

EFFECTIVENESS OF A PLANNED TEACHING PROGRAMME ON RISK FACTORS AND SYMPTOMS OF CORONARY HEART DISEASE AMONG SCHOOL TEACHERS

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ABSTRACT

A quasi - Experimental study was undertaken to evaluate the work entitled “A study to evaluate the effectiveness of a planned teaching programme on risk factors and symptoms of Coronary Heart Disease among school teachers of selected higher secondary school at rural area in Nadia district, West Bengal.” The objectives of the study were to develop and validate the planned teaching programme on risk factors and symptoms of Coronary heart disease, to determine the knowledge of school teachers regarding risk factors and symptoms of coronary heart disease before and after administration of PTP and to evaluate the effectiveness of PTP in terms of gain knowledge score. The conceptual framework for the present study was based on general system theory consists of 3 phases such as Input, processing and output. Purposive sampling technique was followed to select 30 teachers of Sarishadanga Dr. Shyamaprasad Higher Secondary School. One group pre-test post-test design was adopted for the study. The tools used for the study were background Performa & Structure knowledge Questionnaire, adopted technique was Questioning (paper & pencil method) for collecting background data & knowledge of the samples. Data were collected before and after administration of planned teaching. The findings of the study revealed that maximum score range of pre-test knowledge of the school teachers is in the range of 14-15 i.e.26.66% and in post-test the maximum score range of knowledge of the school teachers is in the range of 20 -21 i.e. 34.48%, SD of pre-test is 5.369 and SD of post-test is 2.619, the mean difference between pre-test and post-test knowledge score is 8.03. There was significant difference in post-test knowledge score than the pre-test [t d. f. (29) = 7.266]

Keywords: *Coronary Heart Disease, Risk Factors, School Teachers*

INTRODUCTION

India is the nation of the young where 54 percent of population is enjoining the prime of youth. But a black spot in this sunny picture is the increasing rate of Coronary Heart Disease among youth. The average age in which a person may suffer from heart attack is considered as 30. In an observation in the Middle East , out of patient admitted in CCU with acute MI below the age of 40 years , 80 % were Indian expatriates as compared to 20% native Arabs. CHD is fatal condition but preventable.

Coronary Heart Disease has been defined as “impairments of heart function due to inadequate blood flow to the heart compared to its needs, caused by obstructive changes in the coronary circulation to the

heart”. It is the cause of 25% to 30% deaths in most industrialised countries. In India in the past five decades, rate of coronary disease among urban population have risen from 4% to 11%. The WHO estimate that 60% of the world's cardiac patients will be Indian by 2010.Nearly 50% of CVD - related deaths in India occur below the age of 70% compared with just 22% in the west. CHD is assuming serious dimension in the developing countries. India is currently one of the youngest nation in the world 2/3rd population under the age of 35 years. Tobacco smoking, sedentary habit, stress, obesity, elevated serum cholesterol, hypertension diabetes all are risk factor of CHD. Important symptoms of CHD are chest pain (not relieved by rest, position changed), high blood pressure elevated cholesterol level , anorexia nausea , vomiting, sweating, shortness of breath etc. After gaining knowledge about these risk

factors and symptoms individual may conscious about CHD and take precaution to prevent it.

METHODOLOGY

A quasi experimental study was undertaken at Sarishadanga Dr. Shyamaprasad HS School, Nadia among School Teacher. Total 30 teacher were selected through non probability purposive sampling technique and one group pre-test-post-test research design was adopted. Data were collected through structured questionnaire by paper pencil technique before and after administration of planned teaching program. This study was approved by ethical committee and scientific committee of Calcutta Medical College and Hospital Kolkata and informs consent from participant was also secured prior to the data collection. The collected data was edited, compiled and analysed by both descriptive and inferential statistics.

RESULT

Table 1: Demographic Characteristics of School teachers. N=30

Sl. No.	Variable	Frequency	Percentage
1.	Age(years)		
	25 - 34	18	60
	35 - 44	8	26.66
	45 - 54	4	13.33
	55 - 64	0	0
2.	Sex		
	Male	24	80
	Female	6	20
3.	Religion		
	Hindu	28	93.33
	Muslim	2	6.66
4.	Education		
	Graduate	17	56.66
	Master -Degree	13	43.33
5.	Dietary pattern		
	Vegetarian	4	13.34
	Non - vegetarian	26	86.66
	Spicy food	0	0
	Fast food	0	0
6.	Habit		
	Smoking	8	26.66
	Alcohol Consumption	0	0
	Chewing of tobacco	2	6.66
	Nothing	20	66.66

Data presented in table 1 indicates that majority (60%) of teachers are within the age of 25 to 34 years, 26.66% are within 35-44 years and 13.33% are within 45-54 years . Most of (80 %) them are male. Maximum (93.33 %) are Hindu . Most teachers (56.66%) are having Masters Degree. Most (86.66%) are vegetarian. This table also depicts that 26.66% have habit of smoking, 66.66% have no mentioned habit.

Table 2: Area wise mean, mean%, actual gain, possible gain and modified gain N=30

Sl. No.	Area of knowledge	Max score	Pre- test		Post-test		possible gain	Actual gain	Modified gain
			mean	mean%	mean	mean%			
1	Structure & Function of Heart	2	1.266	63.3	1.9	95	36.7	31.7	0.863
2	Coronary arteryand it's function	1	0.8	8.0	1.0	100	20	20	1
3	Concept of Coronary heart Disease	1	0.266	26.6	0.8	8.0	73.4	53.4	0.727
4	Non-modifiable Factors	2	0.8	4.0	1.533	76.65	60.0	36.65	0.610
5	Modifiable Factors	17	9.30	54.70	13.566	79.80	45.3	25.1	0.554
6	Clinical manifestation	2	0.3	15	1.7	85	85	70	0.823

Table 2 shows that modified gain is highest (1) in "Coronary artery &it's function" and lowest (.554) in "Modifiable factors. So more emphasis on teaching programme is needed in area of "Modifiable factors".

Table 3: Mean, median & SD of pre-test and post-test Knowledge Score. (N= 30)

Sl. no	Knowledge score	Range	Mean	Median	Standard Deviation
1	Pre-test	3 – 20	12.7	14	5.396
2	Post-test	16 – 25	20.63	21	2.619

Data of table 3 shows that the post-test mean knowledge score20.63 is apparently higher than the pre-test test mean knowledge score 14. The median of post test score is 21 apparently higher than the median of pre-test score 12.7. It indicates that post -test knowledge score is apparently higher than pre-test knowledge score. Table also depicts that the SD of post- test is 2.619 and the SD of pre-test is 5.396, thus findings shows that pre-test seems to be more dispersed than post-test.

Table 4: Mean, mean difference and 't' value between pre-test and post-test score. N=30

Sl. No.	Knowledge score	Mean	Mean difference	"t"
1.	Pre-test	12.7	8.03	7.266*
2.	Post-test	20.63		

* $t (d.f. 29) = 2.04, P < 0.05$

The data presented in table 4 shows that mean difference between pre-test and post-test knowledge score is 8.03 which indicates there is difference between mean of pre-test and mean post-test knowledge score. The computer's 't' value 7.266 is found to be significant at 0.05 level, H0 is rejected & H1 is accepted inciting effectiveness of PTP in increasing the knowledge of school teacher on risk factors & symptoms of CHD. It is statistically significant that is true gain and not by chance.

DISCUSSION

On the basis of findings related to evaluate effectiveness of a planned teaching programme in terms of knowledge of teacher of higher secondary school on risk factors and symptoms of coronary heart disease, the same of other related studies are mentioned below.

The study result supports the study of Bhaswati Das (2008) which showed that there was significant difference in post-test knowledge score than the pre-test knowledge score after administration of PTP on diet to prevent cardiac disease among the school teachers in a selected school. The mean post –test knowledge (78.92 %) score was significantly higher than the mean pre-test knowledge score (49%) after administration of PTP.

The study result also supports the study of Lali Alex which showed that the post- test knowledge score was significantly different from the pre-test knowledge score after administration of planned teaching programme on risk factors and symptoms of CHD diet to prevent cardiac disease among the post graduate students of selected college in Kerala. The mean post-test Knowledge score (44.95%) was significantly higher than the mean pre-test Knowledge score (31.19 %) after administration of Planned teaching programme. Computed 't' value is 55.34 when tabulated 'value is '2' at d.f. 57. So the planned teaching

programme was effective for increasing the knowledge of post graduate students.

The result of the study is also consistent with the study of Akila p which showed that there was significant difference in post-test knowledge score than the pre-test knowledge after the administration of structure teaching programme on cardiac rehabilitation among patient with MI. The mean post–test knowledge (18.93%) score was significantly higher than the mean pre-test knowledge score (11.40%) after administration of planned teaching programme. SD of pre-test was 2.9&post-test was 1.3.This planned teaching programme was effective method for increasing the knowledge of MI clients in cardiac re-habitation.

CONCLUSION

The study findings can be concluded that teaching programme on risk factors and symptoms of CHD is effective for increasing the knowledge of the higher secondary school teachers as the computed 't' test was significant at 0.05 level . This data suggested that planned teaching improved the Knowledge of teachers on risk factors and symptoms of CHD which would be beneficial family, community and as a whole for society.

Conflict of Interest

The authors declare that they have no conflict of interest.

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