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Ved Prakash

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

Shubham kumara

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

Nikki kumara

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

Suman Kumari

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

Anita Kumari

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

Nandini Bhumij

Assistant Professor, N.N.C
Jamuhar Narayan Nursing
College, Jamuhar, Rohtas,
Bihar, India

Corresponding Author:

Ved Prakash

B.Sc. Nursing 4th year
Students, N.N.C Jamuhar
Narayan Nursing College,
Jamuhar, Rohtas, Bihar, India

A study to assess the effectiveness of planned teaching program on prevention of nosocomial infection among staff nurses working at NMCH, Jamuhar, Bihar

Ved Prakash, Shubham kumari, Nikki kumari, Suman Kumari, Anita Kumari and Nandini Bhumij

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Abstract

A pre- experimental study to assess the effectiveness of planned teaching program on prevention of nosocomial infection among staff nurses working at NMCH, Jamuhar, Bihar.

Methodology: A pre experimental study with one pre test and post test design was adopted for the study. The planned knowledge questionnaire on Nosocomial infection was developed to collect the data.

The staff nurses of the study were selected by purposive sampling technique. The main study was conducted at N.M.C.H, Rohtas. And data was collected, analysed and interpreted based on descriptive and inferential statistics.

Result: The Pre-test is Average (58%), Good (25%) and Poor (16%) and Post-test score Average (2%) and Good (98%) Where Hence Its shows that Staff Nurses knowledge on prevention of Nosocomial infection is significantly increased. The planned teaching Program was effective improving the knowledge of staff nurses there is a significant association between Pre-test score and selected demographic variables are accepted for educational status of the staff nurses.

Conclusion: The present study was taken up in an effort to assess the knowledge of staff nurses through post-test method. The planned teaching program was carried out on nosocomial infection. Staff nurses had Average (58%), Good (25%) and Poor (16%) of knowledge in pre-test and after planned teaching program their knowledge increase Average (2%) and Good (98%). No one showed that showed that the mean difference between pre-test and post-test knowledge score was highly significant The above finding were supported by the research study which was conducted at NMCH, Jamuhar, Rohtas, Bhar. Thus, planned teaching program is effective in improving the knowledge of subjects on prevention of nosocomial infection.

Keywords: knowledge, planned teaching program staff nurses, nosocomial infection.

Introduction

Nosocomial infection is an ongoing issue in all health care facilities and all central service departments. These infections are those that are not present when a patient is admitted to the facility but which then occur within 48 hours after admission. Nosocomial infection effect approximately 10% of all patients admitted and about 20% of those are Intensive care unit. it has been noted that on average patients with nosocomial infection spend 2.5 times longer in the hospital than their peers who do not

Nosocomial infection also includes occupational infection due to occupational hazards in health care workers. There is various short of transmissions of these microorganism and bacterial acquired through direct contact between patients and doctors as well from patients to nurses and vice versa associated with nursing effected surface through air such as droplets aerosols etc.

Hospital in the developing countries have a lack of awareness of infection control programmes and also in the proper documentation. It is very difficult to investigate the spread of infections (Epidemics). Therefore establishment of an infection control team is to establish a system for case finding and to initiate the maintenance of baseline infection rate for entire hospital to control nosocomial infection.

Objectives of the study

- To assess the pre-test and post-test knowledge on the prevention of nosocomial infection among staff nurses.
- To assess the effectiveness of STP on prevention of nosocomial infection, pre-test & post-test knowledge score among staff nurses.
- To determine the association of pre-test knowledge on the prevention of nosocomial infection with selected sociodemographic variables.

Methodology

Research Design and Research Setting

One group pre-test and post-test experimental design was used to evaluate the effectiveness of planned teaching programme regarding nosocomial infection among staff nurses working at NMCH, Jamuhar, Bihar.

Setting is a physical location in which data collection takes place in a study. The setting of the study was at N.M.C.H. Rohtas, Bihar. This hospital has various staff nurses like B.Sc. nursing, General nursing, Post B.Sc. nursing and M.Sc. nursing. The total strength of staff nurses during the data collection was 100

Sampling and Sampling Technique

The sample consists of the population of registered Staff Nurses selected to participate in the research study. In the study, a Purposive sampling technique through Evaluative approach was used for selection of Nurses.

Sample Criteria

The criteria of the study included Staff nurses who are working in NMCH, Jamuhar and not included the Staff nurses who are not available at the time of data collection. It is also included the Staff nurses who are willing to participate in the study and not included the Staff nurses who having less than 6 months experience.

Description of the Tool

The questionnaire had three parts: Part A, Part B and Part C. Part A included 9 items of socio- demographic variables such as age, gender, religion, family, residence, qualification, experience, working hours, income. Part B consisted of 7 items. The items included aspects regarding introduction of nosocomial infection, definition, causes, risk factors, diagnosis, clinical manifestation, prevention of nosocomial infection. PART C includes the respondent had to select the best possible option and (✓) tick for the most appropriate answers. Each correct answer was given as a score of 1 marks and wrong answer zero scores, thus together were 25 items with a maximum total score of 25.

Ethical Consideration

A formal written permission was obtained from Medical Superintendent, N.M.C.H. Jamuhar Bihar. The research protocol with copies of research instrument and formal consent was submitted to the Organization, Ethical committee for approval and ethical clearance for the study was obtained.

All the selected nursing personnel were given the informed written consent from and adequate explanation given and the purpose of the study was explained. Confidentiality of the information was assured along with the choice of dropping out of the study was as and when they wished.

Plan for Data Analysis

Data analysis is the systematic organization and synthesis of research data and testing of research hypothesis by using the collected data.

Descriptive statistics are useful for summarizing empirical information. Inferential statistics which is based on the laws of probability provides a means for drawing conclusion about the population.

Table 1: showing the frequency and percentage distribution of sample characteristics

Characteristic	Category	Frequency	Percentage %
Age Group	25-30 years	85	85.0
	31-35 years	9	9.0
	36-40 year	4	4.0
	41-Above	2	2.0
Gender	Male	95	95.0
	Female	5	5.0
Religion	Hindu	42	42.0
	Muslim	57	57.0
	Christian	1	1.0
	Other
Family	Nuclear	49	49.0
	Joint	47	47.0
	Extended	4	4.0
Residence	Urban	44	44.0
	Rural	53	53.0
	Semi-urban	3	3.0
Qualification	GNM	53	53.0
	Post B.sc Nursing	12	12.0
	B.sc Nursing	33	33.0
	M.sc Nursing	2	2.0
Experience	>1 years	40	40.0
	1-3 years	41	41.0
	3-5 years	15	15.0
	<5 years	4	4.0
Working Hours	6 hrs	35	35.0
	8 hrs	59	59.0
	12 hrs	6	6.0
Monthly Income	15000-20000	46	46.0
	21000-25000	48	48.0
	26000-30000	4	4.0
	31000-35000	2	2.0

Table 2: showing the result of Pretest.

Valid	Frequency	Percentage (%)	Valid Percentage	Cumulative Percentage
0	1	1.0	1.0	1.0
Average	58	58.0	58.0	59.0
Good	25	25.0	25.0	84.0
Poor	16	16.0	16.0	100.0
Total	100	100.0	100.0	

This table shows that the Pre-test scores is Average (58%), Good (25%) and Poor (16%).

Table 3: showing the result of Post Test

Valid	Frequency	Percentage (%)	Valid (%)	Cumulative (%)
Average	2	2.0	2.0	2.0
Good	98	98.0	98.0	100.0
Total	100	100.0	100.0	

This table shows that Post-test score is Average (2%) and Good (98%).

Discussion

Assessment of knowledge of staff nurses on Nosocomial infection

The present study confirm that overall knowledge in pre-test is Average (58%), Good (25%) and Poor (16%) which is less. This shown that there is lack of knowledge on Nosocomial infection. Although some staff nurses have some knowledge, majority lack of knowledge on prevention of Nosocomial infection.

A study was conducted to assess the knowledge a self-administered survey was done. The present study confirm that the overall mean percentage knowledge score in the pre-test is average 58%, good 25% and poor 16% which shows lack of knowledge among staff nurses on prevention of Nosocomial infection, there is need of planned teaching program to improve their knowledge level.

Planned teaching program was used which included the aspect of general information and incidence of nosocomial infection introduction, definition, causes, risk factors, diagnosis, clinical manifestation & prevention of nosocomial infection.

Evaluating the planned teaching program on prevention of nosocomial infection

The present study was confirmed that there was a considerable improvement of knowledge after the planned teaching program and is statistically established as significant. The overall mean percentage knowledge score after planned teaching program in post-test; Average (2%) and Good (98%).

Association between the demographic variables and knowledge score

Among the demographic variables analysed in thus study professional education qualification recognizing the Nosocomial infection and surveillance of Nosocomial infection is found to have high significant association with knowledge score but there was significant association between gender but there is no significant association between age, religion, family types, residence, qualification, experience, working hours and monthly income.

Conclusion

A planned teaching program was conducted to enhance their knowledge in theses aspects and to update their knowledge on prevention of Nosocomial infection. The nurses expressed that the teaching program informative, different and highly useful in their practical area and it was found to be instructionally effective, appropriate and feasible.

Conflict of Interest

Not available

Financial Support

Not available

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