

EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING VAP BUNDLE AMONG CRITICAL CARE UNIT STAFF NURSES AT SELECTED HOSPITAL

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ABSTRACT

Hospital-acquired pneumonia (HAP) terms from the factors related to the hospital environment and is one of the significant health problems worldwide although preventable. Annually, 1.7 million hospitalized patients develop infections related to the healthcare, and more than 98,000 of these patients die according to data from the United States Center for Disease Intensive care units (ICUs) are high-risk areas for serious infections. Objective: To assess the pre-test knowledge regarding the VAP bundle on critical care unit staff nurses at selected hospital. To assess the post-test knowledge about VAP bundle on critical care unit staff nurses at selected hospital. To assess the association between pre-test and post-test knowledge about VAP bundle. Materials and methods: Quasi experimental study where pre-experimental design (one group pre-test post-test design) was undertaken. The data were collected from 30 critical care unit staff nurses with more than 1 year of Experience by purposive sampling technique based on sample selection criteria. The semi structured interview 20 questions on Knowledge of VAP Bundle. Results: Major findings of the study were 36.67% are 11 males and 63.33% are 19 females. 40% are B.Sc. nursing staff, 3% are Post Basic BSc nursing staff, 47% are GNM staff and 10% are ANM qualified staff. Majority the classification of selected hospital area posting of critical care unit staff nurses, 56.67% are medical ICU staff, 33.33% are surgical ICU staff, 10% are cardiac ICU Staff with years of experience classification the staff with experience of 6 months to 2 years are 40%, 2 years to 6 years are 46.66%, 6 years to 10 years are 10% and the staff above 10 years are 3.33%. In present study the knowledge of CCU staff of the Hospital in Pre-test were mean of 10.01. out of which poor knowledge was 3.33% with scoring between 0-5 average knowledge was 50% with Scoring between 6-10 the level of knowledge was good in 43.33% of nursing staff and 3.33% had knowledge in excellent level. The minimum score in pretest is 2 and the maximum score is 16. The post-test knowledge among Critical care unit staff nurses. In the present study of post-test were the mean of 15.56. in this result 0% in the poor and average level of knowledge the scoring between 11-15 in good category was among 46.66% the scoring between 16-20 in excellent category was 53.33%. The pre-test mean was 10.16 and post-test mean was 15.56. The calculated t value is 10.01 and the degree of freedom was much higher than the tabulated value at 2.04 level of significance that is Highly Significant. hence, it was statistically interpreted that H₀ is rejected and H₁ is accepted which states that H₁: there is a significant difference in pre-test and post-test knowledge among critical care unit Staff nurses regarding VAP Bundle.

Keywords: Self-Instructional Module, Knowledge, VAP Bundle

INTRODUCTION

Hospital-acquired pneumonia (HAP) terms from the factors related to the hospital environment and is one of the significant health problems worldwide although preventable. Annually, 1.7 million hospitalized patients develop infections related to the healthcare, and more than 98,000 of these patients die according to data from the United States Center for Disease. VAP has been defined as pneumonia that develops 48 hours after the intubation in a patient who underwent invasive mechanical ventilation. VAP results in prolonged mechanical ventilation and hospital stay and increased healthcare costs and has a mortality of 8.1-31.9%. Approximately 90% of pneumonia developed in ICUS is observed in patients under mechanical ventilation. The risk of developing VAP is 6 to 21 times higher in patients intubated for more than 24 hours compared to others, and the risk increases with the duration of mechanical ventilation.

MATERIAL AND METHOD

The research approach used for this study was quantitative research approach. The research design chosen for this study was pre-experimental design (one group pre-test post-test design). The baseline data were collected by using semi structured interview schedule.

The tool consists of two sections: Section 1- Demographic Variables This section consists of 4 demographic variables. Section 2- Semi Structured Questionnaire A semi structured questionnaires will be given to gather information from the participants based on below section. (Pre-test will be followed with SIM and post-test will be done). Semi Structured knowledge questionnaire consists of 20 questions on Knowledge of VAP Bundle, Risk factors of developing VAP, Positive Impact of VAP Bundle, Negative Impact of VAP Bundle Scoring.

Sampling criteria were set for the selection of sample, inclusion criteria were critical care unit staff nurses with more than 1 year of experience. Purposive sampling technique is used for sampling method. The sample of study constitute of 30 critical care unit staff nurses with more than 1 year of Experience. The content validity was determined by expert. The reliability of tool was done by test re-test method.

The pilot study was conducted at Step down CCU hospital with the sample size of 7 CCU staffs. Prior permission was obtained from the managing directors of SMBT Hospital. The collected data was analysed by using Descriptive and inferential statistics. Post-test assessment was done on the 4th day for experimental group by using Self Instructional module. The pilot study revealed that the study was Feasible and practicable.

RESULT

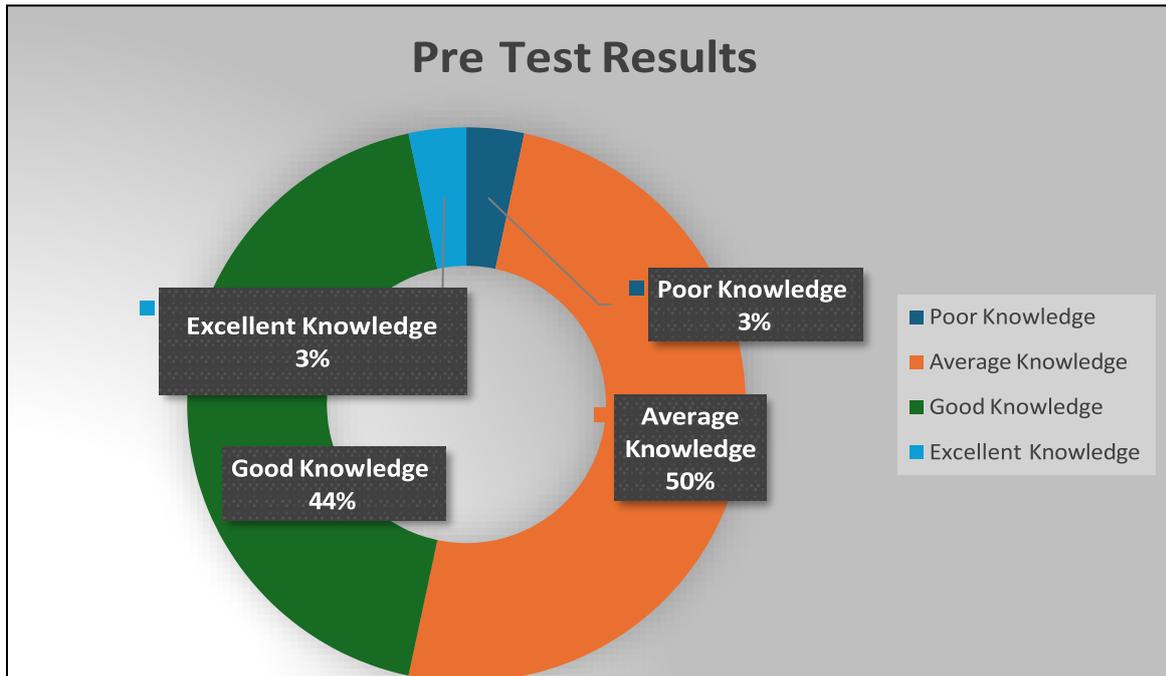


Figure No. 1 Assessment of pre-test knowledge of Critical Care Unit Staff Regarding VAP Bundle. In pre-test 3.33 % of Staff have poor knowledge of VAP Bundle. About 50% of Staff have Average Knowledge Regarding to VAP Bundle. 43.33% Staff have Good Knowledge about the VAP Bundle and 3.33% Staff have Excellent knowledge about VAP Bundle.

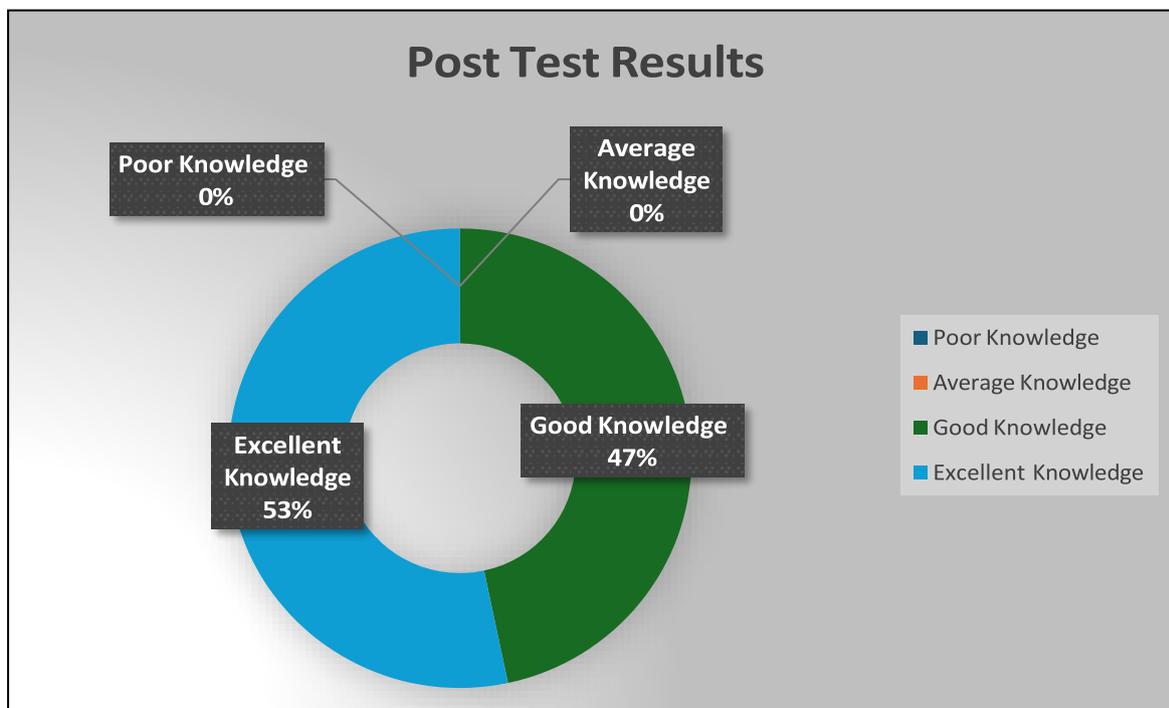


Figure No.2 Assessment of post-test knowledge of Critical Care Unit Staff Regarding VAP Bundle.

In post-test 0% of Staff having poor knowledge of VAP Bundle. About 0% of Staff have Average Knowledge Regarding to VAP Bundle. 47% Staff have Good Knowledge about the VAP Bundle and 53% Staff have Excellent knowledge about VAP Bundle.

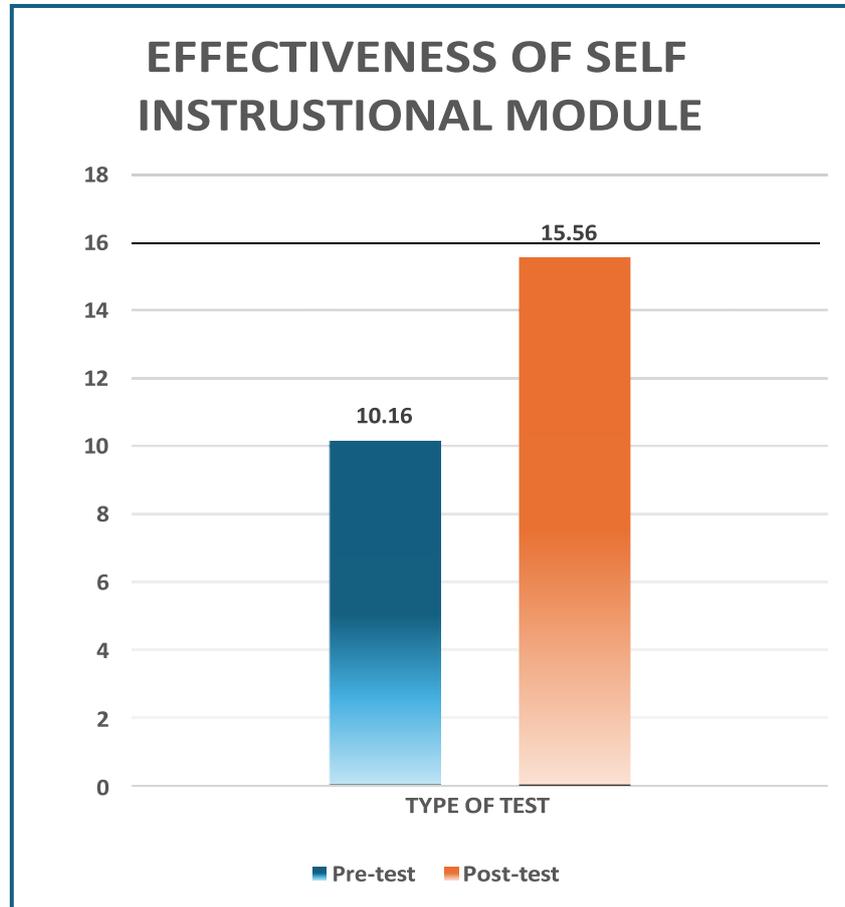


Figure No :3. The effectiveness of Self-instructional module on knowledge of critical care unit Staff nurses regarding VAP Bundle.

The pre-test mean was 10.16 and post-test mean was 15.56. The calculated t value is 10.01 and the degree of freedom was much higher than the tabulated value at 2.04 level of significance that is Highly Significant. hence, it was statistically interpreted that H0 is rejected and H1 is accepted which states that H1: there is a significant difference in pre-test and post-test knowledge among critical care unit Staff nurses regarding VAP Bundle.

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