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To Assess the Effectiveness of Structured Teaching Program on Nosocomial Infection and Its Prevention Among Staff Nurses Working in Shri J.G. Co-Operative Hospital Society, Ghataprabha, Karnataka

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Abstract

Aims*: To evaluate staff nurses' knowledge of nosocomial infections. To examine the impact of a systematic teaching curriculum on staff nurses' ability to avoid nosocomial infections. Furthermore, to ascertain the relationship between staff nurse pre-test knowledge and specific demographic factors.* ***Methods****: In order to investigate and evaluate the staff nurses' level of knowledge regarding nosocomial infection prevention, an evaluatory research approach was used for this study. Pre-experimental design was determined to be appropriate given the nature of the topic being studied and the study's goals to achieve. The convenient sampling method was used. The present study was conducted among staff nurses working in the Shri. J. G. Co-operative Hospital Society, Ghataprabha. The sample size consists of 25 staff nurses, structured knowledge questionaries are used to assess the knowledge level of staff nurses, descriptive and inferential statistics were used for the Data Analysis Interpretation.* ***Results****: The findings related to post-test mean knowledge score of staff nurses and GNM internship students were 20.16 with mean percentage of 80.64% and SD 5.29. In pre-test only 1(4%) of the respondents possess poor level of knowledge and remaining 18(72%) of the respondent possess average knowledge and 6(24%) good knowledge, respectively. in post-test, 10(40%) of the respondents possess average level knowledge and remaining 14(56%) of the respondents possess good and poor present of the had 1(4%) of the poor knowledge. It reveals that the post-test mean percentage knowledge score (mean percentage 80.64% and SD = 5.29) was found higher than pre-test mean percentage knowledge score (mean percentage = 65.76% and SD = 5.27). Statistical pair "t" test results with a paired "t" test value of 2.634 indicate that the difference between the pre-test and post-test value was judged to be statistically highly significant at the 0.05 level of significant (p). This demonstrates an improvement in knowledge score that is statistically significant and reflects the beneficial effects of a structured education strategy. Conclusion: The study was concluded that in pre-test 18 (72%) of the respondent possess average knowledge and in post-test 14 (56%) the respondents possess good knowledge. It was discovered that there was a statistically significant difference between the pre-test and post-test value. Consequently, the findings above show that a structured education program was successful in raising staff nurses' knowledge of nosocomial infection prevention, and it was determined to be appropriate, successful, and able to inspire staff nurses to increase their knowledge.*

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Keywords: Nosocomial infection, evaluate, planned teaching program, prevention, staff nurses.

INTRODUCTION

The hospital and other institutions of health care practice provide a special setting for the interaction of the agents of infection and the hosts, that is, patients and health care workers [1–3].

The hospital function and control has broadened over the years. From being focused to "surgical wound infection," it has emerged to a full, scientifically tested program of surveillance, prevention and control of all hospitals associated infections and beyond, to other aspects of medical care. Laboratory microbiological tests have become a standard support service for these programs [4, 5].

The term *hospital acquired infection* (syn. nosocomial infection) is applied to any clinical infection that was neither present nor its incubation period when the subject entered the hospital. The participant may be a patient or a health care worker in the hospital. In determining whether a given infection is nosocomial is nosocomial, the incubation period of the specific infection must be considered because the infection may manifest when the patient is in the hospital or after the patient has been discharged. Nosocomial infections are caused through the provision of medical services at a medical facility [6, 7].

Nosocomial infections are those that develop as a side effect of a patient's initial disease while receiving care in a hospital or other health care facility. Nosocomial infections are those that develop 48 hours or more after hospital admission or within 30 days of discharge. The majority of the pathogenic organisms are found in the patient's external environment and are either directly contacted with the body or ingested through contaminated objects. Numerous times, strict aseptic technique, a decrease in the use of invasive operations, and medications could avoid nosocomial infections [8–10].

Aims

Objectives of this study were to:

1. evaluate staff nurses knowledge of nosocomial infections.
2. assess the efficiency of a systematic teaching course on staff nurses' ability to prevent nosocomial infections.
3. determine whether certain demographic factors and staff nurses' pre-test knowledge are associated.

Hypothesis

H_1: The staff nurses will be ignorant of how to prevent nosocomial infections.

H_2: Knowledge score on nosocomial infection will significantly correlate with a few demographic factors.

METHODOLOGY (MATERIAL AND METHODS)

The study used an evaluatory research methodology to examine and gauge the staff nurses' degree of expertise in nosocomial infection control. It was determined that the pre-experimental design was appropriate given the nature of the problem being studied and how well it would achieve the study's aims. The present study was conducted among staff nurses working in the Shri. J. G. Co-operative Hospital Society, Ghataprabha. The sample size consists of 25 staff nurses, for present study structured knowledge questionaries was used, descriptive and inferential statistics were used for the Data Analysis Interpretation (Figure 1).

In the present study, structured knowledge questionaries were used. The tool consists of Section A: Considered of items related to demographic data of the subject such as sex, education, religion source of information on nosocomial infection and prevention. Furthermore, Section B: Structured knowledge questionaries consisted of 30 items on knowledge regarding nosocomial infection and its prevention. Each item of the schedule has one correct answer and every correct answer will be given 1 mark and total score of knowledge schedule was 30 marks. The scoring of the items are based on their level of knowledge as good 20 to 30 (24%), average 10 to 20 (72%), poor 0 to 7 (4%). Convenient sampling technique was used. The dependent variable are knowledge of staff nurses regarding nosocomial infection and its prevention, independent variables are structured teaching program on nosocomial infection and its prevention.

RESULTS

Majority 80% of the staff nurses GNM internship students were aged between 20 and 30 years. About 12% were in age group of 31 to 40 years, and were 8% about 51 years and above. It shows majority of the respondents were females that are 92% and males were about 8%. The majority of the respondents were GNM internship students, comprising 84% of the total. ANM students accounted for approximately 12%, while PB.Sc. (N) students constituted around 4%. Among the staff nurses and GNM internship students, 68% reported receiving information from the academic syllabus. The pre-test mean knowledge score for staff nurses and GNM internship students was 16.44, corresponding to a mean percentage score of 65.76%, with a standard deviation of 5.27.

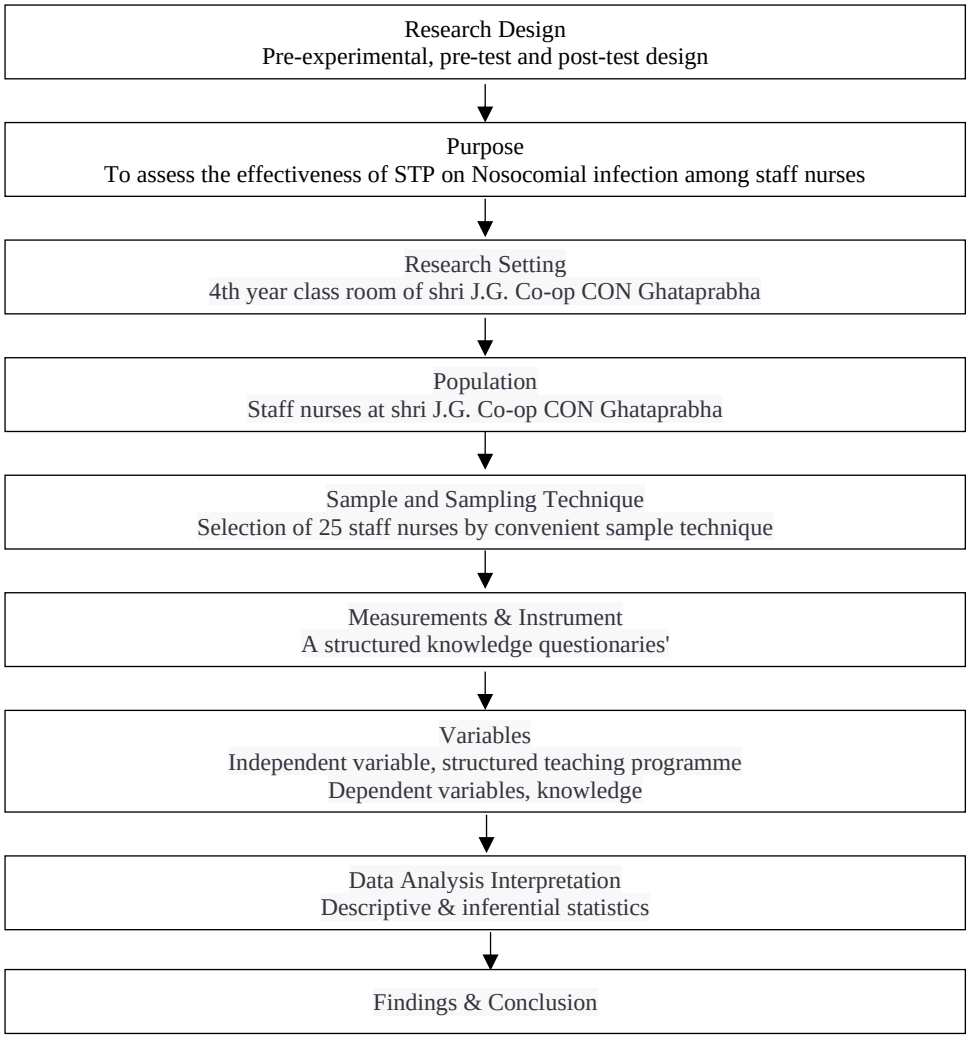

Figure 1. Schematic representation.

In post-test mean knowledge score of staff nurses and GNM internship students was 20.16 with mean percentage of 80.64% and SD = 5.29. In pre-test only 1(4%) of the respondents possess poor level of knowledge and remaining 18 (72%) of the respondent possess average knowledge and 6 (24%) good knowledge respectively. In post-test, 10 (40%) of the respondents possess average level knowledge and remaining 14 (56%) of the respondents possess good and poor present of the had 1 (4%) of the poor knowledge.

It reveals that the post-test mean percentage knowledge score (mean percentage 80.64% and SD = 5.29) was found higher than pre-test mean percentage knowledge score (mean percentage = 65.76% and SD = 5.27).

Statistical pair "t" test results with a paired "t" test value of 2.634 indicate that the difference between the pre-test and post-test value was judged to be statistically highly significant at the 0.05 level of significant (p). this demonstrates an improvement in knowledge score that is statistically significant and reflects the beneficial effects of a structured education strategy. The knowledge scores of staff nurses and GNM interns were correlated with a number of demographic factors using the chi-square test, which demonstrates that there was no correlation between the staff nurse and GNM internship students' pre-test knowledge score and the chosen demographic characteristics.

Chi-square test showing the association between the knowledge score of staff nurses and GNM internship students with selected demographic variables. It demonstrates that there was no correlation between the staff nurse and GNM intern post-test knowledge scores and the chosen demographic variables.

CONCLUSION

The study was concluded that in pre-test 18 (72%) of the respondent possess average knowledge and in post-test 14 (56%) the respondents possess good knowledge. It was discovered that there was a statistically significant difference between the pre-test and post-test value. Therefore, the findings above show that a structured education program was successful in enhancing staff nurses' knowledge of nosocomial infection prevention, and it was determined to be appropriate, successful, and able to inspire staff nurses to further their knowledge.

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