



KNOWLEDGE AND ATTITUDE REGARDING CARDIAC REHABILITATION AMONG PATIENTS WITH MYOCARDIAL INFARCTION: A DESCRIPTIVE STUDY

Nursing

Mrs. Biji I B*

Assistant Professor, Mercy College of Nursing, Valakom. *Corresponding Author

**Mrs. Sreelakshmy
U R**

Associate Professor, Sree Gokulam Nursing College, Trivandrum.

ABSTRACT

The present study was aimed to assess the knowledge and attitude regarding cardiac rehabilitation among patients with myocardial infarction at Sree Gokulam Medical College and Research Foundation, Venjaramoodu, Trivandrum. Descriptive research design was used as research design. Consecutive sampling technique was adopted and selected 115 samples. Self administered knowledge questionnaire was used to assess the knowledge regarding cardiac rehabilitation and self-prepared rating scale was used to assess the attitude regarding cardiac rehabilitation among patients with myocardial infarction. The study shows that more than half 53% of subjects had average knowledge regarding cardiac rehabilitation and all subjects (100%) had positive attitude towards cardiac rehabilitation. There is a significant association between knowledge score with previous information regarding cardiac rehabilitation at $p < 0.05$. There is a positive correlation ($r = 0.325$) between knowledge and attitude regarding cardiac rehabilitation, significant at $p < 0.01$.

KEYWORDS

Knowledge; Attitude; Cardiac Rehabilitation; Myocardial Infarction.

INTRODUCTION

Cardiovascular diseases are the leading cause of death in most of the developed and developing countries. Heart diseases are the leading cause of premature morbidity and mortality. Acute coronary syndromes are responsible for more than 250,000 deaths annually and result from a progressive atherosclerotic process that culminates in rupture of atherosclerotic plaques and thrombus formation.

Myocardial infarction is a condition of heart muscles death when one or more coronary arteries which supply oxygen-rich blood to the heart muscle become suddenly blocked. Blockage results from plaques made of fats and cholesterol. The accumulation of this plaque is known as coronary artery disease. A myocardial infarction occurs when a plaque ruptures suddenly and it causes a rapid accumulation of clotting factors at the rupture site which leads to a sudden obstruction of blood flow in the coronary artery. Sudden obstruction prevents blood reaching the heart muscle. The heart muscles start to die if there is no vital supply of oxygen-rich blood. The longer the obstruction persists, the greater the amount of heart muscle dies. Myocardial Infarction is a medical emergency. If not treated on time it may lead to permanent damage of heart muscles.

Rehabilitation in the cardiac patient population is an important step to decrease the risks associated with the cardiac disease process. Cardiac rehabilitation aims to reverse the limitations experienced by patients who have suffered the adverse physiological and psychological consequences of cardiac events. Education, counseling and behavioral cardiac rehabilitation interventions reduced stress and improved psychological functioning.

Coronary heart disease (CHD) in India is one of the major causes of disease burden and deaths. Mortality data from the Registrar General of India shows that cardiovascular diseases are a major cause of death in India now. Studies to determine the precise causes of death in urban Chennai and rural areas of Andhra Pradesh have revealed that cardiovascular diseases cause about 40% of the deaths in urban areas and 30% in rural areas.⁵

14% of all deaths in Kerala are caused by coronary heart disease. In Kerala, the prevalence of lifestyle diseases like diabetes, heart disease, high blood pressure and obesity is high and it results in very high mortality and morbidity from malignant heart disease. In Kerala mortality rates for coronary artery disease, per 100,000 are 382 for men and also higher than other industrialized countries.⁶

Myocardial infarction results in enormous burden of increased mortality and morbidity by threatening the patient's stability, security, adaptability, belief and assumptions. After MI, many patients led miserable unproductive lives, they were frightened to return to work and unnecessarily become cardiac invalids. Recognizing the importance of patients to return to 'normal', cardiac rehabilitation has

emerged as a part of total patient care. It is increasingly being recognized that post-infarct care of life is more effective only if delivered with proper rehabilitation backup to enhance the speed of recovery and quality of life.

MATERIALS AND METHODS

A quantitative research approach was used to conduct the study. The present study adopted a descriptive design to assess the knowledge and attitude regarding cardiac rehabilitation among patients with myocardial infarction. Socio-demographic variables include age, gender, educational qualification, occupation, marital status, food habit, type of family, religion, monthly income, family history of heart disease and previous information regarding cardiac rehabilitation. The setting chosen for the present study was the cardiology outpatient department of Sree Gokulam Medical College and Research Foundation, Venjaramoodu. It is a 750-bedded, multispecialty hospital with all general departments and super specialty with twenty-four hours casualty and critical care units. This is an educational institution cum research centre. This hospital was selected for the study due to sample availability coupled with the investigators' familiarity and easy access to the hospital. Population of the present study included the patients with myocardial infarction. Sample size was 115. A structured knowledge questionnaire was used to assess the knowledge regarding cardiac rehabilitation and an attitude scale to assess the attitude regarding cardiac rehabilitation among patients with myocardial infarction. The tool was developed by the investigator based on objectives after extensive search of literature. The tool was finalized after departmental discussion and consultation with experts.

RESULTS

Socio-demographic Data Of Subjects

- The findings of the present study revealed that majority 44.3% of subjects belonged to the age group of 60-69 years and majority 53.9% were males and 46.1% were females.
- According to religion 47.8% of subjects were Hindus, 32.2% were Christians and 20% were Muslims.
- According to educational qualification 37.3% of the subjects were having high school level of education, those with education up to primary level were 27%, 20% were educated up to pre-degree level, only 15% of the subjects had degree level of education.
- In case of occupation majority (35.7%) of the subjects were unemployed, 25.2% were government employees, 20% were business persons and 19.1% were private employees.
- In case of marital status majority (94.8%) of subjects were married, 3.5% were widow/widower and 1.7% were single.
- According to the type of family 54.8% of subjects belong to joint family and 45.2% belong to nuclear family. In case of food habit majority (88.7%) of subjects follow mixed type of food habit and only 11.3% were vegetarians.
- In case of family history of heart disease 56.5% of subjects have no family history of heart disease and 43.5% of subjects have family

history of heart disease.

- According to previous knowledge regarding cardiac rehabilitation majority (60%) of subjects had previous information regarding cardiac rehabilitation and 40% did not have any previous information regarding cardiac rehabilitation.

Table 1: Knowledge Of Study Subjects Regarding Cardiac Rehabilitation

| Knowledge score | Frequency(f) | Percentage (%) |
|-----------------|--------------|----------------|
| Poor | 31 | 27 |
| Average | 61 | 53 |
| Good | 23 | 20 |
| Total | 115 | 100 |

Table 1 show that 53% of subjects had average knowledge regarding cardiac rehabilitation, 27% had poor knowledge and 20% had good knowledge regarding cardiac rehabilitation.

Distribution Of Subjects Based On Attitude Score Regarding Cardiac Rehabilitation

Data analysis reveals that 100% of subjects have positive attitude regarding cardiac rehabilitation. None of the samples were found to have negative attitude. This indicates their willingness to adopt cardiac rehabilitation techniques.

Association Between Knowledge Regarding Cardiac Rehabilitation And Selected Socio Demographic Variables

There was a significant association found between knowledge regarding cardiac rehabilitation and previous information of subjects regarding cardiac rehabilitation.

Correlation Between Knowledge And Attitude Regarding Cardiac Rehabilitation Among Patients With Myocardial Infarction

There was a significant positive correlation ($r=0.325$, $p<0.05$) exist between knowledge score and attitude score regarding cardiac rehabilitation among patients with myocardial infarction.

DISCUSSION

In the present study, 53% of subjects had average knowledge regarding cardiac rehabilitation, 27% had poor knowledge and 20% had good knowledge regarding cardiac rehabilitation. 100% of subjects have positive attitude regarding cardiac rehabilitation. None of the sample was found to have negative attitude.

This findings are consistent with the findings of the study conducted by Senthil Kumar et al that, Out of 60 respondents, half of them 50% ($n=30$) have average knowledge and 46.67 % ($n=28$) have poor knowledge regarding cardiac rehabilitation. Only 03.33% ($n=2$) possess good knowledge regarding cardiac rehabilitation. Most of the respondents, 78.33% ($n=47$) have a positive attitude and 21.67% ($n=13$) have neutral attitude towards cardiac rehabilitation.

In the present study there is an association between knowledge regarding cardiac rehabilitation and previous information of subjects regarding cardiac rehabilitation. The other study (Senthil et al.,) showed that, age, educational qualification and economic status (Kruskal-Wallis: 8.289, 10.782 & 6.242) were found to be associated with knowledge regarding cardiac rehabilitation.

In the present study, there is a significant positive correlation exist between knowledge score and attitude score regarding cardiac rehabilitation among patients with myocardial infarction. The other study (Senthil et al.,) showed that there was a positive correlation ($r=0.45$) between knowledge and attitude regarding cardiac rehabilitation.

REFERENCES

1. Alsén P, Brink E, Persson L-O, Brändström Y, Karlson BW. Illness perceptions after myocardial infarction: relations to fatigue, emotional distress, and health-related quality of life. *J Cardiovasc Nurs.* 2010 Apr;25(2):E1-10.
2. Black J, Hawks JH. *Medical-Surgical Nursing: Clinical Management for Positive Outcomes*, 7th Edition. St. Louis, Mo.: Saunders;2004. 1701 p.
3. Moser, Riegel; cardiac nursing: saunders Elsevier;pg 1231-33
4. Sister Nancy. A reference manual for nurses on coronary care nursing. Chapter VII., page no.135
5. WHO. Global status report on non-communicable diseases 2010. Geneva: World Health Organization; 2011(updated March 2013).
6. R.Gupta. Recent trends in coronary heart disease epidemiology in India; *Indian Heart J.* 2008 Mar-Apr;60(2 suppl B):B4-18
7. Potter PA, Perry AG. *Fundamental of nursing, concept process in practice.* 3rd ed. St. Louis: Mosby Publishers; 1993.p. 198-203.
8. Swati C Kurane, Pravin Dani, Chandras Kurane; Knowledge and Practices Regarding

Cardiac Rehabilitation among Patients in Selected Hospitals in a View to Develop Video Assisted Educational Module; *International Journal of Science and Research (IJSR)*, Volume 5 Issue 12, December 2016,492-498.

9. Brink E, Brändström Y, Cliffordsson C, Herlitz J, Karlson BW. Illness consequences after myocardial infarction: problems with physical functioning and return to work. *J Adv Nurs.* 2008 Dec;64(6):587-94.
10. Senthil Kumar, Rincymol Mathew. Knowledge and attitude toward cardiac rehabilitation among patients with coronary artery disease[Internet]. Available from: <https://www.nepjol.info/index.php/NJE/article/download/10176/8>.