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EFFECT OF SELF-CARE TRAINING ON CARDIAC SELF-EFFICACY AND QUALITY OF LIFE IN PATIENTS WITH MYOCARDIAL INFARCTION

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Abstract

Myocardial infarction (MI) poses a significant threat to individuals' lives, characterized by localized necrotic areas within the myocardium. Effective self-care plays a pivotal role in enhancing quality of life and self-efficacy among MI patients. This study aimed to assess the influence of self-care training on cardiac self-efficacy and quality of life in MI patients. Employing a quasi-experimental research design, the study was conducted in the cardiology department of the Specialized Medical Hospital at Mansoura University Hospital. A purposive sample of 120 adult patients participated in the study. Data collection tools included structured interview questionnaires, the Cardiac Self-Efficacy Scale, and the World Health Organization Quality of Life Questionnaire (WHOQOL-BREF). The results revealed a statistically significant difference between the study and control groups concerning the cardiac self-efficacy scale, with the study group demonstrating significant improvement (< 0.001). Furthermore, the quality of life of the study group exhibited significant enhancement post-implementation of the self-care program. In conclusion, the study underscores the notable improvement in cardiac self-efficacy and quality of life among MI patients following self-care training compared to the control group. Recommendations include ongoing patient education through diverse mediums such as audio-visual materials, courses, and diligent monitoring of patient outcomes.

Index Terms: Cardiac Self-Efficacy, Myocardial Infarction, Quality of Life, Self-Care.

INTRODUCTION

Myocardial infarction (MI), a cardiovascular disease resulting from inadequate blood flow to the heart or necrosis due to blockage of coronary arteries, constitutes a significant health concern. Within the spectrum of acute coronary syndrome (ACS), MI manifests as myocardial injury marked by elevated cardiac troponin levels in the context of acute ischemia. The irreversible consequences of MI include heart muscle injury and cell death, precipitated by blockages in coronary artery blood flow, often stemming from atherosclerosis—a condition characterized by the formation of fatty plaque deposits on arterial walls. The formation of a blood clot within the artery further obstructs blood flow following plaque rupture (Mostafa, Abd El-Megeed, & Ibraheim 2023). Self-care practices encompass a spectrum of behaviors aimed at halting or slowing illness progression (self-care maintenance), monitoring signs and symptoms (self-care monitoring), and managing

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exacerbations (self-care management). In the realm of chronic illness self-care theory, the development of the self-care of chronic illness inventory has provided a framework applicable to individuals managing various chronic diseases. Notably, adherence to self-care programs among MI patients correlates with improved quality of life, reduced mortality, morbidity, medical costs, and decreased risk of hospital readmission (Riegel etal. 2019). The enhancement of self-efficacy, a mutable characteristic, has been associated with numerous behaviors and lifestyle modifications conducive to better patient outcomes. Disease-specific self-efficacy, a crucial determinant of effective lifestyle changes in chronic illness management, includes cardiac self-efficacy (CSE)—the individual's belief in their capacity to comprehend, manage, and mitigate coronary heart disease (CHD), its progression, and lifestyle implications (Elzyen et al.,2023)

Health-related quality of life (HRQoL) represents a multidimensional construct encompassing mental, emotional, social, and physical well-being. As a key metric of population health, HRQoL provides insights into the impact of health status on overall quality of life, reflecting both physical and mental health dimensions (Jalilian et al., 2020). Nurses assume a pivotal role within the healthcare team in managing patients with coronary heart disease. Through effective counseling and self-management interventions, nurses contribute significantly to improving cardiovascular health status, fostering patient autonomy, and averting emergency recurrences. Patient education, a cornerstone of nursing practice, exerts a profound influence on patient self-efficacy, promoting independence and empowering patients in their self-care endeavors (Jiang et al., 2020).

Aim of the Study

This study aims to evaluate the effect of self-care training on cardiac self-efficacy and quality of life in patients with myocardial infarction.

METHOD

Design:

The study utilized a quasi-experimental design to evaluate the impact of the intervention on the target population.

Setting:

The research was conducted in the cardiology department of the Specialized Medical Hospital at Mansoura University Hospital, serving patients from Dakahlia governorate.

Participants:

A purposive sample of 120 adult patients of both sexes, aged between 20 to 60 years, with diverse educational backgrounds, attending the mentioned setting, was included.

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Tools of Data Collection:

Tool I: Structure Interview Questionnaire Sheet: Developed by the investigator, it collected demographic and health-related data, including past medical history and compliance to medications.

Tool II: Cardiac Self-Efficacy Scale: Adapted from Sullivan et al. (1998), this scale comprised 13 items measuring two factors: maintaining function (SEMF) and controlling symptoms (SECS), using a 5-point Likert scale.

Tool III: World Health Organization Quality of Life Questionnaire (WHOQOL-BREF): Used to assess quality of life in four domains—physical health, psychological health, social relationships, and environmental aspects—over the past two weeks.

Scoring System

Scoring system helps to contextualize the interpretation of the quality-of-life scores obtained from the study participants. This scoring system categorizes quality of life into three levels: high, moderate, and low, based on the total score obtained from the questionnaire.

- **High quality of life**: Scores ranging from 104 to 130 (representing 75% to 100% of the total possible score) indicate a high level of quality of life. Individuals falling within this range are likely experiencing a good overall quality of life.
- **Moderate quality of life**: Scores ranging from 78 to less than 104 (representing 50% to less than 75% of the total possible score) indicate a moderate level of quality of life. Individuals falling within this range may have some aspects of their quality of life that could be improved but are generally functioning adequately. **-Low quality of life**: Scores ranging from 26 to less than 78 (representing 0% to less than 50% of the total possible score) indicate a low level of quality of life. Individuals falling within this range may be experiencing significant challenges and limitations in various aspects of their life. Understanding these categories allows for a more nuanced interpretation of the quality-of-life scores obtained from the study participants, providing valuable insights into their overall well-being and level of functioning.

Validity:

Content validity was assessed by a panel of seven experts from diverse academic backgrounds. The experts evaluated the tools for appropriateness, relevance, correctness, and clarity, providing feedback on the format layout, consistency, and scoring system.

Reliability:

Reliability was assessed using Cronbach's alpha test. The Arabic version of Tool II demonstrated a reliability score of 0.74, indicating acceptable internal consistency. Tool

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III exhibited reliability scores ranging from 0.84 to 0.93, demonstrating good internal consistency across its domains.

Pilot Study:

A pilot study was conducted on 6 patients from each group to test the feasibility and applicability of the tools. These patients were excluded from the main study sample to prevent their data from influencing the final results.

Ethical Considerations:

Ethical approval was obtained from the Ethical Committee of the Faculty of Nursing, Mansoura University, and official approval was obtained from the hospital administrative authority. Participants were informed about the study's nature and purpose, and their participation was voluntary and confidential. Anonymity, privacy, safety, and confidentiality were assured throughout the study, and participants had the right to withdraw at any time. Participants provided informed consent before participating in the study. Overall, these measures ensure the rigor, reliability, and ethical conduct of the study, enhancing the validity of its findings and safeguarding the rights and well-being of the participants.

Statistical Analysis:

The statistical analysis of the data involved several steps to ensure the validity and reliability of the results:

Data Input and Analysis Software: The collected data were entered into a computer and analyzed using IBM SPSS software package version 20.0. This software allows for efficient data management and statistical analysis.

Assessment of Normality: Normality of the data distribution was assessed using several methods, including examining the standard deviation (less than 25% of the mean) and skewness (less than 1). Additionally, Q-Q plots and box plots were utilized to visually inspect the data distribution and ensure the absence of outliers.

Description of Data:

Qualitative Data: Descriptive statistics such as number and percent were used to summarize qualitative data, providing insights into the distribution of categorical variables.

Quantitative Data: Range (minimum and maximum), mean, and standard deviation were calculated to describe the central tendency and dispersion of quantitative variables. These statistics offer a comprehensive overview of the dataset's characteristics.

Significance Testing: The significance of the obtained results was assessed at the 5% level. This involved conducting appropriate statistical tests, such as t-tests, chi-square tests, or analysis of variance (ANOVA), depending on the nature of the data and research questions. Significance testing helps determine whether observed differences or associations are statistically meaningful or occurred by chance.

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Procedure:

Data Collection: Patients were interviewed to assess their information and self-care skills regarding myocardial infarction.

Development of Self-Care Training Program: The program was developed by the researcher, revised by supervisors, and presented in an instructional booklet in Arabic.

Intervention: The self-care program consisted of three educational sessions, delivered using various teaching media and tailored to patients' educational levels.

Implementation: The program was conducted for 3-4 patients at a time in the cardiology unit, supplemented with posters, PowerPoint presentations, and booklets. Regular telephone follow-ups were conducted for three months post-discharge.

Evaluation: The impact of the self-care program on self-care, cardiac self-efficacy, and quality of life was assessed by comparing results between control and study groups.

RESULT

Table 1: Distribution of Studied Groups According to their Demographic Characteristics (n=120)

	Study (n = 60)		Control (n = 60)		p
	No.	**%**	**No.**	**%**	
Age (years)					
20 > 30	0	0.0	0	0.0	0.273
30 > 40	0	0.0	0	0.0	
40 >50	33	55.0	27	45.0	
50 - 60	27	45.0	33	55.0	
Gender					
Male	43	71.7	43	71.7	1.000
Female	17	28.3	17	28.3	
Level of education					
Illiterate	26	43.3	25	41.7	^{MC}p= 0.981
Read & write	20	33.3	19	31.7	
Secondary	10	16.7	12	20.0	
University	4	6.7	4	6.7	
Occupation					
Working	41	68.3	39	65.0	0.699
Not working	19	31.7	21	35.0	
Marital status					
Married	49	81.7	52	86.7	^{MC}p= 0.760
Single	0	0.0	0	0.0	
Divorced	6	10.0	4	6.7	
Widowed	5	8.3	4	6.7	
Residence					
Rural	41	68.3	47	78.3	0.215
Urban	19	31.7	13	21.7	

χ^2: **Chi square test** MC: **Monte Carlo**

p: p value for comparing between the two studied groups

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Table (1): Seventy-one percent of the studied patients were males and most of them were married. Regarding the age, more than half of the study group (55.0%) was aged 40 > 50 whereas more than half of the control group (55.0%) was aged 50 - 60. As regard the level of education, almost half of the study and the control groups were illiterate. Two-third of the studied patients had an active work status (68.3% and 65.0%)**.**

Table 2: Distribution of Studied Groups According to their Health Relevant Data

	Study (n = 60)		Control (n = 60)		p
	No.	**%**	**No.**	**%**	
Duration of disease					
< 1 year	55	91.7	55	91.7	1.000
1-< 5 years	5	8.3	5	8.3	
5- < 10 years	0	0.0	0	0.0	
Do you feel the symptoms of the disease?					
Yes	**60**	**100.0**	**60**	**100.0**	–
No	0	0.0	0	0.0	
Previous hospitalization due to myocardial infarction (MI) in past 6 months					
Non	28	46.7	27	45.0	0.855
1 – 2	**32**	**53.3**	**33**	**55.0**	
3 – 4	0	0.0	0	0.0	
5 or more	0	0.0	0	0.0	
Duration of the previous hospitalization	**(n = 32)**		**(n = 33)**		
< One week	32	100.0	33	100.0	–
1< 2 weeks	0	0.0	0	0.0	
3-4 weeks	0	0.0	0	0.0	
> one month	0	0.0	0	0.0	
Family history of MI					
Yes	**30**	**50.0**	**28**	**46.7**	0.715
No	30	50.0	32	53.3	

χ^2: **Chi square test** FE**: Fisher Exact**

p: p value for comparing between the two studied groups.

Table (2): showed that the majority of the studied patients complained of MI for less than one year and all of them experienced myocardial infarction symptoms. More than half of the studied groups were hospitalized one to two times due to MI in the past six months. Half of the study participants (50.0%) had a family history of MI, while more than half of the control group (53.3%) had no family history of MI.

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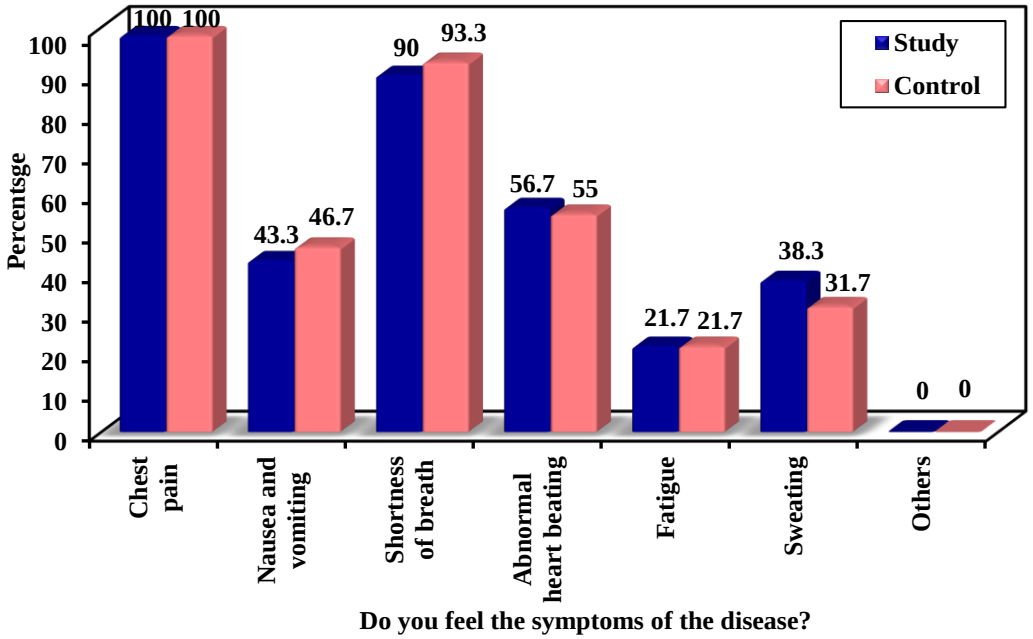

Figure 1: Comparison between the Studied Groups according to do you Feel the Symptoms of the Disease?

Figure (1): showed that all studied patients (100%) had chest pain while the majority of the studied patients complained of shortness of breath. More than half of the studied patients had abnormal heart beating.

Table 3: Cardiac Self-Efficacy of the Studied Groups throughout the Study Period (n = 60)

Cardiac self-efficacy	Study(n = 60)			Control(n = 60)			t (p_1)	t (p_2)	t (p_3)
	Before	After	Follow up	Before	After	Follow up			
Total Score (0 – 52)									
Min. – Max.	3.0 – 23.0	23.0 – 36.0	38.0 – 48.0	3.0 – 23.0	3.0 – 23.0	3.0 – 23.0			
Mean ± SD.	8.57 ± 5.48	30.47 ± 2.92	44.22 ± 2.12	8.58 ± 5.47	8.58 ± 5.47	8.63 ± 5.46			
Median	7.0	31.0	45.0	7.0	7.0	7.0	0.017 (0.987)	27.355* (<0.001*)	47.104* (<0.001*)
% Score									
Min. – Max.	5.77 – 44.23	44.23–69.23	73.08–92.31	5.77 – 44.23	5.77 – 44.23	5.77 – 44.23			
Mean ± SD.	16.47±10.53	58.59 ± 5.61	85.03 ± 4.07	16.51±10.51	16.51±10.51	16.60±10.49			
Median	13.46	59.62	86.54	13.46	13.46	13.46			

SD: **Standard deviation** **t: Student t-test**

p_1: p value for comparing between the two studied groups **before**

p_2: p value for comparing between the two studied groups **after**

p_3: p value for comparing between the two studied groups **follow up**

*: Statistically significant at $p \leq 0.05$

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Table (3): showed that there was a statistically significant difference between the studied groups in relation to the cardiac self-efficacy scale, as the study group shows significant improvement compared to the control group (< 0. 001).

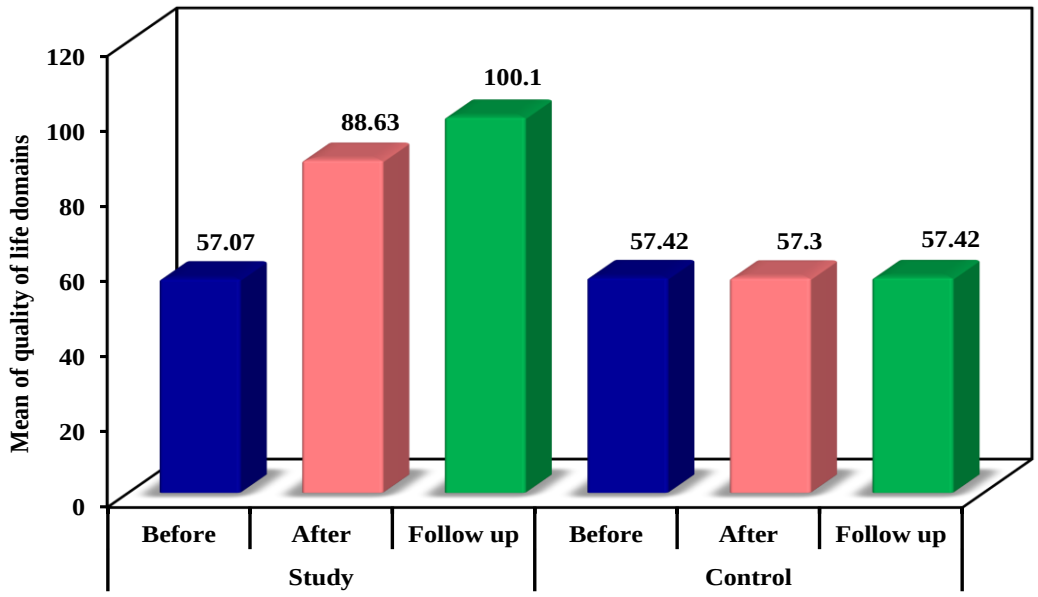

Figure 2: Overall quality of life between the Studied Groups during the Study Period (n = 60)

Figure (2): there was a statistically significantly higher total quality of life score at follow up time point > post-training time point > baseline (pre- training) time point.

Table 4: Correlation between Self-efficacy and Quality of Life

		Study (n = 60)			Control (n = 60)		
		Before	After	Follow up	Before	After	Follow up
Self-efficacy vs. Quality of Life	r	0.738*	0.454*	0.261*	0.867*	0.867*	0.867*
	p	<0.001*	<0.001*	0.044*	<0.001*	<0.001*	<0.001*

r: Pearson coefficient

*: Statistically significant at p ≤ 0.05

N.B: **VS**: versus

Table (4): demonstrates the Correlation between self-efficacy and quality of life from baseline to the 3rd month. Concerning the study group, the findings of the present study revealed that there was a positive correlation between self-efficacy and quality of life (P = 0.001, 0.001, and 0.044). Moreover, there was a positive correlation for the control group regarding self-efficacy and quality of life before, after and follow up of implementing the program (P = 0.001).

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Table 5: Relation between Cardiac Self-Efficacy and Demographic Characteristics in Studied Groups (n = 60)

Socio-demographic characteristics	% Score for Cardiac self-efficacy scale		
	Before	After	Follow up
	Mean ± SD.	Mean ± SD.	Mean ± SD.
Age (years)			
20 > 30	–	–	–
30 > 40	–	–	–
40 >50	15.15 ± 8.11	57.93 ± 5.88	85.14 ± 4.62
50 - 60	18.09 ± 12.87	59.40 ± 5.26	84.90 ± 3.36
t (p)	1.031 (0.308)	1.013 (0.315)	0.225 (0.823)
Gender			
Male	18.52 ± 11.74	59.39 ± 5.24	84.93 ± 4.26
Female	11.31 ± 2.79	56.56 ± 6.16	85.29 ± 3.66
t (p)	3.764* (0.001*)	1.792 (0.078)	0.311 (0.757)
Level of education			
Illiterate	12.50 ± 3.89	58.88 ± 5.30	85.43 ± 4.52
Read & write	14.04 ± 8.42	57.21 ± 6.89	84.42 ± 4.27
Secondary	23.65 ± 15.01	59.23 ± 4.03	84.81 ± 3.07
University	36.54 ± 6.66	62.02 ± 2.42	86.06 ± 2.42
F (p)	12.754* (<0.001*)	0.963 (0.417)	0.315 (0.814)
Occupation			
Working	18.48 ± 12.10	58.68 ± 5.79	84.99 ± 3.70
Not working	12.15 ± 3.01	58.40 ± 5.37	85.12 ± 4.88
t (p)	3.148* (0.003*)	0.176 (0.861)	0.115 (0.909)
Marital status			
Married	17.66 ± 11.19	59.07 ± 5.57	84.81 ± 4.08
Single	–	–	–
Divorced	13.14 ± 4.29	53.85 ± 4.39	85.90 ± 4.33
Widowed	8.85 ± 1.72	59.62 ± 5.61	86.15 ± 4.17
F (p)	1.988 (0.146)	2.525 (0.089)	0.389 (0.679)
Residence			
Rural	16.84 ± 11.05	59.19 ± 5.22	84.62 ± 4.24
Urban	15.69 ± 9.56	57.29 ± 6.33	85.93 ± 3.63
t (p)	0.391 (0.697)	1.228 (0.224)	1.169 (0.247)

SD: **Standard deviation** **t: Student t-test** **F**: **F for One way ANOVA test**

*: Statistically significant at p ≤ 0.05

Table (5): showed that there was a statistically significant association between study groups' gender, level of education, occupation and their cardiac self-efficacy score before program implementation. However, after program implementation (immediately and after three months), there was no statistically significant association between the cardiac self-efficacy score and demographic characteristics for the study groups.

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Table 6: Relation between Quality of Life and Demographic Characteristics in Studied Groups (n = 60)

Socio-demographic characteristics	% Score for Quality of Life		
	Before	After	Follow up
	Mean ± SD.	Mean ± SD.	Mean ± SD.
Age (years)			
20 > 30	–	–	–
30 > 40	–	–	–
40 >50	29.69 ± 8.21	59.91 ± 4.73	70.83 ± 2.99
50 - 60	30.09 ± 11.33	60.61 ± 3.14	71.65 ± 2.49
t (p)	0.159 (0.874)	0.664 (0.509)	1.136 (0.261)
Gender			
Male	32.67 ± 9.32	60.78 ± 3.90	71.38 ± 2.91
Female	22.79 ± 6.43	58.82 ± 4.29	70.76 ± 2.45
t (p)	3.999* (<0.001*)	1.701 (0.094)	0.774 (0.442)
Level of education			
Illiterate	24.85 ± 7.65	60.32 ± 4.61	71.34 ± 2.64
Read & write	29.66 ± 3.49	59.09 ± 4.20	71.01 ± 2.96
Secondary	36.44 ± 12.88	61.25 ± 2.18	70.0 ± 2.47
University	47.12 ± 3.33	62.74 ± 1.64	74.28 ± 1.64
F (p)	13.200* (<0.001*)	1.260 (0.297)	2.474 (0.071)
Occupation			
Working	32.74 ± 9.54	60.30 ± 3.85	71.15 ± 2.80
Not working	23.68 ± 6.63	60.07 ± 4.64	71.31 ± 2.82
t (p)	3.732* (<0.001*)	0.197 (0.845)	0.195 (0.846)
Marital status			
Married	31.34 ± 8.71	60.26 ± 3.95	71.29 ± 3.02
Single	–	–	–
Divorced	25.96 ± 14.67	60.90 ± 6.04	70.83 ± 1.45
Widowed	20.19 ± 5.27	59.04 ± 3.09	70.77 ± 1.46
F (p)	3.926* (0.025*)	0.289 (0.750)	0.134 (0.875)
Residence			
Rural	28.19 ± 10.21	60.53 ± 3.55	71.32 ± 2.66
Urban	33.50 ± 7.30	59.56 ± 5.07	70.95 ± 3.10
t (p)	2.035* (0.046*)	0.851 (0.398)	0.471 (0.639)

SD: **Standard deviation** **t: Student t-test** **F**: **F for One way ANOVA test**

*: Statistically significant at p ≤ 0.05

Table (6): showed that there was a statistically significant association between study groups' gender, level of education, occupation and their quality-of-life score before program implementation. However, after program implementation (immediately and after three months), there was no statistically significant association between the quality-of-life score and demographic characteristics for the study groups.

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DISCUSSION

Myocardial infarction (MI) remains a significant global health concern, imposing substantial burdens on individuals, families, healthcare systems, and economies. Improvements in MI management are crucial for enhancing patient outcomes and quality of life (Matsuura, Moribayashi, & Kaikita, 2022). Patients with cardiovascular disease (CVD) often lack confidence in self-care, leading to neglect in managing their condition. However, self-care is pivotal in managing risk factors and improving quality of life for CVD patients (Rad et al., 2021). Poor self-care practices contribute to frequent readmissions, increasing costs for patients and healthcare systems, particularly evident in developing countries (Khodaveisi, Amini, & Tapak, 2022).

The study found that most of the patients studied were male, consistent with findings from El-Moselhy et al. (2018), Shajrawi et al. (2021), and Mohamed, Soliman, & Maaty (2020). This gender distribution might be attributed to the higher levels of stress and responsibility experienced by males in their lives, as well as the higher prevalence of smoking among them. Interestingly, Elderiny and colleagues (2017) reported a different pattern, with a majority of female participants in their study. This discrepancy could be due to various factors, such as differences in sample selection or the specific population being studied.

The observation that the majority of the studied patients were employed suggests a potential link between occupation and myocardial infarction, possibly due to the stress, irritability, and anxiety associated with routine work. This finding is consistent with the results of Hebeshy et al., (2022) who similarly found a significant proportion of employed patients in their study. The routine stressors of work life may indeed contribute to the development of cardiovascular issues like myocardial infarction.

The majority of patients in both groups fell within the age range of 40 to less than 60 years, which corresponds to a higher risk of myocardial infarction due to age-related changes in the cardiovascular system. This finding aligns with the results of Elkashef et al., (2022) who similarly observed that half of their studied patients were aged 50 years or older. Additionally, it was noted that most of the studied patients were married, consistent with findings from the study by Endalew et al. (2021). This correlation between marriage and myocardial infarction risk may be attributed to the constant stress and social roles associated with marriage, as married individuals are often more prone to developing heart disease compared to single individuals.

The discrepancy in education levels among the studied patient populations highlights the variability that can exist across different studies. In the present study, nearly half of the patients were illiterate. However, Mohamed et al. (2022) found that more than half of their study group had primary education, indicating a different educational profile among their participants. Similarly, Elderiny et al. (2017) observed that secondary education was predominant among their study group, with university education representing the minority. These differences may stem from various factors such as regional demographics, socioeconomic status, and the specific characteristics of the study populations.

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The discrepancy in the duration of myocardial infarction (MI) among the studied patient populations highlights the variability in disease progression and treatment duration observed across different studies. In the mentioned study, most patients suffered from MI for less than one year, consistent with Elkashef et al. (2022) who noted that slightly more than half of their patients received treatment for less than a year. However, Chow et al. (2019) reported a different trend, indicating that the majority of their studied patients received treatment for more than two years, suggesting a longer duration of management for their condition. Similarly, Mohamed et al. (2020) summarized that nearly half of their study sample had experienced MI for one to less than five years, representing a broader range of disease duration. These variations could be influenced by factors such as differences in healthcare systems, access to treatment, disease awareness, and individual patient characteristics. Additionally, variations in study populations and methodologies may also contribute to these differences in findings.

Concerning the patients' complaints, it was noticed that all patients in the studied groups complained of chest pain while the majority of the studied patients complained of shortness of breath. More than half of the studied patients had abnormal heart beating. These findings were supported by Ferry et al.(2019) who revealed that, chest pain was the most common presenting symptom of patients with myocardial infraction This comes consistent with the study of Sun et al. who observed that half of the studied patients had palpitations and irregular heartbeats (sun et al., 2022).

The significant improvement in cardiac self-efficacy mean scores post-intervention and at follow-up compared to the control group indicates the effectiveness of the educational program in enhancing patients' confidence in managing their cardiac health. This finding aligns with results from studies conducted by Dehkordi et al., (2021) Taha et al., (2017) and Turan and Canli (2020) all of which demonstrated significant improvements in patients' cardiac self-efficacy following educational interventions. These findings highlight the importance of providing structured educational programs to empower patients with the knowledge and skills needed to effectively manage their cardiac health. By enhancing patients' self-efficacy, healthcare providers can contribute to better adherence to treatment regimens, lifestyle modifications, and overall cardiovascular health outcomes.

Regarding quality of life, the statistically significant increase in total quality of life scores observed at follow-up, compared to both post-training and baseline, indicates a sustained improvement in patients' quality of life following the intervention. This finding from the study conducted by Dehkordi et al. (2021) underscores the positive impact of the intervention on enhancing various aspects of patients' well-being. Moreover, it is noteworthy that while the intervention group experienced an increase in quality of life during the follow-up period, the control group showed a decrease in quality of life. This contrast highlights the importance of structured interventions, such as educational programs or other forms of support, in promoting and maintaining patients' quality of life over time.

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The positive correlation between cardiac self-efficacy and quality of life supports the idea that individuals who feel more confident in managing their cardiac health tend to have better overall well-being. This finding aligns with the study conducted by Baradaranfard et al., (2019) which also highlighted a direct relationship between quality-of-life scores and cardiac self-efficacy. This suggests that interventions focused on enhancing patients' confidence in managing their cardiac health can lead to improvements in both clinical outcomes and overall quality of life.

Recognizing this connection between cardiac self-efficacy and quality of life is crucial for healthcare providers in designing comprehensive care plans that address both the physical and psychosocial aspects of cardiac health. By taking a holistic approach, healthcare professionals can better support patients in achieving optimal well-being while managing their cardiac conditions. Overall, the study underscores the importance of self-care training in improving cardiac self-efficacy and quality of life among MI patients. By addressing demographic factors and enhancing patients' confidence in managing their condition, healthcare providers can optimize patient outcomes and reduce the burden of MI on individuals and healthcare systems (Jalilian et al., 2020 & Mohamed, et al., 2020).

CONCLUSION

The study findings indicate a highly significant effect of the self-care training program on patients' cardiac self-efficacy and quality of life. By empowering patients with knowledge and skills related to self-care, they are better equipped to manage their condition and adapt to life with myocardial infarction.

RECOMMENDATION

Based on the results of the study, the following recommendations are suggested:

1. Provide adequate knowledge and skills about self-care to myocardial infarction (MI) patients to help them adapt to their disease. This may include educational programs, workshops, or counseling sessions.
2. Conduct further larger-scale studies to evaluate the effect of self-care training on cardiac self-efficacy and quality of life in patients with myocardial infarction. larger studies are needed to validate these findings and provide more robust evidence.
3. Overall, by implementing these recommendations, healthcare providers and researchers can contribute to improving the care and outcomes of patients with myocardial infarction, ultimately enhancing their quality of life and well-being.

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