



1. MBBS, FCPS (Cardiology)  
Assistant Professor  
Department of Cardiology  
University Medical and Dental  
College Faisalabad.
2. MBBS, FCPS (Cardiology)  
Assistant Professor  
Department of Cardiology  
Wazirabad Institute of Cardiology  
Wazirabad
3. M.Phil (Statistics)  
Assistant Professor  
Department of Biostatistics  
GCUF, Faisalabad.
4. MBBS, FCPS (Cardiology)  
Senior Registrar  
Department of Cardiology  
Wazirabad Institute of Cardiology  
Wazirabad
5. MBBS, FCPS (Cardiology)  
Senior Registrar  
Department of Cardiology  
Wazirabad Institute of Cardiology  
Wazirabad
6. MBBS, FCPS (Medicine)  
Assistant Professor  
Abwa Medical College, Faisalabad

**Correspondence Address:**

Dr. Shakeel Ahmad  
Assistant Professor  
Department of Cardiology  
University Medical and Dental College,  
Faisalabad.  
drsa495@hotmail.com

**Article received on:**

13/06/2018

**Accepted for publication:**

25/10/2018

**Received after proof reading:**

04/01/2019

## ACUTE MYOCARDIAL INFARCTION; QUALITY OF LIFE FOUR YEARS AFTER ACUTE MYOCARDIAL INFARCTION.

Shakeel Ahmad<sup>1</sup>, Muhammad Nazim<sup>2</sup>, Rizwan Munir<sup>3</sup>, Hafiz Muhammad Faiq Ilyas<sup>4</sup>, Naeem Asghar<sup>5</sup>,  
Shaukat Javeed<sup>6</sup>

**ABSTRACT... Objectives:** To assess the impact of myocardial infarction on quality of life in four year survivors and to determine factors associated with a poor quality of life. **Design:** Descriptive study. **Settings:** Faisalabad institute of cardiology Faisalabad. **Duration of Study:** 1<sup>st</sup> November 2017 to 30 April 2018. **Sample Size:** Sample size was 200 as calculated by WHO sample size calculator. **Sampling Technique:** Non probability consecutive sampling. **Subjects:** All patients diagnosed with acute myocardial infarction during 2013 and alive at a median of four years. **Patients and Methods:** 200 patients presenting in outdoor for routine follow up checkup who got MI approximately four years ago in year 2013 were included in the study. **Results:** 200 patients with an acute myocardial infarction in 2013 and alive and capable of responding to a questionnaire in 2018 were included in the study. Physical functioning was normal in 63%, fair in 25% and disturbed in 12% of patients. Social life functioning was normal in 66%, fair in 26% and disturbed in 8% of patients. No Angina episodes in 61.5%, 1 to 2 angina episodes per month in 25% and more than 3 episodes per month in 13.5% patients. 59% of patients were doing routine jobs, 21.5 % were doing off and on job and 19.5% were not doing any job after MI. **Conclusions:** this study provides valuable information for the practicing clinicians. Impaired quality of life was reported by patients, unfit for work, those with angina and dyspnea, patients with coexistent lung disease, those with anxiety and sleep disturbances and other co-morbid conditions. Improving quality of life after MI remains a challenge for practicing physicians.

**Key words:** Ischemic Heart Disease, Coronary Artery Disease, Quality Life Years.

**Article Citation:** Ahmad S, Nazim M, Munir R, Ilyas HMF, Asghar N, Javeed S. Acute myocardial infarction; quality of life four years after acute myocardial infarction. Professional Med J 2019; 26(1):96-100.  
**DOI:** 10.29309/TPMJ/2019.26.01.2611

### INTRODUCTION

Following a therapeutic and other possible recent interventions, after acute MI, the success in relieving cardiac signs and symptoms is very important. The more focus of the clinicians is to treat the disease only. The assessment of any disease process having impact on quality of life is under-estimated. We need to focus on specific adverse signs and symptoms which affect quality of life. It gives a general indication to manage the disease process, its manifestation or its prognosis. We need not only to treat the disease, also the impact of disease on quality of life.<sup>1</sup>

From the patient's perspective, it is more important to look at daily life limitations. These are imposed by an episode of illness or as a adverse effect of drugs which affect daily routine activities at the

home, at off timings, and on workplace. The illness or medications may adversely affect quality of life of the patient. We, as clinicians need to make good judgment about the severity of a disease process, role of treatment or overall health related counseling, which would include improvement and sustain quality of life of the patients.<sup>2</sup>

Several assessment measures and methods are written in books to assess quality of life of the patients after having some illness. We have designed a general and easy to interpret questionnaire to apply variably to a range of disabilities and diseases and enable interpretation of all, especially cardiac diseases.

Following a myocardial infarction, the focus of concern, in the immediate period is generally

on physical functioning, social functioning and routine job status. It is the best treatment result if patient routine life continues and job done on daily basis without any compromise and interruption. The impact on quality of life after a myocardial infarction appears variable and complex.<sup>3-5</sup> It may be categorized as short term, mid terms and long terms.<sup>3-4</sup>

Our study has objective to describe the quality of life of survivors of a myocardial infarction after 4 years using a general and simple questionnaire. We are going to highlight the importance of some simple measure to assess the quality of life during follow up visits.

## Material and Methods

### Study Design

Descriptive study.

### Settings

Faisalabad institute of cardiology Faisalabad.

### Duration of Study

1<sup>st</sup> November 2017 to 30 April 2018.

### Sample Size

Sample size was 200 as calculated by WHO sample size calculator.

### Sampling Technique

Non probability consecutive sampling.

## SAMPLE SELECTION

### Inclusion Criteria

All patients who visited in OPD fulfilling the diagnostic requirement for an AMI during 2013 and who survived to have successful follow up in 2018 were included in this study.

### Exclusion Criteria

Patients with multi-organ failure.

## STATISTICAL ANALYSIS

Routine analysis was done to see frequencies using SPSS 23 to the data for each of the four domains. It defines the normality or disturbance of quality of life of the patients. The assessment measurement of life quality was done using the results analysis. We used four parameters in our study to make it simple. There are further some points which could be discussed.

## RESULTS

200 patients with an acute myocardial infarction in 2013, mobilized and able to respond to in 2018 were included in the study. Physical functioning was normal in 63% of patients, fair in 25% of patients and disturbed in 12% of patients. Social life functioning was normal in 66% of patients, fair in 26% of patients and disturbed in 8% of patients. No Angina episodes in 61.5% patients, 1 to 2 angina episodes per month in 25% of patients and more than 3 episodes per month in 13.5% patients. 59% of patients were doing routine jobs, 21.5 % were doing off and on job and 19.5% were not doing any job.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 45 years	90	45.0	45.0	45.0
	More than 45 years	110	55.0	55.0	100.0
	Total	200	100.0	100.0	

Table-I. Age of patients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	94	47.0	47.0	47.0
	No	106	53.0	53.0	100.0
	Total	200	100.0	100.0	

Table-II. Diabetes Mellitus

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	84	42.0	42.2	42.2
	No	115	57.5	57.8	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table-III. Hypertension

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	47	23.5	23.6	23.6
	No	152	76.0	76.4	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table-IV. Dyslipidemia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	86	43.0	43.2	43.2
	No	113	56.5	56.8	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table-V. Sedentary lifestyle

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	81	40.5	40.7	40.7
	No	118	59.0	59.3	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table-VI. Smoking

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	74	37.0	37.2	37.2
	No	125	62.5	62.8	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table-VII. Family history of ischemic heart disease

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal Functioning	126	63.0	63.0	63.0
	Fair Functioning	50	25.0	25.0	88.0
	Disturbed Functioning	24	12.0	12.0	100.0
	Total	200	100.0	100.0	

Table-VIII. Physical functioning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal Functioning	132	66.0	66.0	66.0
	Fair Functioning	52	26.0	26.0	92.0
	Disturbed Functioning	16	8.0	8.0	100.0
	Total	200	100.0	100.0	

Table-IX. Social functioning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No angina episodes	123	61.5	61.5	61.5
	1-2 per month angina episodes	50	25.0	25.0	86.5
	More than 3 angina episodes per month	27	13.5	13.5	100.0
	Total	200	100.0	100.0	

Table-X. Angina episodes per month

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	118	59.0	59.0	59.0
	Off and On	43	21.5	21.5	80.5
	No Job	39	19.5	19.5	100.0
	Total	200	100.0	100.0	

Table-XI. Doing routine job

## DISCUSSION

We, as physicians, look at the patient from management point of view. The disease control or progression is evaluated, symptomatology assessed and addressed. The patient is not much concerned about knowledge of disease, its control or natural course of disease. If the patient is well, he is enjoying quality life years. It means his life is not significantly disturbed with the disease he had. If he got disturbed by some ways, he is having disabilities life years. We want to shift our attention to assess quality of life of every patient while treating disease. More recent methods should be used to cure the disease. As an aim to decrease mortality, morbidity, the risk of subsequent events we treat our patients in our OPD clinics. We need to pay extra attention toward assessment of quality of life so that we may be able to improve it. Sometimes we also consider drugs side effects to avoid any unwanted results. To a large extent an MI has suffered the quality of life of patients. If we want to improve the quality of life, we need to offer detailed counseling about handling of daily routine matters. For example, if a patient is concerned about marital relationships after MI, he should be counseled in detail about avoidance or continuing of routine relations. For the physician, this may be small matter but to the patient, it may worth a lot.

In the late 1970s in Dundee researched and proved notable imbalance in social, physical and routine life daily activities in around 50% of a small group of 59 survivors four years after a MI.<sup>5</sup> In Sweden, using the NHP, quality of life assessed

and found good, five years after MI. There was a small imbalance of energy, sleep, appetite and mobility.<sup>4</sup> Finally, Westinet al, studied patients under 70 years of age with history of MI in a study, showed residual problems in carrying out daily life routine at one year period.<sup>8</sup>

In our study, we concluded that significant number of patients continue to describe symptoms due to IHD. We tried to assess the patients properly with the help of uniform criteria. Patients with sign and symptoms of IHD with other assessment parameters checked and noted for daily routine activities. The main aim was to conclude that management efforts improve quality of life also.<sup>9</sup>

## CONCLUSIONS

This study provides valuable future insight for the practicing clinicians. The assessment of quality of life shows management strategy results. As treatment is offered in the best possible way, not only we are going to treat the disease process, we also improve the quality of life of the patients.

Copyright© 25 Oct, 2018.

## REFERENCES

1. Calkins DR, Rubenstein LV, Cleary PD, et al. (1991) **Failure of physicians to recognize functional disability in ambulatory patients.** Ann Intern Med 114:451-454.
2. Wenger NK, Mattson ME, Furberg CD, et al. (1984) **Assessment of quality of life in clinical trials of cardiovascular therapies.** (Le Jacq, New York).
3. Glasziou PP, Bromwich S, SimesRJ (1994) **Quality of life six months after myocardial infarction treated with**

- thrombolytic therapy. AUS-TASK group. Australian arm of international tPA/SK mortality trial.** Med J Aust 161:532–536.
4. Wiklund I, Herlitz J, Hjalmarson A (1989) **Quality of life five years after myocardial infarction.** Eur Heart J 10:464–472.
  5. Finlayson A, McEwen J (1977) **Coronary heart disease and patterns of living.** (Croom Helm, London).
  6. Oldridge N, Guyatt G, Jones N, et al. (1991) **Effects on quality of life with comprehensive rehabilitation after acute myocardial infarction.** Am J Cardiol 67:1084–1089. (1993) S-plus guide to statistical and mathematical analysis, version 3.2. (Statistical Sciences, Inc, Seattle).
  7. Aitkin M, Anderson D, Francis B, et al. (1988) **Statistical modelling in GLIM.** (Oxford University Press, Oxford).
  8. McHorney CA, Ware JE Jr, Raczek AE (1993) **The MOS 36-item short form health survey (SF-36):11. Psychometric and clinical tests of validity in measuring physical and mental health constructs.** Med Care 31:247–263.
  9. Ross CK, Sinacore JM, Stiers W, et al. (1990) **The role of expectations and preferences in health care satisfaction of patients with arthritis.** Arthritis Care and Research 3:92–98.



WINNING TAKES TALENT,  
TO REPEAT TAKES CHARACTER.



*“John Wooden”*

#### AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author-s Full Name	Contribution to the paper	Author=s Signature
1	Shakeel Ahmad	Data collection	<i>Shakeel</i>
2	Muhammad Nazim	Data collection	<i>M Nazim</i>
3	Rizwan Munir	Statistics	<i>Rizwan</i>
4	Hafiz M. Faiq Ilyas	Drafting	<i>Hafiz</i>
5	Naeem Asghar	Conception and study design	<i>Naeem</i>
6	Shaukat Javeed	Data interpretation	<i>S. Javeed</i>