

Statement of the problem

“A study to evaluate the effectiveness of structured Teaching programme (STP) on knowledge and attitude regarding infection control measures (ICM) among the student nurses studying in Maniba Bhula Nursing college (MBNC), UTU, Bardoli”.

Ms. Vishakha N. Inje

Maniba Bhula Nursing College, Gopal Vidyanagar-Tarsadi, Bardoli

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Corresponding Author:
Ms. Vishakha N. Inje

ABSTRACT

Micro-organisms are tiny living creatures, such as bacteria and viruses. Micro-organisms are present everywhere in the world. Despite their overwhelming abundance, relatively few of the thousands of species of micro-organisms invade, multiply and cause illness in animals and people. Many micro-organisms live on the skin, in the mouth, upper airways and intestines of living beings without causing disease. As the scenario of hospital care suggest that the nurse is only the health personnel who be with the patient for whole day, from admission to discharge of the patient and highly responsible or major factor considered in transferring the disease from one patient to other patient. Objective 1. To assess the demographic variables of the student nurses. 2. To assess the level of knowledge and attitude regarding infection control measures among the selected student nurses of MBNC. 3. To evaluate the effectiveness of STP on knowledge and attitude regarding infection control measures among the experimental group of selected student nurses of MBNC of UTU Bardoli. 4. To find out the correlation between pretest knowledge and attitude scores of nursing students of MBNC. 5. To compare the posttest knowledge and attitude scores between experimental and control group. 6. To find-out the association between the pretest knowledge scores and their selected socio-demographic variables. 7. To find out the association between the pretest attitude scores and their selected socio demographic variables. Research Approach: Quantitative research approach and Research Design : True experimental one group pretest posttest control group design. The results of the study depicted that there is significant association between knowledge scores and level of education and source of information as calculated chi-square value was greater than the chi-square tabulated value.

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Introduction

Micro-organisms are tiny living creatures, such as bacteria and viruses. Micro-organisms are present everywhere in the world. Despite their overwhelming abundance, relatively few of the thousands of species of micro-organisms invade, multiply and cause illness in animals and people. Many micro-organisms live on the skin, in the mouth, upper airways and intestines of living beings without causing disease. What ever it may be Or wherever the micro-organisms live, the transmission /invading depends on the nature of micro-organisms and interaction between the agent, environment and host factors. The mode of transmission of disease may rely on various factors and ways namely direct contact and indirect contact. Hospital is a place where patients were treated for their concerned diseases. Not only the patients visit the hospital but the number of people will also visit the hospital namely parents of the client, doctors, nurses, visitors, student nurses, class D workers, dietitians, etc. These all people have a great chance to transmit the disease causing pathogens from one patient to other patient or may acquire self-disease from the patients. Nosocomial infections (Hospital Borne Infections) are becoming more prevalent in increasing mortality and morbidity in In – patient departments of the hospital. This is mainly because of the people who are involved in the handling of the patients including nurses and student nurses.

Statement of the Problem

“A study to evaluate the effectiveness of structured Teaching programme (STP) on knowledge and attitude regarding infection control measures (ICM) among the student nurses studying in Maniba Bhula Nursing college (MBNC), UTU, Bardoli.”

Objectives of the study

1. To assess the demographic variables of the student nurses.
2. To assess the level of knowledge and attitude regarding infection control measures among the selected student nurses of MBNC.
3. To evaluate the effectiveness of STP on knowledge and attitude regarding infection control measures among the experimental group of selected student nurses of MBNC of UTU Bardoli.
4. To find out the correlation between pretest knowledge and attitude scores of nursing students of MBNC.
5. To compare the posttest knowledge and attitude scores between experimental and control group.
6. To find-out the association between the pretest knowledge scores and their selected socio-demographic variables.

7. To find out the association between the pretest attitude scores and their selected socio demographic variables.

Assumptions

1. The nursing students may have some knowledge regarding infection control measures.
2. The study will show that, the STP may be the effective method to enrich knowledge of nursing students.

Hypotheses

H01- The mean posttest knowledge scores of subjects exposed to structured teaching programme on ICM will not be significantly higher than the mean pretest knowledge scores as measured by structured questionnaire at 0.05 level of significance among the experimental group.

H02- The mean posttest knowledge scores of subjects exposed to structured teaching programme on ICM will not be significantly higher than the mean posttest knowledge scores of control group as. Measured by structured questionnaire at 0.05 level of significance.

H03- The mean posttest attitude scores of subjects exposed to structured teaching programme on ICM will not be significantly higher than the mean pretest attitude scores as measured by structured questionnaire at 0.05 level of significance among the experimental group.

H04- The mean posttest attitude scores of subjects exposed to structured teaching programme on ICM will not be significantly higher than the mean pretest attitude scores of control group as measured by structured questionnaire at 0.05 level of significance.

H05- There will be no correlation between pretest knowledge and attitude scores of nursing student regarding ICM.

H06- There will be no significant association between pretest knowledge score of nursing student and their selected socio demographic variables regarding ICM.

H07- There will be no significant association between pretest attitude score of nursing students and their selected socio-demographic variables regarding ICM.

Conceptual framework:

The conceptual framework used in this study is based on Bertalanffy's General System theory 1964. This model consist of 3 phases 1. Input 2. through put 3. output and 4. feedback.

Methodology

Research Approach: Quantitative research approach

Research Design : True experimental one group pretest posttest control group design

Research method : one group pretest posttest

Research setting : Maniba Bhula Nursing College, UTU, Bardoli.

Variables :

Independent: Structured Teaching Programme

Dependent: Knowledge and attitude of the student nurses

Research population : Student nurses between the age

info.healthinformatics@gmail.com

Sample size : 100 student nurses(50-experimental group, 50-control group)

Sampling Technique : simple random sampling technique

Selection Criteria for Samples:

Inclusion criteria- The student nurses

1. Who are willing to participate in the study
2. Who can comprehend in English language

Exclusion criteria- The student nurses

1. Who are in examination schedule
2. Who are sick during the time of data collection

Description of the tool:

Section I- Demographic data which included variable such a age, gender, education and sources of information.

Section II- Structured questionnaire on knowledge regarding infection control measures multiple choice questions. Each correct answer was given a score of one answer a score of zero. The possible score of the structured questionnaire was 30.

Section III- Consist of 20 attitudinal statements on agree don't know disagree on the basis of 5 point Likert scale.

Results

The results of the study depicted that there is significant association between knowledge scores and level of education and source of information as calculated chi-square value was greater than the chi-square tabulated value.

Major findings of the study were as below:

1. Out of 100 subjects, the majority of subjects were belonged to the age group of 18 to 19 (84%) years and the majority of the subjects were female (92%). The majority of subjects were having a source of information is educational program (54%).
2. Pretest knowledge score of subjects is 52.66% and attitude score is 76.63% regarding infection control measures.
3. Pretest analysis reveals that the majority of subjects 29 (58%) had average, 11(22%) had poor and 10 (20%) had good knowledge scores in the experimental group and 37 (74%) had average, 8(16%) had poor and 5(10%) had good knowledge score in the control group and difference between experimental and control group for good score is 10% average score is 18% , whereas 33(66%) had average, 9(18%) had poor and 8(16%) had good attitude scores in the experimental group and 34(68%) had average, 8(16%) had poor and 8(16%) had good attitude scores in the control group.
4. Posttest analysis reveals that, majority of subjects 29 (58%) had average and 21(42%) had good knowledge scores whereas 33(66%) had average and 17(34%) had good attitude scores in experimental group. In control group majority of the subjects 30(60%) had average, 14 (28%) had poor and 6(12%) had good knowledge scores whereas 34(68%) had average, 9(18%) had poor and 7 (14%) had good attitude scores. The difference between experimental and control group good score is 30%, average score difference is 2% , poor difference is 28%.

5. The results of the study clearly indicated that the STP was effective as posttest scores of the subjects of experimental group is higher than the pretest scores.
6. The study results revealed that, there is negative correlation between the pretest knowledge and attitude scores and there is positive correlation between posttest knowledge and attitude scores as measured by $r=-0.12$ and $r=0.21$ respectively.
7. The study results revealed that there is positive correlation between the pretest and post knowledge and attitude scores in the control group as measured by $r=0.40$ and $r=0.26$ respectively.
8. The study results revealed that the STP is effective in improving the knowledge level as H1 is accepted because the calculated 't' value (3.75) is greater than the tabulated value (1.98) in case of knowledge. Whereas calculated 't' value (1.44) is lesser than the tabulated value (1.98) in case of attitude. Hence H0 is accepted.
9. The results of the study depicted that there is significant association between knowledge score and level of education as calculated chi-square value was greater than the chi-square tabulated value in the experiment group.
10. The results of the study depicted that there is significant association between knowledge scores and level of education and source of information as calculated chi-square value was greater than the chi-square tabulated value.
11. The study results reveals that there is no significant association between attitude scores of experimental and control group and their selected socio demographic variables.

Discussion

Section I- Findings related to distribution of sample characteristics according to their demographic variables.

Section II- Findings related to results of knowledge and attitude regarding infection control measures among the student nurses.

Section III- Findings related to effectiveness of STP and association of socio demographic variables with knowledge and attitude of the subjects.

Nursing Implications

Nursing practice-Since the present study shown that most of the student nurses had average knowledge on ICM, this present study would enable them to become aware about ICM and motivate them to prevent infection and provide quality care to the clients. They would also able to educate their peers. So the nurse educator can take help from this study and practice health education using structured teaching programme on infection control measures.

Nursing Administration-This study emphasized the need for health education programme on ICM to improve the knowledge of student nurses in their professional life. The STP and the tool can be used while providing education to the group of nursing students and staff.

Nursing education-

Findings of the study can be used by the nurse educator to highlight the importance of ICM to the budding student nurses. This STP can be used as a reference material by the student nurses.

Nursing Research-

This present study conducted by the investigator can be a source of review of literature for others, who are intending to conduct study on ICM.

Recommendations

- 1.A similar study on large and wider sample for a longer period of time would be more Pertinent in making broad generalizations.
- 2.A Self Instructional Module (SIM) on ICM can also be used to improve the knowledge.
- 3.A study can be conducted to find out the Prevalence of infection in the hospitalized clients.
- 4.A study can be conducted to assess the impact of ICM on quality of life patients.

Limitations

- 1.No broad generalization could be made due to the small size of sample and limited area of setting.
- 2.The tool used for the data collection was not standardised. It was designed by the investigator himself for the purpose of the present study based on the objectives of the study.
- 3.The sampling technique- probability stratified simple random sampling might give representative sample.

Conclusion

- 1.Overall pretest knowledge and attitude about infection control measures was average which suggested need for structured teaching programme for student nurses on infection control measures.
- 2.Posttest results shown the significant improvement in the level of knowledge on infection control measures among the experimental group. Thus. It can be concluded that structured teaching programme was an effective method of teaching for student nurses to improve the knowledge and attitude regarding infection control measures.
- 3.Pretest results revealed that the majority of the socio demographic variables did not have stastical relationship between the knowledge and socio demographic variables of student nurses.

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