to detect physical changes in patient conditions, consider the case of pulse oxymetry. Before its widespread use, nurses relied on subtle changes in mental status and skin color to detect early changes in oxygen saturation, and they used arterial blood gasses to confirm their suspicions. Now pulse oxymetry allows nurses to identify decreased oxygenation before clinical symptoms appear, and thus more promptly diagnose and treat underlying causes.

2. Objectives of the Study

1) To identify the knowledge regarding medical devices related injuries among staff nurses.
2) To find out an association between knowledge scores of medical devices related injuries with their selected socio - demographic variables

3. Method

The research approach adopted for the study was descriptive. By using Non - probability purposive sampling technique 100 staff nurses working in critical areas were selected for the study. Structured knowledge questionnaire was used to assess the knowledge. Data were analysed by using mean, median, mode, standard deviation and range.

4. Results

The calculated paired' value (t_{ab} = 7.38) was greater than tabulated value (t_{ab} = 2.02). **Hence H_1 is accepted**. This indicates that the gain in knowledge score is statistically significant at P<0.05 level. i. e. H_1: $\mu \neq \mu 0$, therefore the findings revealed that the learning package was effective in increasing the knowledge among staff nurses

In present study, there was significant association between knowledge scores and selected socio - demographic variable like gender (t_{cal}26.86 & t_{ab} 4.30), area of work (t_{cal}05 & t_{ab}2.45) and staff nurses attended the in service education (t_{cal}60 & t_{ab} 2.78). Therefore the calculated Chi - square values was higher than tabulated value at P<0.05 level of significance.

5. Interpretation and Conclusion

The present study revealed that majority of staff nurses had average knowledge on mechanical ventilator. Therefore it was concluded that the study is effective in increasing knowledge regarding medical devices related injuries among patients.