

## Health-Related Quality of Life among Post Myocardial Infarction Patients

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### ABSTRACT

The physiological and psychological consequences of myocardial infarction affect the health-related quality of life. This study aimed to assess health-related quality of life among post-myocardial infarction patients at governmental hospitals in the Gaza Strip. The study utilized a descriptive, cross-sectional, analytical design. The sample of the study consisted of 162 post myocardial infarction patients selected by stratified random sampling method. For data collection, the researcher used a self-administered questionnaire of the World Health Organization Quality of Life short version. Statistical analysis included frequency, mean and percentage, as well as independent sample t-test and one-way ANOVA. The results indicated that the study participants have a moderate level of global quality of life ( $m = 2.94$ ; 58.8%) and moderate satisfaction with their global health ( $m = 3.01$ ; 60.2%). Moreover, the results indicated moderate physical health ( $m = 2.79$ ; 55.8%), moderate psychological health ( $m = 3.06$ ; 61.2%), moderate social relationships ( $m = 3.22$ ; 64.4%), moderate environmental health ( $m = 2.77$ ; 55.4%). Overall, the study participants rated their health-related quality of life as moderate level ( $m = 2.96$ ; 59.2%). The following factors were statistically significant determinants for lower quality of life: being 70 years and older ( $F = 5.342$ ,  $P = 0.000$ ), widowed participants ( $F = 4.135$ ,  $P$  value = 0.007), low income ( $F = 7.436$ ,  $P$  value = 0.001), and having other chronic diseases ( $F = 8.620$ ,  $P$  value = 0.000). Factors that were significantly associated with higher quality of life included university education ( $F = 4.850$ ,  $P$  value = 0.009), and working or employed ( $t = 3.483$ ,  $P$  value = 0.001). On the other hand, hospital, gender, family size, and smoking did not have a significant association with quality of life. The study concludes moderate level of quality of life and raised the need to develop strategies to improve quality of life.

Keywords: cardiovascular disease; health-related quality of life; myocardial infarction

### INTRODUCTION

Non-communicable diseases (NCD) are considered to be the main cause of global morbidity and mortality (Nascimento et al., 2018). The most important and well-known non-communicable disease was patients with cardiovascular disease (CVD), 30% of global mortality and 10% of the global disease burden associated with CVD (Barberi et al., 2018). Myocardial infarction (MI) is one of the most common cardiovascular diseases, and it is a major component of the burden of cardiovascular diseases. Myocardial infarction is defined as demonstration of myocardial cell necrosis due to significant and sustained ischemia (WHO, 2020). Myocardial infarction (MI) greatly impacts various aspects of a patient's life such as physical, psychological and social well-being (Akter et al., 2023)

Myocardial infarction is related to controllable and non-controllable risk factors. The study conducted by Mahmood et al. reported that diabetes (DM), high blood pressure (HTN), hypercholesterolemia, smoking, drinking alcohol, obesity, and sedentary lifestyle as risk factors for MI (Mahmood et al., 2014). Other identified risk factors are unhealthy diet, lack of exercise, loneliness and social isolation (Kim et al., 2018). Because of illness manifestations following MI, the health-related quality of life (HRQL) could be harmed. According to the WHO, HRQL is defined as "an individual's perception of his / her position in life in the context of the prevailing culture and beliefs and in relation to his / her goals / interests" (WHO, 2017). Center for Disease Control and Prevention (CDC) has defined HRQL as "an individual's or group's perceived physical and mental health over time" (CDC, 2000).

Consistent with the risk of MI, it negatively affects quality of life (QOL) in all its aspects due to the disabling and limiting nature of the disease, and due to its impact on daily life, it is difficult to control the complications of this disease physically, psychologically, socially. Therefore, they are unable to carry out their normal and daily activities, which they

were able to do before the illness (Whittaker et al., 2021). In addition, HRQL does not only depend on factors of the service provider, such as access to medical care, but there are also demographic and psychosocial factors such as age, gender, education level, income, social support, and severity of MI as well (Bahall et al., 2018). Eventually, the purpose of this study is assessing the HRQL among post MI patients at governmental hospitals in the Gaza Strip (GS).

**METHOD**

**Study Design**

The study is a descriptive analytical cross-sectional design to determine level of the HRQL of patients after MI.

**Study Setting**

This study was implemented by conducting an interview with the concerned patients in the cardiac outpatient clinic of four governmental hospitals that cover the five GS governorates, including Indonesian hospital, Shifa medical complex, Aqsa hospital, and Naser medical complex.

**Period of the Study**

Four months the study lasted, started immediately after it was approved in February 2021, followed by MOH approval and ethical approval for health research.

**Study Population**

The target population of this study included patients with MI who attend to cardiac OPD at governmental hospitals between November 1, 2020 and the end of January 2021. The total number of patients suffering from MI during this period was 473 patients.

**Sample and Sampling**

The consecutive sample procedure was used to select participants in the study, in which each governorate in the GS was assumed as strata, so there are five governorates in the GS, but there are four hospitals that include cardiac outpatient clinics.

Inclusion Criteria:

Patients who have had MI had been diagnosed by the cardiologist and discharge from hospital from two to twelve weeks and this period was selected according to previous literature review.

Exclusion criteria:

1. Patients suffered from mental disorders and physical disabilities accompanied with MI.
2. Patients who have had MI and discharge from hospital before two weeks or more than twelve weeks from the time of interview.

**Study Instruments**

This study used a self-report structure questionnaire to collect data. The researcher used questionnaire to measure the HRQL of post-MI patients with four aspects about their QOL in the last two weeks. (physical, psychological, social, and environmental). Research variables, including: Selected demographic and comorbidity variables.

Table 1. Criteria for Measurements of variables

Score	Cell length	Weighted percent	Interpretation
1	1.0 – 1.80	20% - 36%	Very low
2	1.81 – 2.60	>36% - 52%	Low
3	2.61 – 3.40	>52% - 68%	Moderate
4	3.41 – 4.20	>68% - 84%	Above moderate
5	4.21 – 5.0	>84% - 100%	High

**Data Collection**

A study was conducted after obtaining ethical and administrative approval. Researcher and data collectors used a self-report structure questionnaire to collect data. The average time for each questionnaire is between 10 and 15 minutes.

**Ethical Considerations**

Initially, the proposal was approved by the Islamic University, in particular the Nursing Research Council, for academic approval. After that the official letter of approval was received from the Islamic University and GS Helsinki Committee. In addition, it has also obtained administrative approval from the MOH. The consent of all participants was also obtained.

**Data Management and Data Analysis**

Researcher used the Statistical Package for Social Sciences (SPSS) to analyse data. The data (including numbers) has been descriptively analysed in the frequency table. The mean is used to represent the main feature of the data, namely the standard deviation (SD). In addition, percentages are used to determine the highest and lowest HRQL values. Logistic statistical tests, such as t-tests, are also used to check the main points and domains used in the questionnaire to determine the relationship between certain sociodemographic characteristics and HRQL. P value of 0.05 or less is considered to have a 95% confidence interval (CI), which is statistically significant.

**RESULTS**

The present study is asking about the level of HRQL among post MI at governmental hospitals in the GS, by use the questionnaire reports analysis tool.

From November 2020 to January 2021, 162 patients were contacted post MI, of whom 95 (58%) were males and 67 (41%) were females. They were distributed over five governorates of the GS, and they are as follows: 17 patients from the northern GS, 70 patients from the Gaza governorate, 13 patients from the middle governorate, and 62 patients from the southern governorates.

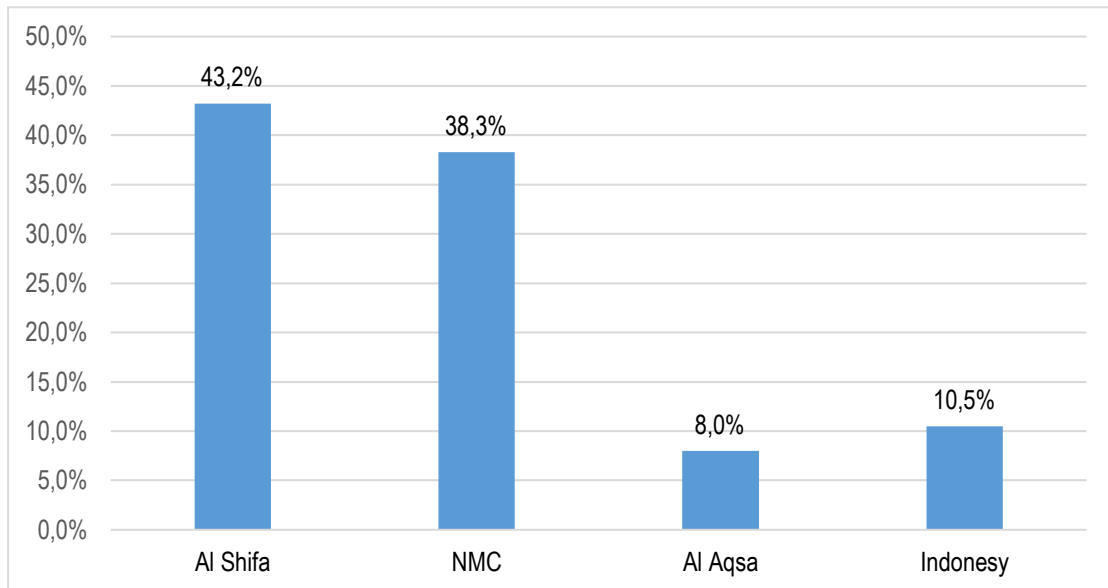


Figure 1. Distribution of Study Participants according to Hospital

Table 2. Sociodemographic Characteristics of Study Participants (n=162)

Variable	Number	Percentage (%)
<b>Age</b>		
Less than 40 years	14	8.6
40 – 49 years	47	29.0
50 – 59 years	42	25.9
60 – 69 years	41	25.3
70 years and above	18	11.1
Total	162	100.0
Mean age= 54.64 years SD= 11.983 years		
<b>Marital status</b>		
Married	115	71.0
Single	7	4.3
Divorced	18	11.1
Widowed	22	13.6
Total	162	100.0
<b>Family size</b>		
1 – 3 persons	32	19.8
4 – 6 persons	75	46.3
7 – 9 persons	41	25.3
10 persons and more	14	8.6
Total	162	100.0
<b>Level of education</b>		
Prep school and less	87	53.7
Secondary school	41	25.3
University	34	21.0
Total	162	100.0

Table 2 noticed that the distribution of participants by age group, marital status, family size, and education level. The researcher pointed out that the mean age of the study participants was  $54.64 \pm 11.983$  years old, most of the study participants were 47 (29.0%), they belonged to the 40-49 age group, and 42 (25.9%) belonged to the age group 50 to 59 years old. The lowest representative 14 (8.6%) in sample, they belonged to the group less than 40 years old. In addition, more than half of the participants 115 (71%) were married, 75 (46.3%) had 4 to 6 children, and 87 (53.7%) have a prep education or lower.

**Quality of life and health**

Table 3. Overall QoL and General Health (n=162)

How do you evaluate the quality of your life?	Very bad	Bad	Some how	Good	Very good	Mean	SD	%
	5.6	21.0	48.1	24.1	1.2			
How satisfied are you with your health?	Absolutely unsatisfied	Unsatisfied	Neutral	Satisfied	Very satisfied	Mean	SD	%
	3.7	29.0	30.9	35.2	1.2			

Table 3 noticed that the mean QOL score is 2.94 and the mean percentage is 58.8%, indicating that the assessment of the study participants' QOL is moderate. In addition, the mean health satisfaction was 3.01 and the mean percentage was 60.2%, indicating that the study participants were moderately satisfied with their health status.

Table 4. Mean Score for All Domains of Quality of Health (n=162)

Domain	Mean	SD	%	Rank
Physical health	2.79	0.621	55.8	3
Psychological health	3.06	0.625	61.2	2
Social relationships	3.22	0.768	64.4	1
Environment	2.77	0.669	55.4	4
Overall mean score	2.96	0.533	59.2	

Table 4 noticed that the social relationship score is the highest, with a mean score of 3.22 and a mean percentage of 64.4%, followed by the psychological health score, with a mean score of 3.06, and a mean percentage of 61.2%. Moreover, the physical health mean score is 2.79 and the mean percentage is 55.8%. The lower mean in all domains of quality of health is satisfaction of environment which represents mean score 2.77, and the mean percentage is 55.4%. The Overall mean score of health is 2.96 and the mean percentage is 59.2%. These results showed that the participants rated the HRQL and health status at moderate level.

**HRQL and selected sociodemographic variables**

Table 5. Age Difference and QoL (n=162)

Variable	Age groups	Mean difference	P value	
Physical health	70 years and more	Less than 40 years	-0.541	0.010 *
		40 - 49 years	-0.799	0.000 *
		50 – 59 years	-0.613	0.000 *
		60 – 69 years	-0.681	0.000 *
Psychological Health	70 years and more	Less than 40 years	-0.248	0.245
		40 - 49 years	-0.464	0.006 *
		50 – 59 years	-0.431	0.011 *
		60 – 69 years	-0.704	0.000 *
Environment	70 years and more	Less than 40 years	-0.342	0.145
		40 - 49 years	-0.539	0.004 *
		50 – 59 years	-0.375	0.044 *
		60 – 69 years	-0.533	0.005 *
Total	70 years and more	Less than 40 years	-0.324	0.074
		40 - 49 years	-0.568	0.000 *
		50 – 59 years	-0.464	0.001 *
		60 – 69 years	-0.606	0.000 *

\*significant at 0.05

As shown in Table 5 shows that patients over 70 years of age are significantly lower physical health, lower psychological health, lower satisfaction with environment, and lower QOL in general.

Table 6. Gender Differences and QoL (n=162)

Domain	Gender	n	Mean	SD	t	p-value
Overall quality of life	Male	95	2.93	0.914	-0.322	0.748
	Female	67	2.97	0.758		
Satisfaction with health	Male	95	3.04	0.988	0.490	0.625
	Female	67	2.97	0.816		
Physical health	Male	95	2.79	0.639	0.103	0.918
	Female	67	2.78	0.600		
Psychological health	Male	95	3.10	0.677	0.930	0.354
	Female	67	3.0	0.543		
Social Relationships	Male	95	3.24	0.778	0.379	0.705
	Female	67	3.19	0.758		
Environment	Male	95	2.79	0.682	0.475	0.635
	Female	67	2.74	0.655		
Total	Male	95	2.98	0.565	0.587	0.558
	Female	67	2.93	0.488		

\*Independent sample (t) test

Table (6) noticed that there is no statistically significant difference between male and female participants in the evaluation of overall QOL (P value = 0.748) and health satisfaction (P value = 0.625). , Physical health (P value = 0.918), psychological health (P value = 0.354), social relations (P value = 0.705), environment (P value = 0.635) and total score (P value = 0.558) were not statistically different, reflecting the same QOL and health status of male and female patients.

Table 7. Differences in Quality of Life in Terms of Marital Status (n=162)

Variable	Marital status	Mean difference	P value	
Satisfaction with health	Widow	Married	-0.630	0.003 *
		Single	-0.357	0.363
		Divorced	-0.444	0.123
Physical health	Widow	Married	-0.397	0.006 *
		Single	-0.666	0.013 *
		Divorced	-0.422	0.031 *
Psychological health	Widow	Married	-0.458	0.002 *
		Single	-0.318	0.232
		Divorced	-0.410	0.036 *
Social relationships	Divorced	Married	-0.509	0.009 *
		Single	-0.423	0.210
		widow	-0.230	0.338
Environment	Widow	Married	-0.486	0.002 *
		Single	-0.268	0.344
		Divorced	-0.212	0.307
Total	Widow	Married	-0.405	0.001 *
		Single	-0.361	0.110
		Divorced	-0.203	0.219

\*significant at 0.05

As shown in table 7 that the health satisfaction of widowed patients was significantly lower than that of married patients. In addition, compared with married, single, divorced, and widowed patients are significantly less satisfied with their physical, mental, social, and environmental health. Generally, the HRQL and health of widowed and divorced patients is much worse than that of married and single patients.

Table 8. Differences in Quality of Life in Terms of Family Size (n=162)

Variable		Sum of Squares	Df	Mean Square	F	P value
Overall quality of life	Between Groups	1.081	3	0.360	0.493	0.688
	Within Groups	115.419	158	0.731		
	Total	116.500	161			
Satisfaction with health	Between Groups	2.637	3	0.879	1.042	0.376
	Within Groups	133.338	158	0.844		
	Total	135.975	161			
Physical health	Between Groups	0.143	3	0.048	0.121	0.948
	Within Groups	62.104	158	0.393		
	Total	62.247	161			
Psychological health	Between Groups	1.254	3	0.419	1.070	0.364
	Within Groups	61.716	158	0.391		
	Total	62.970	161			
Social relationships	Between Groups	0.844	3	0.281	0.472	0.702
	Within Groups	94.191	158	0.596		
	Total	95.034	161			
Environment	Between Groups	1.297	3	0.432	0.963	0.412
	Within Groups	70.919	158	0.449		
	Total	72.216	161			
Total	Between Groups	0.357	3	0.119	0.413	0.744
	Within Groups	45.537	158	0.288		
	Total	45.894	161			

\*Significant at 0.05 One-way ANOVA test

Table 8 noticed that in terms of family size, there is no statistically significant difference in HRQL and health related to family size; overall HRQL (P value = 0.688), health satisfaction (P value = 0.376), physical health (P value = 0.948), psychological health (P value = 0.364), social relations (P value = 0.702), environment (P value = 0.412) and total score (P value = 0.744). these results reflect small differences in HRQL and health status related to family size.

Table 9. Differences in QOL in Terms of Educational Level (n=162)

Variable	Level of education	Mean difference	P value	
Overall quality of life	University	Prep school and less	0.410	0.019 *
		Secondary	0.181	0.353
Psychological health	University	Prep school and less	0.335	0.008 *
		Secondary	0.167	0.242
Social relationships	University	Prep school and less	0.500	0.001 *
		Secondary	0.173	0.316
Total	University	Prep school and less	0.324	0.002 *
		Secondary	0.189	0.120

\*significant at 0.05

As shown in Table 9 that compared with patients with secondary education and below, the overall HRQL of patients with higher education is significantly higher. In addition, the physical and psychological health of patients with higher education is significantly better. Overall, this result showed that university patients have a higher HRQL and health status compared to patients with secondary school and lower education levels.

Table 10. Differences in QOL according to Employment Status (n=162)

Domain	Work	n	Mean	SD	T	P value
Overall quality of life	Employed	48	3.13	1.003	1.764	0.080
	Unemployed	114	2.87	0.770		
Satisfaction with health	Employed	48	3.21	0.967	1.773	0.078
	Unemployed	114	2.93	0.890		
Physical health	Employed	48	2.96	0.629	2.350	0.020 *
	Unemployed	114	2.71	0.606		
Psychological health	Employed	48	3.30	0.674	3.244	0.001 *
	Unemployed	114	2.96	0.577		
Social relationships	Employed	48	3.53	0.777	3.424	0.001 *
	Unemployed	114	3.09	0.729		
Environment	Employed	48	2.92	0.751	1.858	0.065
	Unemployed	114	2.70	0.625		
Total	Employed	48	3.18	0.578	3.483	0.001 *
	Unemployed	114	2.87	0.488		

\*Significant at 0.05 Independent sample (t) test

Table 10 revealed that the difference between employed and non-employed patients in terms of QOL (P value = 0.080), health satisfaction (P value = 0.078) and environment (P value = 0.065) are not statistically significant. The results also showed that compared with non-employed patients, the physical health (P value = 0.020), psychological health (P value = 0.001), and social relationships (P value = 0.001) of employed patients were statistically significantly improved. Besides that, the results showed that the HRQL of working patients is significantly higher than that of non-working patients. (P value = 0.001).

Table 11. Differences in QOL according to Monthly Income (n=162)

Variable	Monthly income	Mean difference	P value
Physical health	Less than 1950 NIS	1950 – 2500 NIS	-0.473
		More than 2500 NIS	-0.451
Psychological health	Less than 1950 NIS	1950 – 2500 NIS	-0.596
		More than 2500 NIS	-0.382
Environment	Less than 1950 NIS	1950 – 2500 NIS	-0.500
		More than 2500 NIS	-0.534
Total	Less than 1950 NIS	1950 – 2500 NIS	-0.489
		More than 2500 NIS	-0.346

\*significant at 0.05

As presented in table 11 indicated that patients with incomes lower than NIS 1950 showed significantly lower physical health, lower psychological health, lower environmental satisfaction, and lower health quality. In general, these results reflected that low-income patients have lower QOL and health compared to patients with higher income.



Table 12. Differences in QOL according to Smoking Status (n=162)

Domain	Smoking status	n	Mean	SD	t	P value
Overall quality of life	No	121	2.99	0.801	1.217	0.225
	Yes	41	2.80	0.980		
Satisfaction with health	No	121	3.02	0.875	0.099	0.921
	Yes	41	3.00	1.049		
Physical health	No	121	2.78	0.601	-0.102	0.919
	Yes	41	2.80	0.685		
Psychological health	No	121	3.06	0.589	-0.026	0.979
	Yes	41	3.06	0.728		
Social relationships	No	121	3.23	0.779	0.300	0.764
	Yes	41	3.19	0.741		
Environment	No	121	3.72	0.664	-1.719	0.088
	Yes	41	2.92	0.670		
Total	No	121	2.95	0.513	-0.464	0.643
	Yes	41	2.98	0.594		

\*Significant at 0.05 Independent sample (t) test

Table 12 revealed the difference in QOL related to smoking. The results revealed that there was no statistically significant difference in QOL (P value = 0.225), health satisfaction (P value = 0.921), physical health (P value = 0.919), psychological health (P value = 0.979) and social relationships (P value = 0.764), environment (P value = 0.088) and total score (P value = 0.643), these results revealed that there was no significant difference of HRQL between smoking and non-smokers.

Table 13. Differences in QOL according to Presence of Chronic Disease (n=162)

Variable	Chronic disease	Mean difference	P value
Overall quality of life	Other chronic disease	No disease	-0.431
		Hypertension	-0.476
		Diabetes	-0.219
Satisfaction with health	Other chronic disease	No disease	-0.733
		Hypertension	-0.497
		Diabetes	-0.240
Physical health	Other chronic disease	No disease	-0.362
		Hypertension	-0.577
		Diabetes	-0.448
Psychological health	Other chronic disease	No disease	-0.658
		Hypertension	-0.477
		Diabetes	-0.323
Social relationships	Other chronic disease	No disease	-0.446
		Hypertension	-0.501
		Diabetes	-0.161
Total	Other chronic disease	No disease	-0.453
		Hypertension	-0.465
		Diabetes	-0.316

\*significant at 0.05

As shown in the table 13 showed that compared with patients without other chronic diseases, The QOL and health status of patients with HTN, DM and other chronic disease are obviously low.

## DISCUSSION

This study tried to assess the overall HRQoL profile with its domains and associated factors among patients post MI. According to this finding, the overall mean of HRQL among study participants was moderately level (59.2%).

A study conducted by Kim et al., 2018 in Japan is consistent with our result, which showed that the mean score of the overall HRQL was 62.3 %, indicating a moderate level (Kim et al., 2018). The result of our finding is also consistent with a study conducted in South Korea (Kim and Hwang, 2015). The possible reason for the low HRQL as perceived by patients could be MI often occurs without warning, and to suddenly find oneself in a hospital is a frightening experience for most people, impacting profoundly on HRQL the sudden and often profound physiological and psychological impact of the acute onset of MI, as well as the psychosocial impact of hospitalization, often, and understandably, harms HRQL. Other possible explanations could be that the sample in this study had different comorbidities. The more comorbidities patients manifest, the poorer their HRQL is likely to be. Unlike the findings of this study in a study conducted in Myanmar indicated that overall HRQL was moderate (Hlaing et al., 2018). Another inconsistent finding was observed in a study conducted in Singapore. Despite a high percentage of this sample having hypertension, diabetes, and other coronary risk factors, participants reported having a better HRQL (Wang et al., 2013). The possible reason for the variation might be due to the approach to the summation of the items, data collection instrument, sample size difference, study design, sociocultural differences, and difference between participants' perception of the quality of life.

According to the findings of this study, the mean score of satisfaction in the environmental and physical health domains were the least (55.4, 55.8%) when compared to the other domains of HRQL. MI impaired all domains of HRQL of the study participants, but physical and environmental health were the most affected domain according to different studies, which are consistent with this finding. Studies done in the United States and Australia found a decrease in the dimensions of physical and environmental functioning after experiencing acute coronary syndrome (ACS). This consistency could be justified by MI manifesting more physically than other domains (Mollon and Bhattacharjee, 2017). This could be further explained by patients with MI having higher rates of complications which can affect their physical ability to do regular activities.

This study revealed that in all domains of HRQL, the mean score of the social health domain was highest one (64.4%) which is similar to a study done in South Korea. This might be due to the similarity between Palestine and South Korean which can be referred to as familism, coping problems depending on social support from their families and friends. This is also in line with a finding of a study conducted in Brazil, in which the highest scores of HRQL were seen in the social functioning domain. This could be that the participants might have opportunities for social life (Kang et al., 2018).

According to this study, age has an inverse relation with overall HRQL. The older the patient gets, the lower his or her HRQL could be. In line with the current finding, studies conducted in India and South Korea revealed that age was inversely related to HRQL and younger patients with MI had a higher quality of life. This can be explained by higher physical functioning in younger patients, and aging may decline the physiological system, which could limit the different activities of the body. Besides, old age is accompanied by problems of mobility, metabolism, decreased immunity, and psychological problems. Based on these study findings, gender did not have significant association with health-related quality of life among post myocardial infarction patients. This is inconsistent with study conducted in India which revealed that women demonstrated more physical limitations than men. Differences in physical functioning between men and women may be related to differences in baseline characteristics (Huffman et al., 2019).

The current research indicates a significant influence of education as a predictor of HRQL. Study participants with secondary education as well as college and above educational level had better HRQL than those with primary education and others. This finding is similar to a study done in Korea (Kang and Han, 2021) and Poland (Krzemińska et al., 2019). Higher and better education can be an advantage for access to wider resources within the community and higher awareness of risk factors of MI. People who have a higher level of education tend to be more aware of risk factors in their health and to obtain more from health-related education than those who have a lower education level (Zimmerman, 2014).

Hypertension and Diabetes Mellitus were found to be a predictor of poor HRQL. This is a similar finding to a study conducted in Singapore which demonstrated that hypertension and Diabetes Mellitus is associated with poor HRQL. A possible reason for this might be the chronic nature, severity, and long-term antihypertensive and antidiabetic medication use together with lifestyle and behavior change to adjust to the illness may impose an added stress burden on patients, and this affects their HRQL negatively. This could also be due to the contributions of different chronic diseases in patients with MI and the side effects of the different drugs or drug interactions, which impair overall HRQL (Sertoz et al., 2013).

### Limitations

There are not enough previous local studies relating to the HRQL and its relationship to coronary artery disease (CAD), particularly MI. Besides that, the emergency and curfews scenario due to COVID-19 caused non-stop closure of outpatient clinics in MoH hospitals. Finally, there are a few contextual boundaries encompass common energy cuts and confined get entry to international publications.

### CONCLUSION

Myocardial infarction has a negative impact on HRQL measurements in MI patients, and the biggest impact is related to the psychological and social domains of HRQL. Finally, the study concludes a moderate level of HRQL and raised the need to develop strategies to improve QOL and special attention should be paid to these vulnerable groups, and support measures should be taken to reduce the impact of MI in these groups.

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### Conflict of Interest

None

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