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## Quality of life of patient with coronary artery disease

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**Abstract**--Background: Coronary artery disease are the common cause of death globally, it can effect on patient physical, emotional, social and environmental aspects, coronary artery disease can disrupt the patient quality of life. Fortunately, ischemic heart disease can be treated successfully with lifestyle changes, medicines, and surgical procedures. Early recognition of the risk factors and primary prevention have significantly decreased the morbidity and mortality associated with CAD. Objective: The Objectives of the study are to Asses patients (Q.O.L.) after coronary.artery.disease, Find out the relation between.the (Q.O.L.) for patient who complain from CAD and the demographical data. Methods: Descriptive cross sectional study design was selected to achieve the objectives of the study. Non probability (purposive) sampling of 120 patients (77) male and (43) female were selected to study the quality of life of patients with coronary artery disease in Al-Najaf Al-Ashraf city. Results: According to study finding, the overall evaluation of research sample quality of life were poor, the researcher found that there were non-significant relationship between the subjects demographical characteristic's and their overall assessment of (Q.O.L.) except of the one item (monthly income). Conclusion: The quality of life is based on the individual perceptions to their various life aspect, The study declared that there were many independent variables that may have an effect on the individual quality of life, like demographical characteristics. It is necessary to identify the factors that influence QoL. This will aid healthcare providers (nurses) in determining quality of life, improving health, and ensuring a maintained or improved QoL, which is significant for CAD patients. It may also lead to more wellness and patient care.

**Keywords**--- quality of life, patient, coronary artery disease.

## **Introduction**

In many developed countries, The main reason of death and disability is coronary artery disease (C.A.D ), particularly among the elderly. (Salari et al ., 2018 ; Malakar e.t.al., 2019). The World.Health.Organization. (WHO) states that, 17.9 million people died from cardiovascular disease (CVD) in 2019, accounting for 32 percent of all deaths globally. 85 percent of the deaths were caused by heart attacks and strokes. Around three-quarters of CVD mortality occurs in low- and middle-income countries. In 2019, CVDs were responsible for 38 percent of the 17 million premature deaths caused by noncommunicable diseases (before the age of 70). Coronary artery disease (CAD) is a collection of clinical symptoms produced by an insufficient supply of coronary blood to the heart muscle. Sub intimal atheroma deposition, which results in arterial luminal stenosis or occlusion, as well as arterial wall thickening, is the most common cause. The proximal sections of larger coronary arteries, particularly at or just beyond branching points, are most typically affected by coronary atherosclerosis. Higher oxygen demand occurs when coronary blood flow is restricted by atherosclerotic stenosis, resulting in myocardial ischemia and necrosis. In the presence of symptomatic CAD, compensatory physiologic processes are insufficient to guarantee adequate myocardial perfusion. Supply ischemia, which causes myocardial infarction (MI) and the majority of bouts of unstable angina, or demanding ischemia, which happens when coronary blood supply is insufficient during periods of high cardiac demands, is the result (Mattia & Manetta, 2017). In the current study, the quality.of.life for the coronary heart disease patients was evaluated. in An- Najaf AL-Ashraf and find out the factors affecting with the quality of life in these patients. Identifying the quality of life of CAD patients adds considerably to the treatment of the disease and the reduction of psychological and physical issues. Determining and identifying the factors that negatively and positively influence individuals with coronary artery disease's quality of life are very important since some factors lead to the worsening of the patient's condition, such as socioeconomic status, which negatively affects the physical status of the clients

## **Methods and Materials**

### **Design of the Study**

The cross-. sectional descriptive method was chosen in order accomplish the research aims, which were to determine the (Quality Of.Life.) of patients with coronary.artery.disease in the city of Al-Najaf Al-Ashraf.

### **Setting of the Study**

The.Al-Najaf.Al-Ashraf.Health.Directorате./Al-Sadder.MedicalCity, Al Najaf. Center. for. Cardiac. Surgery. and. Trans. Catheter. Therapy, and Al Hakeem general hospital were chosen to conduct the study.

### Sample of the Study

For this study, a non-probability (purposeful sampling) total of 120 patient populations (77 men and 43 women) was chosen who complain from (C.A.D.), and their quality of life were evaluated.

### Study Instrument

An assessment tool (questionnaire) is adopted and developed by the researcher to measure the variables of interest. The final study instrument consists of two parts:

Part I: Patients' Socio-demographic Characteristics.

Part II: Short form ( 36 ) quality.of.life.scale.

### Data Collection

The data had been collected through the utilization of the developed questionnaire after the validity and reliability are estimated, and by means of a structured interview technique with the subjects who were individually interviewed, by using the English version of the questionnaire and they were interviewed in a similar way, by the same questionnaire for all those subjects who were included in the study sample. The data gathering technique was carried out over a period of time that began on January 10, 2021 and finished on April 2, 2021. Each subject spends approximately (20-25) minutes to complete the interview.

### Validity of the Instrument

A content validity of the study instrument conducted through a group of experts who have more than 10 years of experience in nursing field.

### Statistical analysis

The data were analyzed through application of the descriptive and inferential data analysis methods, included: Frequency, percentage, and Cumulative Percentage, Mean of scores, and Chi esquire .

### Study results and Findings

Table 1

Distribution of the studied sample according to their demographic data

Demographic data		Freq.	%
Age (Years)	<= 34	6	5.00
	35 - 44	14	11.67
	45 - 54	26	21.67
	55 Up	74	61.67
	Mean ± SD	55.4 ± 10.7	

Gender	Males	77	64.17
	Females	43	35.83
Education level	Illiterate	25	20.83
	Read and write	26	21.67
	Primary school graduate	32	26.67
	Intermediate school graduate	14	11.67
	Secondary school graduate	8	6.67
	Institute and college graduate	15	12.50
occupation	Student	2	1.67
	Employee	16	13.33
	Retired	28	23.33
	Self-employee	35	29.17
	House wife	39	32.50
Marital status	Single	2	1.67
	Married	115	95.83
	Divorce	1	.83
	Widowed	2	1.67
Monthly income	Insufficient	75	62.5
	Barely sufficient	38	31.67
	Sufficient	7	5.83
Residency	Urban	64	53.33
	Rural	56	46.67
Total		120	100%

The results of the demographical characteristics represent that the highest percentage for age categories were showed as 61.67% (n = 74) up to 55 year old. The findings reveal that male patients were more than female with a percentage of 64.17% (n =77). The results of participants' educational levels indicated that the highest percentage 26.67% (n = 32) were primary school graduate. however, in regard to their occupational status, the majority of participants 32.50 % ( n = 39 ) were a house wife. Moreover, the results of marital status categories showed that most of the participants exhibited as "married" 95.83 % (n = 11.( In addition, in regard to their monthly income, the majority of study sample 62.5 % ( n = 75) had insufficient. The results of study sample residency indicated that 53.33% (n = 64) lived in urban area.

Table 2  
Distribution of Overall Quality of Life Domains

Overall Quality of Life domains	Freq.	%	Mean ± SD	Assess.	
Overall Quality of Life	Poor	88	73.33	36.6 ± 17.6	Poor
	Good	32	26.67		
Total		120	100%		

Mean <=50: Poor, Mean >50: Good

The above table ( 2 ) that concerned to overall assessment of theQuality Of.life, so the result show the overall QualityOf.life was poor, with a mean value of less than 50

Table 3  
Overall Quality of Life with demographical variables

Demographical variables	Chi.square	d.f	Pvalue
Age.	3.233	3	0.358 (NS)
Gender	0.399	1	0.528 (NS)
Education level	9.57	5	0.08 (NS)
Occupation	10.35	5	0.06 (NS)
Marital status	6.5	3	0.088 (NS)
Monthly income	16.1	5	0.007 (HS)
Residency	1.47	1	0.225 (NS)

Regarding to above table ( 3) represent there were non-significant relationship between all items of sample demographical characteristic's and the overall assessment of (Q.O.L.), except of the one item (monthly income ) the result declared high meaningful relationship with the overall (Q.O.L.) at pvalue lower than 0.05.

### Discussion

Concerning the relationship between the demographical variables of all 120 patients with coronary artery disease that included in the study and their quality of life who visited the three governmental hospitals , the researcher found that there were non-significant relationship between the subjects demographical characteristic's ( gender, age, level of education, occupational status, marital status, residency and Smoking status) and their overall evaluation of quality of life except in one item ( monthly income ). This study finding opposite with the article of researchers Santoso et al (2017) that demonstrated that there were highly association between the quality of life and the increasing of ages that indicated decrease of physical functioning and have high risk of coronary artery disease. The increasing in age include one of the non-modifiable risk factor. Impaired of physical activity in patients with CAD can causes decrease QoL score. Previous studies Chu et al ., ( 2014 ) and Sajobi et al ., ( 2018 ) revealed that several factors including the sex , age, socioeconomic status and chronic disease were affecting quality of life of study subjects. Regarding the personal income the result of study indicated that there.were strong relationship between the study subjects overall evaluation of (Q.O.L.) with their monthly income at pvalue lower than.0.05. This maybe come from that the low economic status also had direct effect on their fulfill daily living requirement. Low socio-economic status may put individuals at risk with poorer health than the individual with good economic status for various reasons, such as less access to healthcare, poorer living conditions, less knowledge about the complication of disease and the negative effect on psychological status. This finding are is in consisted with Keyvanara et al ., ( 2015 ), study they demonstrated there is positive and high meaningful relationship with the patient socioeconomic status and their (Q.O.L.), so the patients with low economic status were had poorer (Q.O.L.)than the individuals with good economic status.

## Conclusions

The study concluded that the quality of life is based on the individual perceptions to their various life aspect, The study declared that there were many independent variables that may have an effect on the individual quality of life, like demographic characteristics. The study concluded that the overall assessment of (Q.O.L.) of coronary artery disease clients were poor and there were non-significant relationship between the study subjects overall quality of life and their demographical factors except in one item (monthly income).

## Recommendations

The study recommends that the important to ascertain the variables that affect QoL. This will assist healthcare providers (nurses) in determining quality of life, improving health, and ensuring that patients' quality of life is maintained or enhanced, which is important for patients with coronary artery disease (CAD). Additionally, it may result in increased wellbeing and patient care.

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