“Effectiveness of structured teaching programme (STP) on Knowledge Regarding Modifiable Risk Factor of Ischemic Heart Disease Among Angina Pectoris patients”

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Abstract:

Introduction:

Cardio vascular disease is the leading cause of death in the majority of the industrialized countries. Ischemic heart disease in India was estimated to be 3 to 4 percent in rural areas (six-fold higher compared with 40 years ago) and 8 - 10 percent in urban areas (two-fold higher compared with 40 years ago), with a total of 29.8 million affected (14.1 million in urban areas, and -15.7 million in rural areas) according to population-based cross-sectional surveys.

Methods: This study was conducted by using one group pre-test and post-test design at selected hospital, Jaipur, Rajasthan from 01.01.2017 to 28.02.2017. Study patients 50% of them belong to more than 60 years of age.

Result: The pre-test score on knowledge regarding Cardiac Modifiable Risk Factor was 52.125% and post-test knowledge score was 75.333% respectively. After exposure to STP, the Ischemic Heart Disease patient knowledge on Cardiac Modifiable Risk Factor was found to be significant ('t' value = 20.455 at $P < 0.05$ which was more than the table value 2.000). The mean pre-test knowledge of Ischemic Heart Disease patients was found moderately adequate. After exposure to Structured Teaching Programme on Cardiac Modifiable Risk Factor the mean post-test knowledge was found adequate on Cardiac Modifiable Risk Factor.

Conclusion: The finding of this study revealed that Structured Teaching Programme was found effective of Ischemic Heart Disease patients.

STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of structured teaching programme (STP) on knowledge modifiable risk factor of Ischemic heart disease among angina pectoris patients in selected Hospital, Jaipur (Rajasthan)”

OBJECTIVES

1. To develop and validate the Structured Teaching Programme (STP) on modifiable risk factor for Ischemic Heart disease.
2. To assess the pre-test knowledge score about cardiac modifiable risk factor of Ischemic Heart disease among Angina Pectoris patients before implementation of Structured Teaching Programme (STP).

3. To assess the post-test knowledge score about cardiac modifiable risk factor of Ischemic Heart Disease among Angina Pectoris patients after implementation of Structured Teaching Programme (STP).
4. To compare mean pre-test and mean post-test knowledge scores on modifiable risk factor ischemic heart disease patients.
5. To find association between mean pre-test knowledge and the selected demographic variables such as age, sex, type of family, type of work, dietary pattern, personal habits.

HYPOTHESES

Level of Significance at 0.05 level

H_1 : There will be significant difference between the

pre-test knowledge score and post-test knowledge score regarding modifiable risk factor of Ischemic Heart disease patients.

H₂: There will be significant Association in between knowledge scores and the selected demographic variables such as age, sex, type of work, dietary pattern, type of family and personal habits.

Conceptual framework

This study is based on Betty Neuman's Systems Model (1985) which would be relevant to improve the quality of life by providing adequate knowledge of Ischemic Heart disease patients regarding cardiac modifiable risk factor.

The individual responses may be manifested by three protective mechanisms to overcome three types of stresses:

- a. Intra personal stressors
- b. Inter personal stressors
- c. Extra personal stressors

The patients may influence or be influenced by the environmental factor either positively or negatively at any given point of time.

METHODOLOGY

The research design adopted for the present study is quasi experimental one group pre-test and post-test design. This study was conducted in the outpatient department selected Hospital, Jaipur. Nearly about 50-60 cardiac patients attend outpatient department per day. Non -probability purposive sampling technique was adapted for this study.

CRITERIA FOR SAMPLE SELECTION

The patients were selected based on predetermined criteria.

Inclusion Criteria

1. Both sexes from 30 and above years of age.
2. Ischemic Heart disease patients who attend the outpatient department in selected Hospital, Jaipur.
3. Who are willing to participate in the study.
4. Who can read and write Hindi.
5. Who are married, living together during the period of study.

Exclusion Criteria

1. Who have other cardiac disease along with Ischemic Heart disease/cardiomegaly/endocarditis / congestive cardiac failure.
2. Who have already received content regarding cardiac modifiable risk factor in any form.

SAMPLING TECHNIQUE

In this study non probability purposive sampling technique was adapted. The researcher selected the patients based on personal judgment which depends on the problem statement and objectives that has to be achieved.

SAMPLE SIZE

The sample size included in this study is 60 Ischemic Heart disease patients.

Findings

Section I : Description of the demographic variables of the patients

The main findings of the study were: patient over age in years of these, exactly half 50.0% proportion of Ischemic Heart disease patient evidenced to be in more than 60 years of age 36.7% were found in 50-59 years of age, 11.7% of them found in 40-49 years of age and a meager percent 1.7% i.e., rarely one patient in the age of 30-39 years. The proportion of Ischemic Heart disease patient according to their sex, shows that three fourth of patients were men and remaining one fourth were women.

Section II: Analysis of mean pre-test and mean post-test knowledge scores on cardiac modifiable risk factor patient

The mean score percentage of knowledge on structure and functions of heart in pre-test was 32.778 and after implementation of STP it was increased to 57.500. The mean score percentage of ischemic heart disease in pre-test and post-test was 64.524 and 77.381 respectively. The mean score percentage of knowledge on physiological modifiable risk factor in pre-test and post-test was 73.889% and 100.370%. The mean score percentage of knowledge on psychological modifiable risk factor in pre-test and post-test was 37.500% to 47.917%.

Section III : Comparison of mean pre-test and mean post-test knowledge score on cardiac modifiable risk factor patients

N = 60

S. No.	Area of knowledge	Paired mean difference	df	Paired 't' value
1.	Structure and functions of heart	1.48	59	t =8.454*
2.	Ischemic Heart disease	0.90	59	t =6.009*
3	Physiological modifiable risk factors	2.38	59	t =9.781*
4.	Psychological modifiable risk factors	0.83	59	t =7.284*
5.	Vocational modifiable risk factors	0.58	59	t =5.448*
6.	Sexual modifiable risk factors	3.10	59	t =19.729*
7.	Overall	9.28	59	t =19.851*

* - Significant Significant 5% = 0.05 Level

The statistical significance was assessed by comparing the mean pre-test and mean post-test scores. The paired t-test values were found to be significant in all areas of knowledge at 0.05 level of significance. Hence, the research hypothesis H_1 is accepted and H_0 is rejected.

Section – IV Association between the pre-test knowledge score on cardiac modifiable risk factor and the selected demographic variables of the patients

S. No.	Demographic Variables	χ^2	df	P-value at 0.05 level
1.	Age	16.673*	6	0.011
2.	Sex	0.719 ^{NS}	4	0.949
3.	Type of work	17.624*	6	0.007
4.	Dietary Pattern	6.635*	2	0.036
5.	Type of family	11.999*	2	0.002
6.	Personal habits	13.210 ^{NS}	8	0.105

* - Significant

NS – Not Significant.

OBJECTIVE – 1: To develop and validate the STP on Cardiac Modifiable Risk factor for Ischemic Heart disease.

STP on cardiac modifiable risk factor as a guide was prepared to safe guard the patient's life, to modify their life style behaviours and to promote second life after Ischemic Heart disease.

OBJECTIVE – 2 : To access the pre-test knowledge score about Cardiac Modifiable Risk factor

among Ischemic Heart disease patients before implementation of Structured Teaching Programme.

The results were found to be with areas of knowledge like structure and functions of +heart (32.778%). Ischemic Heart disease (64.524%), Physiological modifiable risk factor (73.889%) Psychological Modifiable Risk factor (37.500%). Vocational modifiable risk factor (70.000%). Sexual modifiable risk factor (24.333%) and the overall pre-test knowledge score was 52.125%. The overall level of knowledge was considered as moderately adequate.

OBJECTIVE – 3 : To assess the post-test knowledge score about Cardiac Modifiable Risk factors among Ischemic Heart disease patient after implementation of STP

The results of post-test analysis in the areas of knowledge was, structure and functions of heart (57.500%), Ischemic Heart disease (77.381%) Physiological modifiable risk factor (100.370%), Psychological modifiable risk factor (47.917%), Vocational modifiable risk factor (81.667%). Sexual modifiable risk factor (86.333%) and the overall post-test knowledge score was 75.333%. The overall level of knowledge was considered as adequate.

OBJECTIVE-4: To compare mean pre-test and mean post-test knowledge scores on Cardiac Modifiable risk factor

The overall pre-test and post-test knowledge score was (52.125%) and (75.333%). The post-test knowledge score was increased when compared to pre-test knowledge score and the STP was very effective.

The overall level of knowledge in pre-test was moderately adequate and in post-test was adequate.

Conclusion

The mean pre-test scores on knowledge regarding modifiable risk factor reveals moderately adequate level of knowledge among ischemic heart disease patients. After exposure to STP (Structured Teaching Programme) on cardiac Modifiable risk factor they showed adequacy in their knowledge level. The finding of this study reveals that STP was effective in improving the knowledge regarding cardiac modifiable risk factor of ischemic heart disease patients. The researcher concluded this study that STP was effective in improving the knowledge regarding modifiable risk factor of Ischemic Heart disease patient to promote second life after ischemic heart disease.

Implications

The findings of the study have implication in various areas of nursing practice, nursing education, nursing administration and nursing research to promote their health.

Recommendations

1. A similar study can be conducted to patients with coronary heart disease and those who have undergone bypass surgery.
2. A similar study can be conducted for inpatient in coronary care unit.
3. A study may be done on each individual cardiac modifiable risk factor aspects.
4. An experimental study with structured teaching programme may be conducted to determine the effectiveness of the teaching programme.

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