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IP Journal of Paediatrics and Nursing Science

Journal homepage: https://www.jpns.in/

Original Research Article

The effect of individualized education on stylistic changesamong M.I. patients

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ARTICLE INFO

Article history:
Received 23-11-2022
Accepted 20-12-2022
Available online 07-02-2023

Keywords:
M.I.: Myocardial Infraction
CHD: Coronary Heart disease
BMI: Body Mass Index

ABSTRACT

Introduction: Life is a precious, Lord -given gift to mankind. Pulse rate represents life & lack of it pronounces death. The heart pumps blood throughout the body from conception till the death. A heart is essential to sustain life.

Materials and Methods: A true experimental, posttest research design was adopted. A sample of 60 post M I patients were selected by using non-probability convenient sampling technique, 30 in each experimental and control group.

Result: The mean knowledge level score and standard deviation of the experimental group was 21.86 (SD=2.20) higher than mean (10.57) and standard deviation (SD=3.49) of the control group and „t“ value 14.72.Two mean „t“ for independent samples showed a significant difference in the post test knowledge score on stylistic changesamong experimental and control group at 0.05 level. This finding indicated that the individualized education was highly effective.

Conclusion: Individualized education on the stylistic changeswas highly effective, eminent and cost-effective intervention for improving the knowledge and creating awareness among post myocardial infarction patients about the stylistic changesand helped them to adopt a healthy lifestyle post myocardial infarction.

1. Introduction

Myocardial Infarction (MI) develops when the myocardium is deprived of oxygen. It is a dynamic process in which the blood supply to more than one area of the heart is significantly reduced as a result of a blood supply shortage, which leads to necrosis or the death of myocardial tissues.[1] The development of CHD is caused by the constriction of the coronary artery that occurs when plaque builds up in its walls. The amount of oxygen-rich blood that is supplied to the heart muscle is reduced when fat deposits significantly in a coronary artery. Muscle tissue near starts to clot with blood, increasing the risk of a heart attack.[2]

Atherosclerosis is the term used to describe the plaque-formation process. The risk factors for atherosclerosis include elevated blood pressure, smoking, diabetes, or increased CHO.[3] White blood cells, lipid, ca level, and other chemicals accumulate on the endothelial as a result of their injury. Such events won't occur immediately. Forming takes a long time.[4]

In the majority of the globe, nobody is aware of the CHD risk factors. The most frequent causes of MI globally, affecting both males and females of all ages, are hypertensive, diabetic, aberrant lipids, smoking, abdominal obesity, alcohol use, psychosocial factors, irregular physical activity, and inadequate consumption of fruits and vegetables.[5]

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https://doi.org/10.18231/j.ijpns.2022.028

1.1. Need for the Study

The main risk factors leading to M.I. are smoking, hyper-lipidemia, obesity, sedentary lifestyles. A supportive education system to address knowledge acquisition, behaviour control, decision-making is definitely essential. Such an education system can guide and motivate cardiac patients to practice lifestyle changes.[6]

There is evidence that 88% of CHD patients have at least two lifestyle-related cardiovascular risk factors. If these lifestyle risk factors are not modified, the risk of recidivism and delayed recovery may increase.[7]

Nurse-delivered health education will help restore the optimal level of health for patients with M.I. which will prevent further attacks. The researcher recognized the importance of individualized education and was motivated to undertake this research. Patients may not be aware of styling changes following a myocardial infarction.[8] This prompted the researcher to prepare individualized training on stylistic changes, nutritional balance, appropriate physical activity, rest and sleep, safe sex, stress reduction, quitting tobacco and alcohol. Such an education will provide a basis for individual attention and will help lead a healthy life after a myocardial infarct.[9]

1.2. Statement of the problem

A Study to Assess the Effectiveness of Individualized Education on Stylistic changesamong Post Myocardial Infarction Patients in selected hospitals of Indore M.P.

2. Objectives

1. To assess the pre test score lifestyle practices of post myocardial infarction patients.
2. To assess the effectiveness of individualized education on lifestyle modification.
3. To associate the pre test knolwedhe score lifestyle practices with the selected demographic variables.

2.1. Hypothesis

1. H1**:** There will be a significant difference in the pre test knowledge score on stylistic changesamong experimental and control group.
2. H2: There will be a significant association between lifestyle practices and selected demographic variables

2.2. Assumptions

1. Myocardial infarction patients may not have adequate knowledge about stylistic changesafter the first attack.
2. Individualized education will help them adopt a healthy lifestyle.

3. Materials and Methods

3.1. Research approach

Quantitative research approach

3.2. Research design

True experimental, posttest.

3.3. Variables

1. *Independent variable:* Individualized education on lifestyle modification
2. *Dependent variable:* Knowledge level on stylistic changesamong post myocardial infarction patients
3. *Extraneous variables:* Information received from health care professionals, influence of family members, peer groups and media.

3.4. Setting of the Study

The study was conducted in the Convental Hospital, Indore.

3.5. Population

It comprised of all post myocardial infarction patients who fulfilled the inclusion criteria.

3.6. Sample size

The sample size was 60 samples.

3.7. Sampling technique

Non-probability convenient sampling technique.

3.8. Sampling criteria

3.8.1. Inclusion criteria

Patients who had their heart attack for the first time
Patients who were treated medically

3.8.2. Exclusion criteria

1. (a) M.I. patients who were advised for CABG.
   (b) M.I. patients who were haemodynamically unstable

4. Result

Table 1: Frequency distribution according to demographic variables n= 60

S. No.	Demographic data	Experimental		Control	
		(f)	(%)	(f)	(%)
1	Age				
	a) 30-39 yrs	4	13.3	2	6.7
	b) 40-49 yrs	10	33.3	7	23.3
	c) 50-59 yrs	7	23.3	8	26.7
	d) > 60 yrs	9	30.0	13	43.3
2	Gender				
	• a) Male	26	86.7	26	86.7
	• b) Female	4	13.3	4	13.3
3	Education status				
	a) Illiterate	2	6.7	3	10.0
	b) Primary	26	86.7	22	73.3
	c) graduate	2	6.6	5	16.7
	d) Postgraduate	0	0	0	0
4	Occupation				
	a) Unemployed	3	10.0	7	23.3
	b) Self-employed	18	60.0	12	40.0
	c) Govt Job	2	6.7	8	26.7
	d) Private Job	7	23.3	3	10.0
5	Religious				
	a) Hindu	25	83.33	29	96.7
	b) Christian	3	10	0	0
	c) Muslim	2	6.67	1	3.3
	d) Others	0	0	0	0
6	Marital Status				
	• a) Single	1	3.33	2	6.67
	• b) Married	28	93.34	24	80
	• c) Widow	1	3.33	4	13.33
	• d) Divorced	0	0	0	0
7	Type of Family				
	• a) Nuclear	24	80	20	66.67
	• b) Joint	6	20	10	33.33
8	Monthly Income per capita				
	a) <10,000	23	76.8	18	60
	b) Rs. 10,001 – 20,000	5	16.7	10	33.33
	c) Rs. 20,001 – 30,000	1	3.3	2	6.67
	d) Above Rs. 30,001	1	3.3	0	0
9	Family history				
	• a) Present	10	33.3	6	20
	• b) Absent	20	66.7	24	80
10.	Disease history				
	• a) Hypertension	3	10.0	4	13.33
	• b) Diabetes	5	16.7	7	23.33
	• c) Diabetes & hypertension	1	3.3	7	23.34
	• d) Others	2	6.66	0	0
	• e) None	19	63.34	12	40

Table 2: Frequency distribution according to activities of daily living according to the level of independence. n= 30

Sl. N o	Level of Independence	Scoring	Experimental group		Mean	SD
			Frequency (f)	Percentage (%)		
1	Independent	7-12	29	96.67		
2	Interdependent	1-6	1	3.33	11.76	1.09
3	Dependent	0	0	0		

Table 3: Frequency distribution according to lifestyle practices of the experimental group n= 30

Lifestyle practices	Scoring	f	%	Mean	SD
Poor	0-34	0	0		
Fair	35-54	5	16.67		
Good	55-69	20	66.66	62.3	9.67
Very Good	70-84	5	16.67		
Excellent	85-100	0	0		

Table 4: Frequency distribution according to level of knowledge on stylistic changes in experimental and control group n= 60

Sl. No	Level of knowledge	Experimental Group				Control Group			
		f	(%)	Mean	SD	f	(%)	Mean	SD
1	Inadequate knowledge	0	-	21.86	2.20	19	63.33%	10.57	3.49
2	Moderate knowledge	2	6.67%			11	36.67%		
3	Adequate knowledge	28	93.33%			0	-		

Table 5: Comparison of level of knowledge on stylistic changesin experimental and control group n= 60

Group	Mean	Mean difference	t"-value	df	Table value
Experimental group	21.86	11.3	14.72*	58	2.00
Control group	10.57				

df- degree of freedom*level of significance 0.05

Table 6: Association of lifestyle practices with selected demographic variables n=30

S. N o	Demographic variables	Lifestyle practices			Chi square value	Table value	Level of signif- icance
		Fair	Good	Very Good			
		Religion					
1	Hindu	2	20	3	χ^2=19.12 df=4	9.49	S
2	Christian	1	0	2			
3	Muslim	2	0	0			

Note: NS- Non significant S- Significant df- Degrees of freedom Level of significance- 0.05

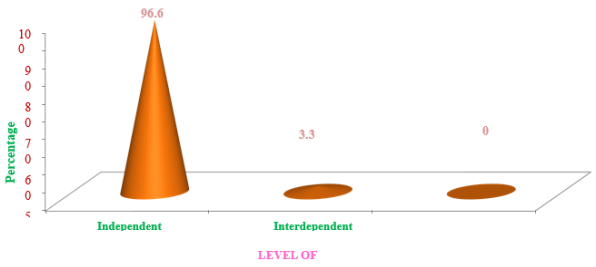

Fig. 1: Frequency distribution according to of activities of daily living

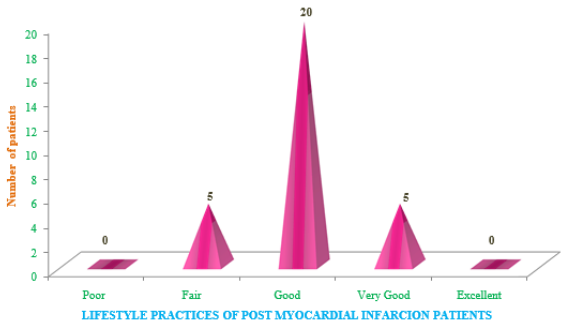

Fig. 2: Frequency distribution according to lifestyle practices of the experimental group

5. Summary

This incidence can be brought down enormously by their lifestyle practices. Since, the lifestyle practice of each individual varies it was decided to assess them individually and to teach about the lifestyle modifications.

6. Conclusion

The study concluded that individualized education on the stylistic changes was a highly effective, eminent and cost-effective intervention for improving the knowledge and created awareness among post M.I. patients and helped them to adopt a healthy lifestyle.

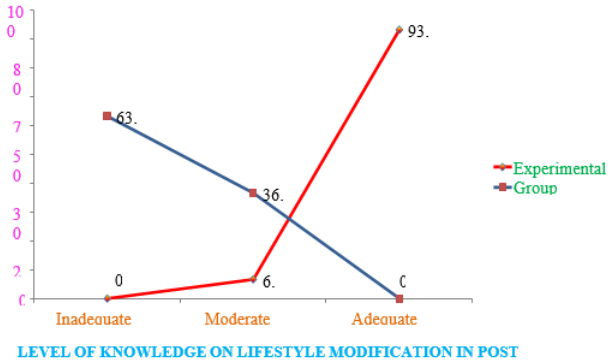

Fig. 3: Frequnecy distribution of level of knowledge on stylistic changesin experimental and control gro

7. Source of Funding

None.

8. Conflict of Interest

None.

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Cite this article: Rai DK, Kumar AV. The effect of individualized education on stylistic changesamong M.I. patients. *IP J Paediatr Nurs Sci* 2022;5(4):175-179.