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A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON EARLY SIGNS AND PREVENTION OF MYOCARDIAL INFARCTION AMONG INDUSTRIAL

Archana Rohit Dhanawade ¹

Assit. Professor,

Department of Obstetrics and Gynaecology

BVDU, College of Nursing, Sangli, Maharashtra, India

Mrs. Tejaswini E. Chougule ²

Clinical Instructor

Department of Obstetrics and Gynaecology

BVDU, College of Nursing, Sangli, Maharashtra, India.

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ABSTRACT:

“A Study To Assess The Effectiveness Of Planned Teaching Programme On Early Signs And Prevention Of Myocardial Infarction Among Industrial Workers In Selected Area Of Sangli, Miraj And Kupwad Corporation. this study is done with the objectives, To assess pre-test knowledge score related to early signs and preventions of myocardial infarction, To assess post-test knowledge score, & To compare pre-test and post-test knowledge score. material and Methods: A quasi experimental one group pre-test and post-test design used, sample selected by using simple random sampling technique, 60 samples were selected of age group 21 to 60 years. A self-structured questionnaire was used to assess the level of knowledge among industrial workers.

Result: Pre-test level of knowledge shows that 50 (83.3%) workers have adequate knowledge, 3 (5%) have poor knowledge and 7 (11.6%) of workers having good knowledge. In post-test, 39 (65%) workers has good knowledge, 11 (18.3%) have very good knowledge and 10 (16.6%) have adequate knowledge. The overall pre-test mean score was 8.6 and S.D. was 1.439 and post-test Mean score was 12.136 and S.D. was 1.548. It shows that highly significant difference is found between pre-test and post-test mean score of knowledge. P-value is 0.00 which is less than 0.05.

Conclusion: Planned teaching program is effective regarding early signs and prevention of Myocardial infarction. Statistically it was found that there is highly significant difference in pre-test and post-test scores. So, hypothesis H₁ was accepted.

Keywords: Myocardial Infarction, industrial workers

INTRODUCTION:

A myocardial infarction (MI), commonly known as a heart attack. It occurs when blood flow decreases or stops to the coronary artery of the heart causing damage to the heart muscle. The most common symptom is chest pain or discomfort which may travel

into the shoulder, arm, back, neck or jaw. Often it occurs in the centre or left side of the chest and lasts for more than a few minutes.¹

Worldwide, about 15.9 million myocardial infarctions occurred in 2015. In INDIA 17.7 Million death are leading cause of Myocardial Infarction. According to WHO INDIA account one fifth death are especially younger population. The result of global burden study state age standardized Myocardial Infarction death rate of 272 per 100000 population. In that 40% of population death is by Myocardial infarction in industrial workers.⁴

Typically, chest pain because of ischemia, be it unstable angina or myocardial infarction, lessens with the use of nitroglycerin, but nitroglycerin may also relieve chest pain arising from non-cardiac causes.² The objectives of study was To assess pre-test knowledge score related to early signs and preventions of myocardial infarction. To assess post-test knowledge score related to early signs and preventions of myocardial infarction. To compare pre-test and post-test knowledge score related to early signs and preventions of myocardial infarction.

NEED FOR STUDY :

Myocardial infarction (MI), known as "heart attack," is caused by decreased or complete cessation of blood flow to a portion of the myocardium.³ Myocardial infarction maybe " silent," and go undetected, or it could be a catastrophic event leading to hemodynamic deterioration and sudden death. Silent" myocardial infarctions can happen without any symptoms at all.⁴

These cases can be discovered later on electrocardiograms, using blood enzyme tests, or at autopsy after a person has died. Such silent myocardial infarctions represent between 22 and 64% of all infarctions, and are more common in the elderly, in those with diabetes mellitus and after heart transplantation. In people with diabetes, differences in pain threshold, autonomic neuropathy, and psychological factors have been cited as possible explanations for the lack of symptoms. In heart transplantation, the donor heart is not fully innervated by the nervous system of the recipient.^{6,8}

HYPOTHESIS:

- H₀; There is no significant difference between pre-test and post-test knowledge score.
- H₁; There is significant difference between pretest and post test knowledge score.

RESEARCH METHODOLOGY :

A quasi experimental one group pre-test and post-test design^{5,9} By using simple random sampling technique 60 samples were selected of age group 21 to 60 years for this study. A self- structured questionnaire was used to assess the level of knowledge among industrial workers. Prior permission from industry is obtained, sample selection done with simple random technique-test given and plan teaching given on the same day. Post test done after 7 days. The data was analysed based on the study objectives and inferential and descriptive statistics.

The findings are presented under the following sections.

- **Section I:** -Frequency and percentage distribution of the demographic variables.
- **Section II:** -Frequency and percentage distribution of pre-test knowledge score.
- **Section III:** -Frequency and percentage distribution of post- test knowledge score.

Section IV: -Comparison of pre-test and post-test knowledge score.

The reliability was carried out by the test re-test method and "r" was calculated by Karl Pearson's formula and the tool was found to be reliable i.e., 0.9 After the pilot study was carried out with 10 samples.^{7,10}

RESULT**Table No 1****1) Frequency and percentage distribution of the demographic variables.****n=60**

Sr.no	variables	Category	frequency	percentage
1	Age in years	21 to 30	31	51.6
		31 to 40	13	21.6
		41 to 50	11	18.3
		51 to 60	05	8.3
2	Sex	Male	50	83.3
		Female	10	16.6
3	education	No formal education	0	0
		Primary	3	5
		Secondary and higher secondary	50	83.3
		Graduate and post graduate	7	11.6
4	Bad habits	Tobacco chewing	12	18.3
		Gutka chewing	13	21.6
		Alcohol consumption	11	18.3
		No any bad habits	24	58.3
5	Food	vegetarian	20	38.3
		mixed	40	61.7
6	Information regarding MI	YES	10	66
		NO	-	-
		Internet	20	33.3
		family	5	8.3
		friend	2	3.3
		media	3	5

Result-

- According to age in the study of the workers about early signs and prevention myocardial infarction 51.6 % in the age group of 21-30 years, 21.6 % in the age group of 31-40 years, 18.3 % in the of 41-50 years and 8.3% were in the age group of 51-60 years
- According to gender in the study of the workers about early signs and prevention of myocardial infarction 83.3% were males and 16.6% were females.
- According to education, in the study of the workers about early signs and prevention of myocardial infection 5% were educated up to primary, 83.3% up to secondary and higher secondary and 11.6% were graduates and post graduates.

- According to bad habits, in the study of the workers about early sings and prevention of myocardial infarction 18.3% of them had habit of tobacco chewing,21.6% had habit of gutakha chewing, 18.3%said alcohol consumption, 58.3% had no any such type of bad habit.
- According to type of diet, 33.3% participants were vegetarian and 66.6%patients were mixed diet.

Table no.2**Frequency and Percentage distribution of Pre test Knowledge Score**

n = 60

Level of Knowledge	Frequency	Percentage
Good	7	11.6%
Adequate	50	83.3%
Fair	3	5%

Result :

The above table shows that , most of the workers 50 (83.3%) had adequate knowledge,7 (11.6%)had good knowledge and 3(5%)had fair knowledge.

Table no 3**Frequency and Percentage distribution of Post test Knowledge Score**

n=60

Level of Knowledge	Frequency	Percentage
Very Good	11	18.3%
Good	39	65%
Adequate	10	16.6%

The above table shows that , majority of the workers 11 (18.3%) had excellent knowledge,39 (65%)had good knowledge and 10(16.6%)had adequate knowledge .

Table no 4**Comparison of pre test and Post test Knowledge Score**

n=60

Aspects	Mean	SD	DF	t value	P Value
Pre test	8.61	1.439	1.18	22.955	0.0
Post test	12.13	1.54			

Result :

The mean value is increased after post test that is 12.136 t – value is 22.955. p – value is 0.0 (at 5 % level of significance) hence proved plan teaching was effective.

DISCUSSION

Assessments of Knowledge in pre and post test. At the time of pretest, 5% of subjects were having fair knowledge 83.3% were having adequate knowledge, 11.6% were having good knowledge and remaining 0% subjects were having very good knowledge.

Average score at the time of pretest was 8.61 with standard deviation of 1.439. At the time of post test, 16.6% of subjects were having adequate knowledge, 65% were having good knowledge and 18.3% subjects were having very good knowledge. Average score at the time of post test was 12.136 with standard deviation of 1.548Average.

CONCLUSION:

Since the test is statistically significant at $p= 0.00$.

It shows that highly significant difference is found between pre- test and post- test meanscore of knowledge regarding to early signs and prevention of myocardial infarction.

. **Conflict of interest:** Nil

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