

Effectiveness of Transitional Care Model on Quality of Life Among Patients with Myocardial Infarction Admitted in Government Head Quarters Hospital, Erode. Tamilnadu

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ABSTRACT:

Myocardial infarction (MI), colloquially known as "heart attack," is caused by decreased or complete cessation of blood flow to a portion of the myocardium. To determine the effectiveness of transitional care model on quality of life among patients with myocardial infarction. Pre- experimental design, where one group pretest and post-test design were used for this study. The study was conducted in Government headquarters hospital, Erode. 15 patients with myocardial infarction who are fulfilling the inclusion criteria were selected by purposive sampling technique. The study was conducted with health education on transitional care model on quality of life once a day for 7 days. WHO QOL tool was used to assess the quality of life. Pretest mean score was (52.40±8.89), which is 70% where as in post-test mean score was (45.93±5.91) which is 61%, showing the difference of 9 the paired 't' value was 2.59, when compared to table values (0.05) it was high. Significant association was found between transitional care model on quality of life and history of smoking. The nursing intervention was highly effective on transitional care model on quality of life among patients with myocardial infarction.

Key words: Transitional care model, quality of life, patients with myocardial infarction.

INTRODUCTION:

Myocardial infarction may be "silent," and go undetected, or it could be a catastrophic event leading to hemodynamic deterioration and sudden death. MI is the main cause of human death, globally. Although the global rate of MI-associated mortality was totally decreased, the incidence of heart failure (HF) is at a high level. The mortality and morbidity rates are high in MI-related HF. HF induces detrimental impacts on the healthcare systems of the United States, affecting 6 million individuals, 300,000 deaths per year, and approximately \$40 billion in costs. Also, the economic impact of MI is at a high rate. In

2010, more than 1.1 million hospitalizations following MI attacks were reported in the United States with an estimated direct cost of \$450 billion. Body weakness is a common complication in cardiovascular diseases and is also a common syndrome among the elderly causing weight loss, fatigue, physical manipulation, decreased walking speed, and low body activity. Various published articles represented a general increase in the prevalence of cardiovascular risk factors (especially diabetes, cholesterol and obesity, and smoking). In MI patients < 55years, smoking was found a unique cardiovascular risk factor in 80% of cases. **Mishra J, et, al. 2022**

Transitional care Model (TCM) is a model of care that helps patients and their families adjust to different levels of care, such as moving from hospital to home care. TCM includes pre-discharge and post-discharge interventions, which include proper education and effective communication of instruction, medication explanation, and post-discharge follow-up to assess self-management. Transitional care model focuses on decreasing hospitalizations and readmissions for vulnerable patients. It can be classified into telemonitoring, home visits, outpatient clinic intervention, structured telephone support, and educational interventions. **Higgins JPT, et. Al. 2022.**

Health-related quality of life is used to understand the impact of chronic disease on patients' wellbeing. Even though the survival rate from Myocardial infarction has significantly increased due to the use of most up-to-date management modalities over the last few decades yet, these patients frequently experience negative physiological, psychological problems and a disrupted daily life. Myocardial infarction (MI) is one of the leading causes of death worldwide. The life-threatening nature of the disease, the need for long-term lifestyle changes, and medical regimens after MI often result in reduced health-related quality of life (HRQOL) among patients. **Helen LamesginEndalew 2021.**

STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of transitional care model on Quality of life among patients with MI in Government Headquarters Hospital, Erode, Tamilnadu”.

OBJECTIVES:

1. Assess the level of Quality of life among patients with MI before and after Transitional care model.
2. Determine the effectiveness of transitional care model on Quality of life among patients with MI.
3. Find out the association between the post-test score of Quality of life among patients with MI

Materials and Methods.

Pre- Experimental design – one group pretest and post-test design were used. The aim of the study was to evaluate the effectiveness of transitional care model on quality of life among patients with MI. The present study was conducted in Government Head Quarters, Erode, which is 20 km distance from Dhanvantri College of nursing. The population for this present study was patients with MI, age group between 30-60 years, the patient who had the previous complaints of acute myocardial infarction, patients who were available during the period of data collection, who were willing to participate and who knows Tamil. After obtaining informed consent, the samples were selected for this study. The total sample size for was 15 patients with MI, non- probability purposive sampling technique were used to select the patients with myocardial infarction. Researcher excluded patients who had Underwent CABG surgery, who were critically ill. Statistical methods were used for this study. Frequency and percentage distribution, mean, paired t test values and chi-square test were used to estimate the association between post test score of quality of life among patients with MI with their selected demographic variables.

Tools used for the study

There are 2 sections of tools were used. They are

1. **Section A:** It consists of demographic variables like age in years, duration of illness, Number of previous hospitalizations for MI, Family history of MI, History of smoking, Co-morbid condition.
2. **Section B:** The WHO Quality of Life tool – It is used to assess the level of quality of life among patients with myocardial infarction. This scale consists of 15 questions. Each question consists of 5 scores the total score was 75. Based on the scores the level of quality-of-life graded into 3 categories. They are “Good”, “Normal”, “Average” .

Table 1. Scoring procedure for Quality of life.

LEVEL OF QUALITY OF LIFE -SCORING	SCORING	PERCENTAGE
Good	51-75	67%-100%
Normal	26-50	34%-66%
Average	1-25	0%-33%

Ethical Consideration.

1. Written permission was obtained from Chairman, and Principal of Dhanvantri College of Nursing at Namakkal District.
2. Written permission was obtained from medical superintendent at Government headquarters hospital, Erode.
3. Prior informed consent was obtained from patients with MI.

Validity and Reliability.

The content validity of the demographic variables and WHO quality of life tool were validated in consultation with guide and field of experts. The experts are cardiologist, statistician and Nursing specialist. The tool was modified according to suggestions and recommendations of the experts.

Period of Data Collection

The investigator collected the data from Patients with MI for the period of one month from 3.5.2024 to 10.5.2024.

Pre- test.

Pre-test was conducted by using WHO Quality of Life tool regarding quality of life among patients with myocardial infarction. In an average daily 2-3 patients were provided health education.

Implementation of Transitional care model.

Immediately after pre-test Transitional care model (with use of Flash cards and posters) provided to the patient for 30 minutes once a day for 7 days.

Post Test

Post-test was conducted on 8th day with use of WHO quality-of-life tool.

DEVELOPMENT OF THE TOOL

Section A: Description of sample characteristics according to their demographic variables.

Section B: To assess the level of Quality of life among patients with Myocardial infarction

Section C: To evaluate the effectiveness of Transitional care model on Quality of life among patients with Myocardial infarction.

- Comparison of Mean, Standard deviation and mean percentage of Transitional care model on

Quality of life among patients with MI.

- Paired ‘t’ test score was analyzed to assess the effectiveness of Transitional Care model on Quality of life among patients with MI.
- **Section D:** To find out association between post-tests score of Transitional care model on quality of life among patients with MI with their selected demographic variables.
- Chi-square was calculated to find out the association between the post test score of Quality of life among patients with MI with their selected demographic variables.

RESULTS

SECTION A

Description of sample characteristics

Section A: Description of sample characteristics according to their demographic variables.

Table: 2 Frequency and percentage distribution among patients with MI according to their demographic variables. (N = 15.)

Sl.NO	Demographic variables	Frequency(n)	Percentage (%)
1	Age in years		
	a) 30 -40 years	3	20
	b) 41 – 50 years	3	20
	c) 51- 60 years	6	40
	Above 60 years	3	20
2	Gender		
	Male	10	67
	Female	5	33
3	Duration of illness		
	Less than 1year	2	13
	1 -3 years	5	33
	4-6 years	7	47
	Above 7 years	1	7
4	Number of previous hospitalizations for MI patients		
	1-3 times	7	47
	4-6 times	8	53
5	Family history of MI		
	yes	11	73
	no	4	27
6	History of smoking		
	Do not smoke	5	33
	≤ 1 pocket/day	2	14
	2-3 pockets/day	5	33
	> 3 pockets/day	3	20
7	Co-Morbid condition		

Hypertension	9	60
Diabetes mellitus	3	20
Renal failure	-	-
Thyroid toxicosis	3	20

Table: 3 Frequency and percentage distribution of the pre-test and post test score of transitional care model on quality of life among patients with Myocardial Infarction

Transitional care model on quality of life	Pretest		Post test	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Good	2	13%	9	60%
Normal	3	20%	6	40%
Average	10	67%	-	-

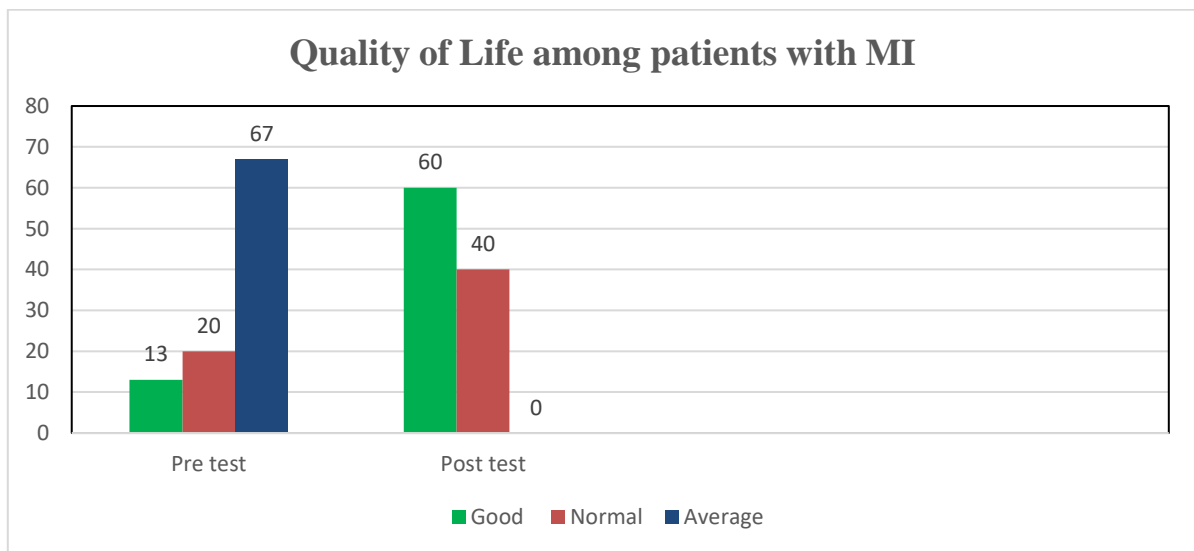


Table 4 Mean, Standard deviation and Mean percentage of Pretest and Post test scores of Transitional care model on quality of life among patients with Myocardial Infarction. (N=15)

Patients with MI	Sum	Transitional group						Difference %
		Pretest			Post test			
Quality of life								

Table 5. Paired 't' test value of Pre-test and Post test scores of Quality of life among patients with MI.

Patients with MI	't' test	Level of significant
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Quality of Life	2.59	P< 0.05 significant
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Paired ‘t’ test was calculated to analysis the difference in Pre and Post test scores on transitional care model on quality of life. The paired ‘t’ test value is 2.59 when compared with table values. So, it is concluded that, there is significance in transitional care model on quality of life among patients with Myocardial Infarction.

Table 6. Chi-square value was calculated to find out the association between the Post test score of Quality of life among patients with MI with their selected demographic variables.

Demographic variables	DF	Chi-square value	TV	Level of significance
Age	6	3.9	3.14	P> 0.05, Not Significant
Gender	2	2.73	6.97	P> 0.05, Not Significant
Duration of illness	6	1.48	3.14	P> 0.05, Not Significant
Number of previous hospitalizations for MI	3	0.7	5.99	P> 0.05, Not significant
Family history of MI	2	0.67	5.99	P> 0.05, Not significant
History of smoking	6	7.8	3.14	P< 0.05, significant
Co-morbid condition	6	1.35	3.14	P> 0.05 Not significant

DISCUSSIONS.

This study was to assess the effectiveness of Transitional Care Model on Quality of life among patients with Myocardial Infarction in Government Head Quarters Hospital, Erode. Pretest score showed that 67% of patients were in **Average QOL** and 20% were **in Normal** and 13 % were **Good**. Post test score showed that (60%) of patients had **Good QOL** and only (40%) of them were **Normal**. **This shows that the transitional care model was effective.**

In pretest the mean score was (52.40±8.9) which is (69.8 %), whereas in posttest the mean score was (45.93±5.91) which is (61.2 %) in area. In patients with MI the paired t value was (2.59), when compared to table value, it was high. Chi- square was calculated to find out the association between the post test score of transitional care model among quality-of-life patient with Myocardial Infarction with their demographic variables (Age in years , Gender , Duration of illness , Number of previous hospitalizations for MI, Family history of Myocardial Infarction, History of smoking and co-morbid condition). Among the demographic variables, duration of illness was significant.

CONCLUSION

Based on the findings of the study the following conclusions were drawn. The study findings revealed that providing of Transitional care model were highly significant to improve Quality of life among patients with MI. There was statistically significant evidence on improvement of Quality of life among patients with MI.

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