ORIGINAL ARTICLE

The Influence of Depression on Health-related Quality of Life among Patients with Heart Diseases

HATIF ALI ABED [1], KAREEM RESHAK SACHET[2]
[1]MSc Student, University of Baghdad, College of Nursing
[2]Associate Professor \Department of Psychiatric Mental Health Nursing \ College of Nursing \ University of Baghdad.
E-mail: kareemr@conursing.uobaghdad.edu.iq
Corresponding author: Hatif Ali Abed [1], Email: hatif.ali1205a@conursing.uobaghdad.edu.iq

ABSTRACT

Background: Heart disease is the highest cause of death in Europe and the rest of the world. Patients with symptomatic heart disease may benefit from emergency heart disease intervention

Aims of the study: assess the Influence of Depression on Health-related Quality of Life among Patients with Heart Diseases

Methodology: A descriptive cross-sectional study was carried out from period December 15th, 2021 through May 15th, 2022 at Al-Samawah Teaching Hospital's Center Coronary Care Unit, and A non-probability (purposive) sample of the study consisted of (100) patients with heart diseases were selected from the Center Coronary Care Unit at Al-Hussein teaching hospital in Sammawa city

Results: The results show that (23%) of heart patients were moderate depression. And most heart patients were males. This suggests that depression have a significant influence on quality of life among patients with heart disease.

Conclusions : The majority of heart disease patients suffer from moderate depression, and depression have a significant influence on quality of life among patients with heart disease.

Keywords: Depression, Quality of life , Patient , Heart Disease.

INTRODUCTION

Heart disease is often regarded as the leading cause of death and disability worldwide. This is due to the fact that the heart, as a strong organ, is responsible for blood circulation as well as the transportation of oxygen and essential nutrients throughout the body, according to science. As a result, it is regarded as the most important organ in the human body, with any abnormality in the heart having the potential to cause death [1] .

Psychiatric symptoms such as depression are symptomatic scenarios regularly seen in patients with heart diseases; these comorbidities complicate the therapeutic method and expand hospitalizations and increase mortality [2] .

Patients with heart disease typically get a poor quality of life, and the majority have a low life expectancy, with a high death rate within the last years after diagnosis[3].

In people suffering from heart disease, fatigue and intolerance of daily living activities are the most prominent clinical symptoms, other disorders, such as depression and anxiety, are frequently noticed [4] .

Heart disease and other chronic conditions have a direct influence on physical health and quality of life, which are combined to produce the idea of health-related quality of life–in other words, the whole state of physical, social, and cognitive functioning. Additionally, Schipper and colleagues created the idea of health-related quality of life in the 1990s [5]

METHODOLOGY

The Study Design: The investigation is conducted using a descriptive-analytic approach. The research will run from December 15th, 2021 through May15th, 2022 at Al-Samawah Teaching Hospital's Center Coronary Care Unit.

Ethical Consideration: The researcher obtained orally informed approval from each patient. The researcher has explained the purpose of the study to patient before they take part in the research.

The Setting of the Study: The research is being undertaken at the Muthanna Governorate's Al-Samawah Teaching Hospital's Center Coronary Care Unit (CCU), which provides daily management for different types of heart Diseases. Center Coronary Care was mixed with the intensive care unit (ICU) and separated in 2015 room independent in the ground floor of the hospital. Al-Hussein Teaching Hospital, which contains 400 beds, consists of 6 floors in the governorate center, and the Center Coronary Care Unit hall is on the ground floor to be near the hospital emergency to avoid critical cases, myocardial infarction, and other dangerous diseases.

Sampling of the Study: A non-probability (purposive) sample of the study consisted of (100) patients with heart diseases were selected from the Center Coronary Care Unit in Al-Samawah Teaching Hospital

Study Instrument: The research instrument consists of a socio demographic sheet for each patient and the depression question and QoL question.

Part I: Demographic Data: The socio-demographic sheet includes patients' age, gender, level of educational and marital status, occupation, house ownership, residency, monthly income, duration of illness, and type of diseases

Part II: The Depression measures: this part contains questions that measure the level of depression with heart disease patients. descriptive statistics

Part III: The Quality of life measures: this part contains questions that measure the level of **Quality of life** with heart disease patients. descriptive statistics

RESULTS

This table shows that 37% of patients with heart disease are of age group 51-60 year and 23% of them are of age group 41-less than 51 years. The gender variable shows that 66% of patients are males and 34% of them are females. Regarding marital status, 66% of patients are married and 25% are widowed/widower. The level of education analysis refers that 38% of patients are doesn't read and write and 23% of them read and write while 19% are graduated from primary school. Regarding Occupation result showed that highest percentage (28%) of participants were Free works

Table 1: Distribution of Sample according to their Socio-demographic Characteristics

List	Characteristics		f	%
1	Age	20 – less than 31 year	1	1
		31 – less than 41 year	12	12
		41 – less than 51 year	23	23
		51 – less than 61 year	37	37
		61 – less than 71 year	17	17
		71 ≤ year	10	10
		Total	100	100
2	Gender	Male	66	66
		Female	34	34
		Total	100	100
3	Marital status	Unmarried	4	4

			f	%
		Married	60	60
		Widowed/er	25	25
		Divorced	11	11
		Total	100	100
4	Level of education	Doesn't read & write	38	38
		Read & write	23	23
		Primary school	19	19
		Intermediate school	13	13
		Secondary school	5	5
		Institute/college	2	2
		Total	100	100
5	Occupation	Employee	20	20
		Free works	28	28
		Retired	20	20
		Doesn't work	9	9
		Housewife	23	23
		Total	100	100

f: Frequency, %: Percentage

Table (2) Assessment of Depression Symptoms among Patients with Heart Disease

Depression	f	%	M	SD
Normal	26	26		
Mild	13	13		
Moderate	31	31	11.26	5.270
Severe	23	23		
Extremely severe	7	7		
Total	100	100		

f: Frequency, %: Percentage, M: Mean for total score, SD: Standard Deviation
Normal= 0-7, Mild= 8 – 9; Moderate= 10 – 14; Severe= 15 – 19, Extremely severe= 20 – 21

This table indicates that patients are experiencing moderate depression symptoms (M±SD= 11.26±5.270) in which 31% show moderate depression while 23 % show severe depression.
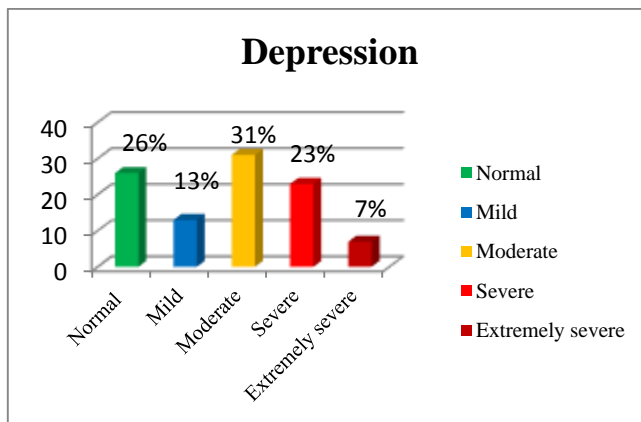

Figure (4-2): Levels of Depression Symptoms among Patients with Heart Disease (N= 100)
This figure shows that 31% of patients with heart disease are suffering from moderate depression.

Table 3: Regression Analysis for Depression Symptoms with Quality of Life among Patients with Heart Diseases (N=100)

Depression / QoL	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Physical	-.225	.064	-.335	-3.521	.001
Psychological	-.292	.059	-.448	-4.967	.001
Social	-.124	.035	-.335	-3.520	.001
Environmental	-.381	.076	-.453	-5.029	.001
Overall	-1.161	.208	-.492	-5.593	.001
Dependent variable: Quality of life					

The regression analysis in this table indicates that depression has significant influence on quality of life among patients with heart disease indicated by high significant difference with overall quality of life score and it sub-domains at p-value= .001

DISCUSSION

According to the study's results, the great majority of patients (66 percent) were men, as seen in table (1). This conclusion is corroborated which observed that the overwhelming majority of research participants were males [6].

In terms of age, this study's results reveal that the majority of patients polled are between the ages of (51-60) years, as seen in table (1). This finding is consistent with study which finding that the majority of the participants investigated were (>50) years old[7].

In terms of education level, the majority of sample patients (38%) were unable to read and write, as shown in table (1). This study's results are similar to those of the preceding one[8].

The patient's degree of knowledge about the condition and treatment options may influence their ability to recognize heart disease symptoms and reduce the impact of risk factors and consequences. Because of this, a large number of people with low educational attainment are at greater risk of illness.

According to the findings of this survey, 28% of participants were free workers, while 23% were jobless, as indicated in the chart below (Table 4-1). Unemployment was detected in 67.2 percent of the research participants.

According to Polaski et al The result indicate that 31% of the study sample experience Moderate and Severe depression that patients with heart disease as a result of Table (2)[9]. These results are in agreement with those of a research conducted by Khue et al. who revealed that heart diseases patients experience from depression about (92.8%)[10].

Also The regression analysis in this table (3) indicates that depression has significant influence on quality of life among patients with heart disease indicated by high significant difference with overall quality of life score and it sub-domains at p-value= .001 Patients' quality of life (QoL) may be negatively impacted by depression for a variety of reasons.

CONCLUSION

Based on the results presented and their discussion, the researcher has made the following conclusions: According to their disease duration, the majority of patients have a disease duration of 1-5 years, while 30% have a disease duration of 6-10 years. The majority of heart disease patients suffer from moderate depression.

Depression has significant influence on quality of life among patients with heart disease indicated by high significant between depression and quality of life.

Recommendation

The present study recommends the following points:

Increases awareness among heart disease patients and their families about the heart's nature and risk factors, as well as ways to lessen illness-related distress, and Improvement of the psychological and emotional well - being of heart diseases patients, particularly by nursing personnel, following treatment. Psychological treatments can help heart diseases patients feel less depressed.

REFERENCES

1. Abd, R. K., Abd, S. N., & Raman, V. (2019). Tracing the risk factors of heart diseases at al-Nasiriyah heart center in Iraq. Journal of Cardiovascular Disease Research, 10(1).
2. Gustad, L. T., Bjerkeset, O., Strand, L. B., Janszky, I., Salvesen, Ø., & Dalen, H. (2016). Cardiac function associated with previous, current and repeated depression and anxiety symptoms in a healthy population: the HUNT study. Open Heart, 3(1), e000363.
3. Faller, H., Störk, S., Gelbrich, G., Schowalter, M., Ertl, G., & Angermann, C. E. (2015). Depressive symptoms in heart failure: Independent prognostic factor or marker of functional status? Journal of Psychosomatic Research, 78(6), 569–572.
4. Tully, P. J., Baker, R. A., Turnbull, D., & Winefield, H. (2008). The role of depression and anxiety symptoms in hospital readmissions after cardiac surgery. Journal of Behavioral Medicine, 31(4), 281–290

5. Sosnowski, R., Kulpa, M., Ziętalewicz, U., Wolski, J. K., Nowakowski, R., Bakuła, R., & Demkow, T. (2017). Basic issues concerning health-related quality of life. Central European Journal of Urology, 70(2), 206.

6. Denton, E. J., Hart, D., Russell, P. A., Wright, G., & Conron, M. (2017). Lung cancer and socio-economic status: inextricably linked to place of residence. Internal medicine journal, 47(5), 563-569.

7. Abbas, A. D. (2018). Effect of Chemotherapy upon Lifestyle for Patients with Pulmonary Carcinoma. Iraqi Journal of Cancer and Medical Genetics, 6(1).

8. Molla, S., Yitayal, M., & Amare, G. (2021). Health-related quality of life and associated factors among adult patients with heart failure in Wolaita Zone Governmental Hospitals, Southern Ethiopia. Risk Management and Healthcare Policy, 14, 263.

9. Salari, N., Hosseinian-Far, A., Jalali, R., Vaisi-Raygani, A., Rasoulpoor, S., Mohammadi, M., Rasoulpoor, S., & Khaledi-Paveh, B. (2020). Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. Globalization and Health, 16(1), 1–11.

10. Khue, P. M., Thom, V. T., Minh, D. Q., Quang, L. M., & Hoa, N. L. (2019). Depression and anxiety as key factors associated with quality of life among lung cancer patients in Hai Phong, Vietnam. Frontiers in psychiatry, 10, 352