A Study to Assess the Effectiveness of Plan Teaching Programme on Level of Knowledge Regarding Advance Nursing Intervention of Myocardial Infarction Patient's Care Among Staff Nurses at NH MMI Hospital, Lalpur, Raipur, Chhattisgarh

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Abstract: Heart disease is the leading cause of death in the United States. Incidence rates of myocardial infarction (MI) in rural West Texas signify a lack of effective, risk-specific prevention programs. Hospital patient data for those with and without a history of MI were obtained from the Project FRONTIER database for rural West Texas counties. Aim: the present study aims to Advance Nursing Intervention of Myocardial Infarction. Setting and Design: a quantitative approach with pre-experimental one group pretest post test design was used. The study was conducted at NH MMI Superspeciality Hospital, Lalpur, Raipur, Chhattisgarh. The sample selected by Non-Probability Purposive Sampling Technique. Method: consisted of 60 samples at NH MMI Super speciality Hospital, Lalpur, Raipur, Chhattisgarh. Formal permission for data collection was obtained. After obtaining a written consent from the samples for main study using a pre test data was collected through Self Structured Questionnaire level of knowledge was assessed. Results: The results of the study based on the pre test results indicated that a significant majority of staff nurses, 56(93.3%), had inadequate knowledge. The t-value of 54.346 indicated a highly significant difference between the pre-test and post-test scores. With 59 degrees of freedom, the correlation between the pre-test and post-test scores is 0.818. The p-value of 0.001 (Significant at p < 0.05) indicated that the improvement in knowledge scores from the pre-test to the post-test was statistically significant. Hence the Research Hypothesis (H1) was Accepted. Association between pre test level of knowledge with socio demographic variables like qualification of staff nurse, the calculated value i.e., 16.896 was greater than the table value (12.592) at 0.05 level of significance and years of working experience the calculated value i.e., 24.563 was greater than the table value of chi square (12.592) at 0.05 level of significance. Hence, the proposed Research hypothesis (H2) was accepted.

Keywords: effectiveness, plan teaching programme, knowledge staff nurses, advance nursing intervention, myocardial infection.

1. Introduction

Myocardial Infarction (MI), colloquially known as "heart attack," is caused by decreased or complete cessation of blood flow to a portion of the myocardium. Myocardial infarction may be" silent," and go undetected, or it could be a catastrophic event leading to hemodynamic deterioration and sudden death. a blockage of blood flow to the heart muscle. A Heart Attack is a medical emergency. Global Prevalence of Myocardial Infarction (2023) conducted a systematic review and meta-analysis study to examine the global prevalence of MI in two groups of individuals < 60 and > 60 years. The global prevalence of MI < 60 years was detected 3.8% according to 22 studies with a sample size of 29.826.717 individuals.

2. Objectives

1) To assess the pre test and post-test level of knowledge score regarding advance nursing intervention of myocardial infarction patients care among staff nurses at NH MMI Hospital, Lalpur, Raipur, Chhattisgarh.
2) To evaluate the effectiveness of planned teaching programme on level of knowledge score regarding advance nursing intervention of myocardial infarction patient care among staff nurses at NH MMI Hospital, Lalpur, Raipur, Chhattisgarh.
3) To find out the association between the pre test level of knowledge score regarding advance nursing intervention of myocardial infarction patients care

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among staff nurses with selected socio demographic variables at NH MMI Hospital, Lalpur, Raipur, Chhattisgarh

3. Material and Methods

A pre-experimental study was conducted using pre-experimental one group pretest posttest research design. Sample in the study were staff nurses fulfilling the inclusion criteria at the selected settings. Nursing staff not willing to participate, not present at the time of study were excluded. Staff nurses who gave informed consent were included. Data was collected using self-structured questionnaire to assess the knowledge of staff nurse.

A representative sample was selected using non-probability purposive sampling from the population of all staff nurses.

Frequency and percentage analysis was done to describe the demographic characteristic of the staff nurses. The paired "t" test used to compare the pretest and posttest knowledge level of staff nurses. The Chi-square analysis used to determine the association between socio demographic variable and pretest knowledge of staff nurses.

4. Result and Discussion

A. Distribution of staff nurses with regarding to demographic variables

The socio demographic variables, age of staff nurses according to which, about 29 (48.3%) were of 26-30 years, 52 (86.7%) were female, 50 (83.3%) were unmarried, 28 (46.7%) were GNM qualification, 27 (45%) were had 0-2yr and 3-5yr working experience, 24 (40%) were working in general ward, 33(55%) belong from urban area,47(78.3%) were had previous knowledge, 42(70%) were had other source of information.

B. Assessment of the pre test and post test level of knowledge score regarding advance nursing intervention of myocardial infarction patients care among staff nurses at a selected hospital Raipur

Presented the pre test results which indicated that a significant majority of staff nurses,56(93.3%), had inadequate knowledge and 4 (6.7%) had moderately adequate knowledge about MI care. However, following the intervention, the post test results showcased a remarkable transformation, with 41 (68.3%) of staff nurses demonstrating moderately adequate

knowledge and 19 (31.7%) attaining an adequate level of understanding. The table further offered summary statistics, including the minimum and maximum scores for both pre test and post test, as well as the mean scores and standard deviations. These statistics highlighted the considerable improvement in knowledge scores from a mean of 9.27 in the pre test to 18.80 in the post test.

C. Assessment the effectiveness of planned teaching programme on level of knowledge score regarding advance nursing intervention of myocardial infarction patient care among staff nurses at a selected hospital Raipur

The pre test knowledge scores had a mean of 9.27, with a standard deviation of 2.364. The post test knowledge scores' standard deviation was 2.364, and the mean was not explicitly provided in this table excerpt. The statistical analysis, reflected by the t-value of 54.346, was conducted with degrees of freedom (df) amounting to 59. The correlation coefficient of 0.818 indicated a strong positive correlation between the effectiveness of the planned teaching program and the improvement in knowledge scores. The "Significant" column denoted the level of significance (p-value) associated with this correlation. In this case, the value of 0.001S indicated a statistically significant correlation, implying that the planned teaching program had a substantial impact on enhancing knowledge scores related to advanced nursing interventions for MI patient care among staff nurses.

D. To find out the association between pre test level of knowledge score regarding advance nursing intervention of myocardial infarction patients care among staff nurses with socio demographic variables in the selected hospital Raipur

It's indicated that there was significant association between pre test level of knowledge with socio demographic variables like qualification of staff nurse and knowledge and the calculated value i.e., (16.896) was greater than the table value of 12.592at 0.05 level of significance and years of working experience and knowledge and the calculated value i.e., (24.563) was greater than the table value of 12.592 at 0.05 level of significance. Hence the proposed Research hypothesis (H$_2$) was accepted. There was no significant association between pre test level of knowledge with socio demographic variables such as Age, Gender, Marital status, Area of working, Area of residence, previous knowledge, source of information.

Table 1

Knowledge Score	Pre Test		Post Test	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Inadequate Knowledge <50%	56	93.3	0	0
Moderately adequate knowledge 50-75%	4	6.7	41	68.3
Adequate knowledge >75%	0	0	19	31.7
Total	60	100.0	60	100.0
Minimum	5		16	
Maximum	13		24	
Mean	9.27		18.80	
SD	2.364		1.903	
Mean knowledge Score	35.65±9.09		72.30±7.31	

Table 2

	Mean	N	Std. Deviation	t-value	df	Correlation	Significant
Pre test	9.27	60	2.364	54.346	59	0.818	**0.001S**
Post test	18.80		1.903				

5. Nursing Implication

A. Nursing Practice

1) Improve the knowledge regarding myocardial infarction findings among staff nurses which in turn improve the level of knowledge quality nursing care to the patient.
2) Assessment of level of knowledge regarding undergoing myocardial infarction improves quality nursing care.

B. Nursing Education

1) This research study can be used by nurse educators to teach the student nurses and staff nurses to improve their knowledge regarding level of knowledge on myocardial infarction patients care. This can be implemented among staff nurses in the following ways.
2) This study will help the staff nurses to understand the importance of myocardial infarction patients care among staff nurses.

C. Nursing Research

1) The present study will help the future nursing researchers to carry out further study on advance nursing intervention on myocardial infarction patients care among staff nurses.
2) This study motivates other investigators to conduct further study on advance nursing intervention on myocardial infarction patients care among staff nurses.
3) The essence of research is to build up a body of knowledge related to Nurses are in key position to continue the research as they are only one who provides care to the patients.

D. Nursing Administration

1) Frequently conduct the education programme for the staff nurses on myocardial infarction.
2) Explore innovative ideas in reducing the myocardial infarction.
3) Utilize findings and dissemination of knowledge on myocardial infarction to determine the outcome of research work.

6. Recommendations

- The study can be replicated with larger sample.
- The effect of the educational program can be evaluated on a long term basis.
- Effectiveness of planned teaching programme regarding advance nursing intervention on myocardial infarction patients care among staff nurses can be compared with other techniques to find its effectiveness.
- A similar study can be conducted for a longer duration.

7. Conclusion

The present study's results concluded that planned teaching programme was found to be effective in improving level of knowledge regarding advance nursing intervention of myocardial infarction patients care among staff nurses.

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