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EFFECT OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGRADING EARLY SYMPTOMS AND MANAGEMENT OF MYOCARDIAL INFARCTION AMONG HIGH RISK CLIENTS

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ABSTRACT

Myocardial Infarction remains unrecognized most of the time because the signs and symptoms appear in a confusing way. Awareness of early symptoms and management of myocardial infarction are an important step in early treatment. The focus of the study was to evaluate the effectiveness of educational intervention on early symptoms and management of myocardial infarction among high risk clients. The study was based on health belief model. Quantitative experimental approach was used in the study. By convenience sampling technique, the sample size was 60.The tools used were structured questionnaire to collect the sociodemographic data and structured knowledge questionnaire to assess the level of knowledge. The findings revealed that 13 % of the high risk clients have poor knowledge, 67 % of the high risk clients have average knowledge and 20 % of the high risk clients have good knowledge. The 't' value ($t=30.74, p< 0.01$) revealed that majority of the high risk clients improved their knowledge on early symptoms and management of myocardial infarction.

KEYWORDS: Early symptoms, effect, high risk clients management, myocardial infarction, structured teaching programme.

INTRODUCTION

Myocardial infarction, also known as heart attack, occurs when blood flow decreases or stops to a part of the heart causing damage to the heart muscle. muscle. It's a serious medical emergency. Worldwide about 8.6 million people affected with myocardial infarction.[1] The incidence of myocardial infarction in India is 64.37\1000 people (2014)[2] Ischemic heart disease is the leading cause of death in India, and there are likely more myocardial infarction in India than in any other country in the world.[3] In Kerala,14 % of death were caused by coronary heart disease (2016)[4] Myocardial infarction remains unrecognized most of the time because the signs and symptoms appear in a confusing way. The people who experiences symptoms of acute myocardial infarction do not seek care until more than 2-6 hours after the onset of symptoms, increasing their risk for morbidity and mortality. Cardiovascular diseases has been historically correlated with diabetes, hypertension, increased circulating lipids, obesity etc.[5] Awareness of early symptoms and management of myocardial infarction are an important step in early treatment. So the researcher felt the need to assess the knowledge regarding early symptoms and management of myocardial infarction among high risk clients and to provide a structured teaching programme regarding the early symptoms and management of myocardial infarction.

Pallavi (2014) conducted a descriptive evaluatory study to assess the effectiveness of planned teaching on early signs and symptoms and immediate treatment of myocardial infarction among patients admitted in Government hospital, Mumbai, India.50 high risk patients selected by non-probability purposive sampling. The result showed that the variation in the percentage of the overall knowledge during the pre-test and post test showed a marked improvement.In post-test evaluation 80 to 100 percent of the sample were aware of the disease condition.The study concluded that planned teaching significantly improved the knowledge and performance among patients.[6]

Manikanda (2009) conducted a descriptive survey to assess the knowledge about risk factors and warning

signs of acute coronary syndrome among patients admitted in cardiac medical unit at SCTIMST, Trivandrum. A survey was conducted in 50 consecutive samples with a pre-validated questionnaire.90 % of the sample answered fatty diet, 88 % answered hypertension and 80 % of the sample answered smoking and 52 % answered obesity as the risk factors for ACS respectively About warning signs,98 % and 72 % answered chest discomfort and arm discomfort respectively. The study concluded that the patients had average level of knowledge about risk factors and warning signs of ACS.[7]

The objectives of the study is to assess the level of knowledge regarding the early symptoms and management of myocardial infarction among high risk clients using a structured questionnaire, To evaluate the effect of structured teaching programme on knowledge regarding the early symptoms and management of myocardial infarction among high risk clients and to find out the association between the level of knowledge regarding the early symptoms and management of myocardial infarction among high risk clients and selected socio demographic variables.

MATERIAL AND METHODS

- Research approach: Quantitative experimental approach
- Research design: Pre experimental one group pre test-post test design
- Setting: Selected Government hospitals at Alappuzha district

Population
Target population: High risk clients who are known case of hypertension and \or diabetic mellitus and\or angina pectoris in Alappuzha district.

Accessible population: 60 high risk clients admitted with hypertension and\0r diabetic mellitus and \or angina in the medical wards of selected government hospitals. Alappuzha.

Sample and sample size
60 high risk clients with age group of 40- 60 years.

Calculation:
$n= 2 (z\alpha+z\beta)^2S^2 /d^2$
$z\alpha =1.96$
$z\beta =0.84$
Standard Deviation (s) =3.89
Significant Difference =2
n = 59.30
Sample size finalized as 60
Sampling technique: convenience sampling technique

Sample selection criteria
Inclusion criteria
Clients who are,

- Between the age group of 40-60 years
- Admitted with hypertension and \or diabetic mellitus and \or Angina pectoris
- Known case of hypertension and \or diabetic mellitus and \or Angina pectoris since 5 years or more
- Admitted in medical wards of taluk hospital cherthala and General hospital,Alappuzha
- Admitted for 5 days or more

Exclusion Criteria
Clients with

- Previous history of myocardial infarction
- Risk factors of myocardial infarction other than hypertension,diabetic mellitus and angina
- Technique Semi structured interview

Instruments
Tool 1: structured questionnaire to collect socio demographic data.
Tool 2: Structured knowledge questionnaire to assess the knowledge regarding early symptoms and management of myocardial infarction among high risk clients.

Content Validity
The tool was given to 5 experts from the medical surgical nursing department and 2 cardiologists with the validation criteria checklist. Modifications were made in the tool based on the given corrections. The tool was translated to Malayalam and subsequently translated back to English.

Reliability of the tool
The reliability was assessed by using split half method and reliability of the tool was 0.6

RESULTS

The present study was intended to assess the effect of structured teaching programme on knowledge regarding early symptoms and management of myocardial Infarction among high risk clients. .This section deals with the analysis and interpretation of data collected from 60 high risk clients.

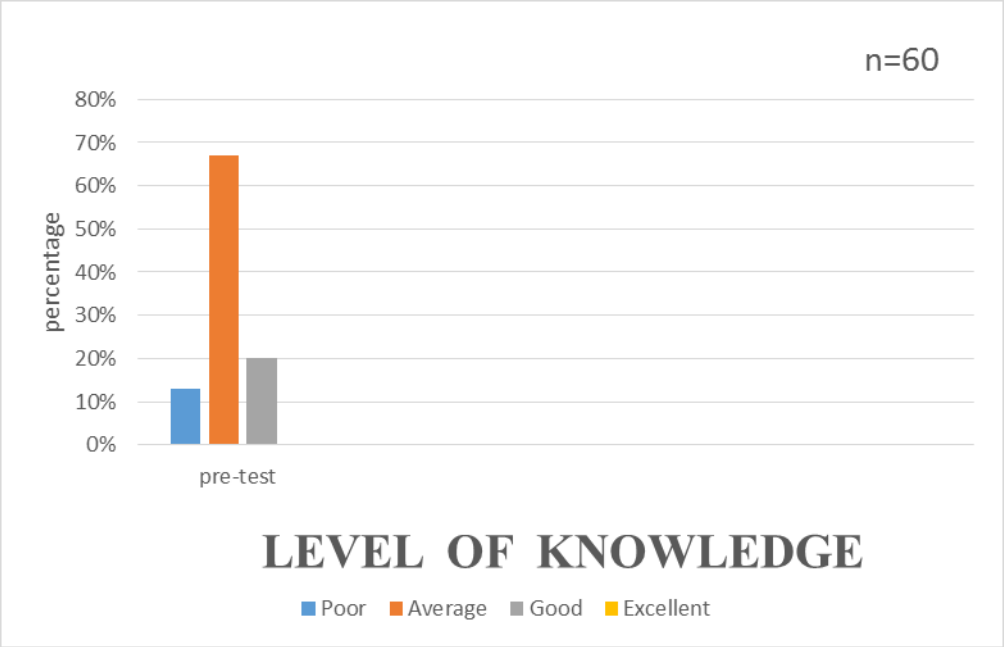

Figure 1: Distribution of level of knowledge regarding the early symptoms and management of myocardial infarction.

Table 1: Depicts Effect of structured teaching programme on knowledge regarding the early symptoms and management of myocardial infarction among high risk clients (n=60).

Test	Mean	S.D	Standard error	Mean Improvement	t-value	p-value
Pre-test	11.28	4.029	0.520	8.733	30.74	0.001 *
Post-test	20.01	3.959	0.511			

*Significant at 0.01 level. SD-Standard Deviation

- In the present study, the mean and S.D of the pre-test is 11.28 and 4.029 and for the post test is 20.01 and 3.959.The mean difference between pre-test and post-test is 8.77.The t-value is 30.74.Since the p-value is less than 0.01,the average improvement in knowledge is 8.73 seen in the level of knowledge is significant. So the structured teaching programme is effective in improving the level of knowledge.
- The major findings indicated that there is no association between knowledge score with age (χ^2-0.373,p-0.072), gender (χ^2-1.64,p-0.080),Occupation (χ^2-0.084,p-0.087), Habits (χ^2-0.059,p-0.087),habits (χ^2-0.059,p-0.075) and lifestyle (χ^2-0.011 ,p-0.123).The computed chi square value between the pre – test level of knowledge and level of education (χ^2-1.068 ,p-0.045) was significant at 0.05 level.

DISCUSSION

Myocardial Infarction is one of the leading cause of death in the world. The present study aims to assess the knowledge regarding early symptoms and management of myocardial infarction among high risk clients. The study reveals that most of the high risk clients (67 %) only had a moderate level of knowledge regarding early symptoms and management of myocardial infarction. The findings of the study is supported by non randomized control group design conducted by Kaur (2016) on effectiveness of planned teaching programme on knowledge regarding early signs and symptoms of myocardial infarction among 60 hypertensive patients shows maximum(90%) number of patients had below average pre-test knowledge and 10 % had average knowledge.[8]

In the present study, the average improvement in knowledge after the structured teaching programme is 8.77.The study concluded that the structured teaching programme is effective in improving the level of knowledge regarding the early symptoms and management of myocardial infarction among high risk clients. The findings of the study supported by a descriptive evaluative study by paswan (2018) to assess the effectiveness of self instructional module on knowledge regarding life style modification among myocardial infarction patients admitted in selected hospitals in Vidarbha Region, Maharashtra. The results shows that in pre-test scores,63.4 % of subjects were having average knowledge,33.3 % having poor knowledge and 3.3 %subjects having very good knowledge. But in post -test, 61.67% of subjects were having good knowledge, 38.33 % having excellent knowledge. The tabulated 't' value is 59 ($p<0.01$).[9]

In this study, The computed chi square value between the pre-test level of knowledge and level of education was significant at 0.05 level. So there is association between

the level of knowledge and level of education among high risk clients. There were no association between the pre-test level of knowledge and selected demographic data such as age, gender, occupation, habits and lifestyle as the chi –square value not significant at 0.05 level. The findings of the study supported by a study conducted by Panda (2016) on awareness of symptoms and risk factors of myocardial infarction among adult seeking health care from a rural hospital of India. The study shows that there is significant association between knowledge score with socioeconomic status (χ^2 -86.07, p<0.001,df=1) and no significant association between knowledge score with age gender, religion, caste, type of family, occupation, education and marital status.[10]

Limitations of the study

The selected high risk client who discharged against the medical advice made the researcher difficulty to collect data

Recommendations

- The study can be replicated with large sample to generalize the findings
- The similar study can be conducted by including the different risk groups of myocardial infarction

Compliance with ethical standard

The study was started after obtaining permission from Ethics Committee. This study does not contain any studies with animals performed by author.

CONCLUSION

The present study assessed the effect of structured teaching programme on knowledge regarding early symptoms and management of myocardial infarction among high risk clients admitted in selected hospitals, Alappuzha District. Based on the findings the following conclusion were drawn that structured teaching programme is effective in improving the level of knowledge regarding the early symptoms and management of myocardial infarction. Coronary heart disease is the most common cause of death and disability in the world.[11] Diseases can rarely be eliminated through early diagnosis or good treatment, but prevention can eliminate diseases. So the public should focus on improving awareness regarding the early symptoms and management of myocardial infarction, so that preventive actions can be taken against the occurrence of myocardial infarction.

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REFERENCE

1. Emelia J, Heart diease and stroke statistics, HHS Public Access, 2017 march 07; 135(10): 146-e603.
2. Rao Vinay, Risk factors of acute myocardial infarction coastal region of India;A case control study, Heart India, 2014; 2(3): 70-75.
3. Huffman, Acute coronary syndrome quality improvement in Kerala,Rationale and design for a cluster -randomized stepped wedge trial ,American Heart Journal,[cited], 2017; 154-160.
4. Kerala Health Statistics, Indus healthplus, 2011.
5. Durairaj G,Correlation betweenBMI, HbaIc and fasting lipid profile in patients presenting with Acute Coronay Syndrome and their relationship with CVD risk,[cited], journal of cardiovascular Disease Reseach, 2019; 10(2): 65-67.
6. Pallavi Lee, Effectiveness of planned teaching on early signs and symptoms and immediate treatmet of myocardial infarction in among patients. International Journal of Science and Research, ISSN [cited], 2012; 2319-7064.
7. Manikanda,Assess the knowledge about risk factors and warning signs of acute coronary syndrome among patients admitted in cardiac medical unit at SCTIMST, trivandrum,[cited], 2009.
8. Available at http;//dspace.sctimst.ac.in/jspui /bitstream/123456789/1585/1/309.
9. Kaur,effectiveness of planned teaching programme on knowledge regarding early signs and symptoms of myocardial infarction among hypertensive patients.[cited], 2016; 123-128.
10. Vaishali Paswan,To assess the effectiveness of self instructional module on knowledge regarding life style modification among myocardial infarction patients admitted in selected hospitals in Vidarbha Region,Asian J,Nursing Education and Research, 2018; 8(2): 247-267.
11. Panda,Awareness of symptoms and risk factors of myocardial infarction among adult seeking health care from a rural hospital of India,Journal of cardiovascular disease research [cited], 2016; (2): 83-85.
12. Dahale,A narrative review of the relationship between coronary heart disease and anxiety,Iranian Journal of psychiatry and behavioural Sciences, 2017; 11(3): e7722.
13. Sharma, Nursing Research and Statistcs, 4th ed, Haryana, Elsevier, 2013.
14. Polit, Nursing Research, 7th ed, Lippincott, 321.