

A Study to Assess the Effectiveness of Integrated Teaching Programme on Knowledge Regarding Prevention of Cardiac Disorders among Adult in Pillaiyarkuppam at Puducherry

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Abstract

The objective of the study was to evaluate the effectiveness of integrated teaching Programme among adults on prevention of cardiac disorders. Quasi experimental research design was conducted among 30 adults in Pillaiyarkuppam, Puducherry to assess the knowledge regarding prevention of cardiac disorders among them. The results shows that subjects mean knowledge was 12.5 with standard deviation of 4.783 whereas after Integrated Teaching Programme the mean score was increased to 21.7 with the standard deviation of 2.423. The improvement was statistically tested by paired 't' test which was found to be statistically significant at $P < 0.001$ level. It indicates that Integrated Teaching Programme was effective in improving the knowledge regarding prevention of cardiac disorders.

Keywords: effectiveness, integrated teaching programme, knowledge, prevention of cardiac disorders, adult.

Introduction

Cardiac disorders refer to any disease that affects the cardiovascular system, principally cardiac disease, vascular disease of the brain and kidney, peripheral arterial disease³.

Cardiac disorder is a no.1 killer disease worldwide 12 million deaths annually. Alarming increases in developing countries especially in India⁵. The recently conducted study high blood pressure is the major risk factors for cardiac disorders. It has been estimated that reduction in dietary intake of sodium by about 1gm sodium a day, about 3gm salt, would lead to 50% reduction in the number of people needing treatment for hypertension. The same decrease would lead to a 22% drop in the number of deaths resulting from strokes and 16% fall in the number of deaths from coronary heart disease¹.

WHO stated that 26 million were affected, in 2013 and 54% death occur in that year. Over 80% cardiac death take place in low and middle income countries. The number of people, who die from cardiac disorders mainly from heart diseases and stroke, will increase to reach 23.3 million by 2030 and 9.4 million deaths each year or 16.5% of all death can be attributed to high blood pressure⁴. These include 51% of death due to strokes and 45% death due to coronary heart disease.

Objectives

- To assess the knowledge on prevention of cardiac disorders before and after the integrated teaching programme.
- To determine the effectiveness of integrated teaching Programme among adults on prevention of cardiac disorders.
- To find out the association between the knowledge regarding cardiac disorders with selected demographic variables.

Methods and Materials

Quasi experimental research design was used. The

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population of the study includes all the subjects between the age group of 20 to 40 years at Pillaiyarkuppam. Samples size of the study was 30 in numbers.

Simple Random sampling techniques by lottery method was adopted for this study.

Procedure For Data Collection

A formal permission was obtained from the panchayat people in Pillaiyarkuppam prior to actual data collection attempts were made to built the support with the staffs of anganwadi’s and obtained the list of adult (20-40 years) in the selected areas , and the purposes of the study was explained to the adults with self-introduction. The investigator personally visited 3houses per day for the data collection and at the end of the week 30 houses were collected.

Structured interview questionnaire were provided to all subjects and they were interviewed to fill the questionnaire.

After pre-test the investigator has to perform Integrated Teaching programme which includes PowerPoint presentation, pamphlet distribution, displaying of food items and cooking demonstration regarding the prevention of cardiac disorders. After a week post test was conducted with the same structured interview questionnaire.

Data Analysis

The data collected was analysed by using descriptive statistics and inferential statistics. Frequency

and percentage distribution was used for demographic variables. Paired‘t’ test was used to test the effectiveness of integrated teaching programme. Chi-square test was used to associate the knowledge regarding prevention of cardiac disorders among adult.

Results

Regarding level of knowledge, majority 13(43%) of the respondent were had average knowledge, 9(30%) had good knowledge, 7(23%) had poor knowledge and 1(3%) had excellent knowledge on prevention of cardiac disorder in pre-test where as in the post-test 23(71%) had excellent knowledge and 7(23%) had good knowledge. **(Table 1)**

Comparison of mean score of the subjects in pre-test and post-test. The subjects mean knowledge was12.5 with standard deviation of 4.783 whereas after Integrated Teaching Programme the mean score was increased to 21.7 with the standard deviation of 2.423. The improvement was statistically tested by paired ‘t’ test which was found to be statistically significant at P<0.001 level. It indicates that Integrated Teaching Programme was effective in improving the knowledge regarding prevention of cardiac disorders. **(Table 2)**

In association, the data reveals that there is significant association between the knowledge regarding prevention of cardiac disorder with the demographic variable , age , occupation , monthly income , family history of cardiovascular disease are found to be significant at <0.05 level. Exercise found to be significant at the level of <0.01.

TABLE: 1 KNOWLEDGE LEVELS OF ADULTS REGARDING PREVENTION OF CARDIAC DISORDERS IN PRE TEST AND POST TEST PROGRAMME

N=30

S.No	Level Of Knowledge	Pre Test		Post Test	
		Frequency	Percentage	Frequency	Percentage
1	Excellent	1	3	23	77
2	Good	9	30	7	23
3	Average	13	43	0	0
4	Poor	7	23	0	0

TABLE-2.COMPARISON OF THE MEAN PRE TEST AND POST TEST KNOWLEDGE SCORE OF THE ADULTS**N = 30**

Group	Mean	Std. Deviation	t- value	p-value
PRE TEST	12.5	4.783	-11.1266	*** 0.00000 (s)
POST TEST	21.7	2.423		

*** S-significant (P<0.001 level)

Conclusion

It shows that the integrated teaching programme was effective to improve the knowledge level of the adults

Ethical Clearance- Institutional Human Ethical committee, Sri Balaji Vidyapeeth, Puducherry.

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Conflict of Interest- Nil.

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