



EFFECTIVENESS OF ORIENTATION CUM
DEMONSTRATION PROGRAMME ON KNOWLEDGE
REGARDING COMPREHENSIVE NURSING CARE OF CABG
PATIENTS AMONG NURSING STUDENTS POSTED IN
CARDIAC UNIT AT A SELECTED HOSPITAL, VADODARA,
GUJARAT

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ABSTRACT:

Background of the study: Coronary artery bypass grafting (CABG) has become a standard method of treatment of significant coronary artery stenosis. Aims & Objectives: 1. Assess the pre-test knowledge score regarding comprehensive nursing care of CABG patients among nursing students posted in Cardiac Unit 2. Evaluate the effectiveness of orientation cum demonstration programme on knowledge regarding comprehensive nursing care of CABG among nursing students posted in cardiac unit by post-test. 3. Associate the selected demographic variables with the pre-test knowledge on comprehensive nursing care of CABG among nursing students posted in Cardiac Unit. Material and Methods: In this research study an evaluative research approach with pre-experimental design was used. Systematic probability random sampling was used to select the 115 samples of B.Sc. (N), P.B.B.Sc (N) & G.N.M students and data collection was done. Data was analysed by using descriptive and inferential statistics such as standard deviation, chi-square test and paired 't' test. Results: The pre-test depicts that



prior to the administration of orientation cum demonstration programme, (35) 30.43% samples were having poor knowledge regarding comprehensive nursing care on CABG and (80) 69.57% of them were having average knowledge and 00% samples were having good knowledge level in particular study. The post-test depicts that after the administration of orientation cum demonstration programme, (87) 75.65% samples had good knowledge, (25) 21.74% samples had average knowledge and (3) 2.61% had poor knowledge level. Pre and post-tests reveals that post-test level of knowledge score were greater than pre-test of the study. Conclusion: The study findings reveals that orientation cum demonstration programme is highly effective in improving the knowledge of nursing students regarding comprehensive nursing care of CABG patients.

Keywords: Comprehensive Nursing Care, CABG, orientation cum demonstration programme, nursing students, cardiac unit.

INTRODUCTION

Cardiovascular disease has become the leading cause of morbidity and mortality in India during the last 3 decades. The genetic predisposition and acquisition of traditional risk factors at a rapid rate as a result of urbanization seems to be the major cause. Coronary artery bypass grafting (CABG) has become a standard method of treatment of significant coronary artery stenosis. Achieving and maintaining health is a continuous process, shaped by both the evolution of health care knowledge and practices, as well as personal strategies and organised interventions for staying healthy. Health is maintained and improved not only through the advancement and application of health sciences, but also through the efforts and intelligent lifestyle choices of the individual and society. A healthy lifestyle can help prevent diseases and help keep it from progressing. Obesity is an important risk factor for coronary artery disease that can be modified by improved diet and



weight loss. Family history of coronary artery disease, male gender, and advancing age increase risk but cannot be modified. A heart-healthy lifestyle includes eating right, regular exercise, maintaining a healthy weight, no smoking, moderate drinking, and no recreational drugs, controlling hypertension and managing stress. While efforts are being made to contain this epidemic of cardiovascular diseases by educating public and applying preventive measures, the ever increasing burden of patients with symptomatic and life threatening manifestations of the disease is posing a major challenge. This requires a concerted effort to develop modern facilities to treat these patients.

BACKGROUND OF THE STUDY

This study has been carried out in a view to assess nurse's skills in emergency cardiovascular challenging situations especially for patients posted for CABG. Inadequate knowledge among nursing personnel is a key barrier to comprehensive nursing care, and nurses have a major role to provide education to patients. The purpose of this study is to identify student nurses' learning needs on comprehensive nursing care on CABG patients and to prepare them for managing patients posted for CABG perioperatively. The overall need of the study is to develop an educational intervention on holistic nursing care for student nurses working with patients posted for CABG.

STATEMENT OF THE PROBLEM

"Evaluate the effectiveness of orientation cum demonstration programme on knowledge regarding comprehensive nursing care of CABG patients among nursing students posted in cardiac unit at a selected hospital, Vadodara, Gujarat"

OBJECTIVES

- Assess the pre-test knowledge score regarding comprehensive nursing care of CABG patients among nursing students posted in Cardiac Unit.



- Evaluate the effectiveness of orientation cum demonstration programme on knowledge regarding comprehensive nursing care of CABG among nursing students posted in cardiac unit by post-test.
- Associate the selected demographic variables with the pre-test knowledge on comprehensive nursing care of CABG among nursing students posted in Cardiac Unit.

RESEARCH HYPOTHESES

- H1: There will be significant difference in the pre-test and post-test knowledge score regarding comprehensive nursing care on CABG patients among nursing students posted in Cardiac unit.
- H2: There will be significant association between the selected demographic variables with the pre-test knowledge on comprehensive nursing care on CABG among nursing students posted in Cardiac unit.

CONCEPTUAL FRAMEWORK: Modified Wiedenbach's Conceptual Framework was used in the study.



RESEARCH METHODOLOGY

Research Approach	Quantitative Evaluative Research Approach
Research Design	Pre –experimental, one group pre-test post-test design
Variables	Dependent– Knowledge of nursing students posted in cardiac unit. Independent- Orientation cum demonstration programme regarding comprehensive nursing care on CABG.
Setting	Cardiac Unit of the selected hospital at Vadodara.
Population	Nursing students posted in Cardiac unit at a selected Hospital.
Samples	115 nursing students posted in Cardiac unit at a selected Hospital.
Sampling technique	A systematic probability random sampling using selection of every K th (2 nd) case was used to select the sample.
Tool-development	Section 1: Socio-demographic variables Section 2 : Self-structured knowledge questionnaire.
Content validity	Suggestion from various experts i.e. Master in the field of Medical Surgical Nursing Asst. Prof. -7,1 M.A, B.Ed.(English), cardiologist-1,statistician-1
Reliability	Using the Karl Pearson and Spearman's Brown's Prophecy formula and applying spilt half method the reliability of 0.81was obtained.
Pilot study	Pilot study was conducted on 15th September 2016 from 11nursing students posted in Cardiac unit of Dhiraj Hospital to find out the feasibility of the study.
Data collection procedure	1 st Day- took Informed Consent, conducted Pre-test and administered orientation cum demonstration programme



	7h Day-Conducted the Post-Test. The data collection procedure was carried out from 4th October 2016 to 26th October 2016, 3 weeks.
Analysis of data	<p>Descriptive and Inferential statistics</p> <ul style="list-style-type: none"> • Items related to the demographic variables were analysed in terms of frequency and percentage. • Computation of mean, median, mean difference and standard deviation, standard error. • Computation of paired 't' test for significance differences between the mean scores of the pre-test knowledge score and post-test knowledge score • Chi-square values were computed to find out the association between the pre- test knowledge with demographic variables.
Sample selection criteria	<p>Inclusion criteria-</p> <ul style="list-style-type: none"> • Nursing students posted in Cardiac unit at a selected Hospital, Gujarat. • Nursing students who are willing to participate in the study. <p>Exclusion criteria:-</p> <ul style="list-style-type: none"> • Students those who were absent at the time of study. • Students those who have job experience in cardiac speciality.
Ethical consideration	Ethical approval from the Institutional Ethics Committee and informed consent obtained from the subjects.



RESULTS

ORGANIZATION OF STUDY FINDINGS:

The data collected were edited, tabulated, analysed, interpreted and findings were presented in form of tables and diagrams represent under the following areas.

Description of the demographic variables of nursing students



TABLE 1: Frequency and percentage distribution of nursing students according to their personal characteristics (demographic variables) (N=115)

S.no.	Variable	Frequency(f)	Percentage (%)
1	Age group		
	a) 18-19 years	62	53.91%
	b) 20-21years	39	33.91%
	c) 22-23 years	14	12.18%
2	Course of Study		
	a) B.Sc. (N)	52	45.22%
	b) P.B.B.Sc. (N)	5	4.35%
	c) G.N.M.	58	50.43%
3	Area of domicile		
	a) urban	74	64.35%
	b) rural	41	35.65%
4	Do you have any previous knowledge regarding CABG?		
	A) yes		
	If yes, what is the source of previous knowledge?		
	a) workshop/seminar	8	6.96%
	b) mass media	2	1.74%
	c) clinical experience/posting	64	55.65%
	B) no	41	35.65%



Analysis of mean pre-test & mean post-test score to determine the knowledge level of nursing students. It represents that in pre-test 30.43% samples were having poor knowledge regarding comprehensive nursing care on CABG and 69.57% of them were having average knowledge and 00% samples were having good knowledge level and in post-test 75.65% samples had good knowledge, 21.74% samples had average knowledge and 2.61% had poor knowledge level.

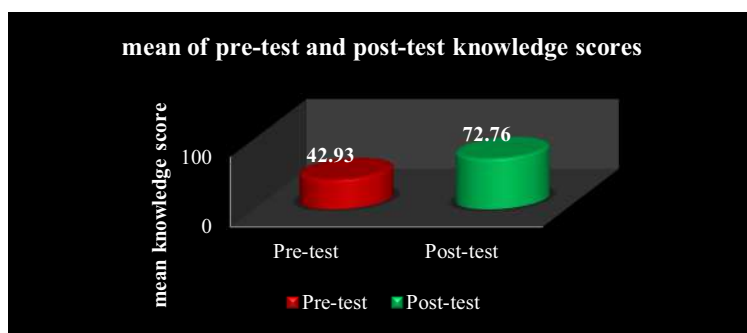
Effectiveness of orientation cum demonstration programme on knowledge level of nursing students which deals with the analysis to find the significant difference between the mean pre-test and post-test knowledge level of nursing students. SD, mean difference and paired "t" test was used. In order to test the statistical significance research hypothesis was analysed to know the significance at $p < 0.05$ level.

TABLE 2: mean, standard deviation, mean difference and paired 't' value of pre- test and post-test knowledge of nursing students. n=115

Pre-test score		Mean (%)	Post-test score		Mean (%)	Mean difference	't' value
Mean	SD		Mean	SD			
12.88	3.31	42.93	21.83	3.11	72.76	8.95	28.87*

*t (0.05, 114)

=1.658 Significant



Association of pre-test knowledge of nursing students regarding comprehensive nursing of CABG patients with selected demographic variables which consists of 5 items seeking information on demographic data which includes age, course of study, area of domicile, source of previous knowledge regarding CABG

So here to test the research hypothesis, chi-square test has been used. Data have been analysed by the researcher manually, statistical formula and the outputs are depicted in the above table. The table reveals that there is no significant association between pre-test knowledge score and selected demographic variables. The obtained χ^2 value in all variables is less than the table value of χ^2 at 0.05 level of significance. Hence the obtained χ^2 value is non-significant for all the socio-demographic variables. Therefore, there is no association between selected demographic variables (age, professional qualification, area of domicile and source of previous knowledge) and pre-test knowledge score of nursing students posted in cardiac unit. Thus H_2 hypothesis is not accepted.

DISCUSSION & CONCLUSION

In the present study "Evaluate the effectiveness of orientation cum demonstration programme on knowledge regarding comprehensive nursing care of CABG patients among nursing students posted in cardiac unit at a selected hospital, Vadodara, Gujarat." 115 nursing



students were selected using systematic probability random sampling technique.

The research approach adopted in the present study is quantitative research approach with a view to measure the level of knowledge regarding comprehensive nursing care of CABG patients among nursing students and effectiveness was assessed by analysis of pre-test and post-test level of knowledge score. The data was interpreted by suitable and appropriate statistical method. This chapter deals with the following conclusions;

The overall pre-test mean knowledge score of the nursing students was 12.88 and post-test mean knowledge score of the nursing students was 21.83. The post-test mean knowledge score is significantly greater than the pre-test mean knowledge score. So the orientation cum demonstration programme was effective.

The association of the pre-test knowledge score of the nursing students with selected demographic variables such as age, course of study, area of domicile, source of previous knowledge regarding CABG evidenced that there was no statistically significant association at $p < 0.05$.

RECOMMENDATIONS

In the light of the above findings and personal experience of the investigator the following recommendations are offered:

- The study can be replicated on a larger sample; thereby findings can be generalized for a larger population.
- A similar study can be conducted to assess the knowledge level of patients posted for CABG and further remedial measures can be taken to improve the knowledge.



□ An orientation cum demonstration programme can be prepared to enhance the knowledge of patients posted for CABG regarding early detection of heart problems and its management.

□ Pamphlets or information booklets can be prepared about comprehensive care for a patient posted for CABG to get awareness about and for early detection of heart problems and its treatment.

REFERENCES

1. <http://www.godvine.com/bible/psalms/34-8>
2. Brunner and Suddharth's TEXT BOOK OF MEDICAL-SURGICAL NURSING, Janice L Hinkle, Kerry H Cheever, Volume 1, 13th edition, Wolters Kluwer Publications.
3. (<http://www.annalsofian.org/article.asp?issn=09722327;year=2006;volume=9;issue=3;spage=145;epage=151;aulast=Vibha>)
4. Michael Diodato and Edgar G. Chedrawy, "Coronary Artery Bypass Graft Surgery: The Past, Present, and Future of Myocardial Revascularisation," Surgery Research and Practice, vol. 2014, Article ID 726158, 6 pages, 2014. doi:10.1155/2014/726158
5. Joyce M. Black, "MEDICAL SURGICAL NURSING" 7th edition, Volume I, 2007, Published by Saunders Company, Philadelphia.
6. Martin, Caron G., Turkelson, Sandra L. Journal of Cardiovascular Nursing, April 2006, Volume :21 Number 2, page 109- 117