



Quality of Life for Patient with Hypertension in Al-Najaf Al-Ashraf City

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ABSTRACT

Background: Uncontrolled hypertension affects millions of people worldwide, whether they live in developed or developing countries. According to the WHO, there are around 1.13 billion people in the globe who suffer from hypertension. Every year, almost seven million individuals die as a result of hypertension.

Objectives: The aim of this study is to evaluate quality of life in hypertension patients treated in al-Najaf teaching hospitals.

Methodology: Descriptive design cross-sectional study was used in the study. The population of the study consists of hypertension patients who are followed up in the Teaching Hospitals in Al-Najaf Al-Ashraf Province/Iraq. The sample of the study consisted of 120 patients who applied to the hospitals on February 1, 2022 and May 1, 2022 and met the research criteria. Study data were collected with Quality Of Life, the Socio demographic data form.

Results: The results of study showed that 35% of the patients were between the ages of 46-55 and 62.5% were female. It is seen that 25% of the evaluated patients are illiterate and 22.5% are high school graduates. 59.2% of the patients resided in the city and 73.3% of them had hypertension between 1-10 years. It was observed that the quality of life increased as the age of the patients increased and the highest quality of life was statistically higher in the 66-75 age range ($p < 0,05$). It has been determined that the quality of life of individuals who do not work and who have a disease year of 21-30 years is high ($p < 0,05$).

Conclusion: The median quality of life of patients differs radically by demographic factors like age, level of education, occupation, and length of disease. Patient awareness is significantly related to demographic variables such as age, education, occupation, and duration of disease.

Recommendations: The study recommended to Encourage patients to regular monitoring of blood pressure. And Educated them about anxiety and depression management to enhance their psychological status.

Keywords: hypertension, quality of life, adult patient.

INTRODUCTION

Cardiovascular disease is the leading cause of death and disability in relation to productivity and lifespan. The most common form of heart disease was hypertension. In 2014, 22 percent of adults were found to have hypertension. The American Society of

Hypertension and the International Society of Hypertension found in 2013 that one-third of adults in both developed and developing countries suffer from hypertension, which occurs when blood pressure levels are too high. There are n estimated 1.28 billion

adults aged 30–79 years worldwide have hypertension, according to estimates world health organization (WHO, 2023).

It adds to the global health burden because hypertension is a treatable condition that can be controlled, but it also adds to the number of people who get sick. Many body parts, like the kidney, are slowly damaged by hypertension, which can cause blood vessels to burst quickly and cause bleeding. Many things can cause heart disease and death, like being overweight, having diabetes, and smoking. A person's high blood pressure can cause them to die early or become disabled from cardiovascular disease, which costs a lot of medical costs and lost human capital (Aldiab et al. 2018).

Uncontrolled hypertension affects millions of people worldwide, whether they live in developed or developing countries. According to the WHO, there are around 1.13 billion people in the globe who suffer from hypertension. Every year, almost seven million individuals die as a result of hypertension. Moreover, a quarter of the population aged 15 to 64 in the kingdom of Saudi Arabia (KSA) has high blood pressure. According to a KSA-wide survey, 57.8% of patients with hypertension were entirely uninformed of their disease before participating (Alshammari et al. 2021).

It is widely accepted that quality of life is an indicator of overall well-being, which includes feelings of happiness and satisfaction with life. "The individual's viewpoint on their place in life, as well as their objectives, expectations, standards, and worries, within the context of the culture and value systems in which they live" was the most commonly used definition of QoL. In addition, well-being resulting from a combination of physical, functional, emotional, and social factors are referred to as "quality of life." As it pertains to health and quality of life.

AIMS OF THE STUDY

The aim of this study is to evaluate quality of life of patients with hypertension in a al-Najaf

teaching hospital. The study was conducted with Descriptive design cross-sectional study.

METHODOLOGY

Setting and sample of the study

The research data collected in Iraq between February 1, 2022, and May 1, 2022, was provided by Al-Najaf Al-Ashraf teaching hospital and alsader teaching hospital. There are 120 participants in this study. A purposive sample is a method of selecting a sample with a specific goal. Analysis was done using the G power package application. Power analysis determined that a sample size of 3.0, 0.05, and 120 had a power of 0.95 when the effect size, P, and sample size were all set at these values.

Inclusion criteria of sample

Who are older than 18 years.

Who are diagnosed with hypertension least one year.

Who are agree to participate in the study.

Exclusion Criteria of sample

have a medical diagnosis that prevents them from speaking and understanding, who refused to participate in the study and hypertension without a medical diagnosis.

Study instrument

Socio demographic data form: The questionnaire evaluates the patients' age, gender, education, and diseases. The researcher created it by scanning the literature.

Quality Of Life: John Flanagan, an American psychologist, developed the Quality of Life Scale in the 1970s. He used it to help people with chronic illnesses keep their lives going. When looking at health outcomes, it is essential to look at how well people are doing regarding their quality of life. To determine the value of medical treatment for someone with a long-term illness, they must look at their quality of life (QOL). In the last two decades,

more than a thousand QOL-testing devices have been made. It was a 15-item questionnaire that measured the five conceptual domains Flanagan and his group came up with from the 6500 critical incidents they obtained. These five domains were based on what they found in the critical incidents. Relationships with other people, actions in a society or group of people, personal development and recreational pursuits were some of the things people did. In descriptive research, people with chronic diseases have been questioned about their quality of life. After that, one more thing was added to the tool. People should be able to deal with their problems (Burckhardt and Anderson, 2003).

The European Quality of Life Scale (EQ-5D-3L) was used to collect data on quality of life. Two parts make up the EQ-5D-3L: the EQ-5D descriptive system and the EQ visual analog scale (EQ VAS). The five components of the EQ-5D-3L descriptive system are mobility, self-care, usual activities, pain or discomfort, and anxiety or depression. There are three possible states along each axis: problem-free, with minor issues, and severely problematic. Patients with hypertension were asked to rate their health on a five-factor scale, with their responses to each dimension represented by a check box. The patient's subjective assessment of their own health is recorded on a 20-centimeter vertical visual analog scale that ranges from 100 (the "best imaginable health state") to 0 (the "worst imaginable health state") (Group, 1990). The researchers were given a translated Arabic version of EQ-5D-3L (EQ-5D-3L) when they registered this study on the Euroqol website. As soon as King Saud University Medical City's Institutional Review Board gives its blessing, this research could get underway (Alshammari et al. 2021)

Ethics committee approval: approval obtained from the Training and Human Development center of Najaf health directorate to collect samples on December 22, 2021, No. 59859 . I got approval from the Ethics Committee Çankırı Karatekin University On

December 28, 2021, meeting No. 24. Before beginning data collection, the researcher explained the study and its goals to the participants. The researcher obtained their verbal consent to proceed with data collection before beginning data collection.

Data collection: Data collection occurred between February 1, 2022, and May 1, 2022. Hypertension patients who came to the internal polyclinics of the hospital for control purposes were reached. There are 4 internal polyclinics in total. Questionnaire forms were collected face-to-face by the researcher. The data-gathering process takes between 15 and 25 minutes for each participant.

Data analysis: We analyzed the collected data using SPSS (Statistical Package for the Social Sciences) version 25.0 for Windows. The data was analyzed using descriptive statistics (such as frequency, percentage, range, mode, and mean and standard deviation). In this case, we made sure the data followed the standard normal distribution. The Q-Q Plot can be used to check for deviations from the normal distribution. In addition, the skewness and kurtosis values must be less than three for the data to have a normal distribution. The Kruskal-Wallis test was utilized due to the fact that the data did not exhibit a normal distribution. We used a Bonferroni-corrected test to determine which subset of participants was responsible for any observed differences. If the data did not follow a normal distribution, the Spearman correlation coefficient was calculated. The p-value for a correlation coefficient to be meaningful must be lower than 0.05.

RESULTS

The study results shows that 42 (35%) of patients aged (46-55) years, there is a highly significant difference in the mean quality of life of patients according to age. The table reveals that 75 (62.5% of patients) are females, and there is no statistically significant difference between the mean quality of life of male and female patients. Table results indicate that thirty patients (25%) are illiterate,

and there is a highly significant difference between the mean quality of life of patients according to their level of education. The table reveals that forty-eight (40%) of the patients are employed, and that the mean quality of life varies significantly by occupation. According to the table 1, 71 (59.2%) of them are urban residents, and there is no significant difference between the mean quality of life of patients based on their place of residence. The table's results indicate that 88 (73.3%) patients had (1-10) years of hypertension, and there is a highly significant difference in the average quality of life of patients according to disease duration Table (1). Also the study shows regarding quality of life domains that mobility domain, 49(40.8%) of patients have severe problems with walking around and being confined to bed. Regarding the personal care domain, 53(44.2%) of patients have severe problems with washing and dressing. Regarding the usual domain, 48(40%) patients have severe problems performing their usual activities. Regarding the pain/discomfort domain, 52(43.3%) patients have extreme pain and discomfort problems. Regarding the anxiety and depression domain, 93(77.5%) of patients have severe problems with anxiety and depression. Table (2) regarding quality of life overall the results shows that the mobility (6.5%), personal care (6.73%), usual activity (6.72%), pain/discomfort (7.08%), anxiety/depression (8.23%), and overall quality of life (35.2%) Table (3).

DISCUSSION:

The study indicated that quality of life varies significantly among patients based on age, education, occupation, and disease time. Xiao et al.'s (2019) study *Chronic Hypertension and Quality of Life in Chongqing, China*, based on an Investigation of the Population as a Whole found a significant relationship between (QOL) and age, gender, and education. Alshammari et al.'s (2021) (*Quality of Life and Hypertension Awareness Among People with High Blood Pressure in Saudi Arabia*) found that the mean of patients' scores differs significantly from their

quality of life according to gender, education, occupation, and disease period. In the study by Xu et al. (2016) (Chongqing, China), researchers conducted research on middle-aged adults to see how high blood pressure influenced their QOL regarding their condition) and found a significant relationship between the quality of physical activity and gender. The patient's usual activities, age, education, occupation, and disease period strongly correlate. There is a strong correlation between a patient's age, education, occupation, and illness duration in pain or discomfort. Anxiety and depression in patients are strongly associated with their gender. Bhandari et al.'s (2016) study (*The quality of a person's everyday life with high blood pressure in Kathmandu*) found significant contact between patient physical function and age, gender, education, and illness duration. Also, there is a significant relationship between patient mental health, age, and education. Azar et al.'s (2020) study (*the QOL of people with high blood pressure in health centers is looked into*) revealed that the "levels of education" variables are substantially connected to the quality of life. There was no statistical significance in the physical, psychological, social, or environmental domains.

According to the research, 73.8% of patients know the typical blood pressure range. 76 (63.3%) of those surveyed did not realize that hypertension is the medical term for high blood pressure. 58 out of 48.3 % of those polled know that hypertension worsens with age. The statement that both sexes have an equal likelihood of acquiring hypertension was rejected by 60% of respondents. According to 69 (57.5%), hypertension is not a curable illness. Most people (70/58.3%) know that a person's risk of acquiring hypertension increases as they age. Tobacco use has been linked to hypertension in 106 (88.3 %). According to 103 (85%), a diet heavy in saturated fat raises a person's risk of developing hypertension. A whopping eighty-four percent (or 70%) believe that being overweight increases one's

risk of developing high blood pressure; most people (58.3%) know that frequent physical activity reduces their risk of developing high blood pressure. 90% of those polled disagreed, stating that adding salt to one's diet does not influence blood pressure. 70% of those polled felt dietary efforts to lower hypertension were useless. When asked whether white meat is better than red meat for lowering blood pressure, 63% of respondents replied no. 103 (85.8%) of those polled stated that medicine alone would not be sufficient to treat hypertension. Nine out of ten people (90 %) know that untreated high blood pressure can progress to other life-threatening conditions. According to Bagale's study (2016) (Hypertensive patients' knowledge of the disease, self-care, and how to deal with complications), only 14 % of respondents were aware of hypertension.

Alshammari et al. (2021) stated that majority 49(40.8%) of patients have severe problems walking around and being confined to bed. Regarding the personal care domain, 53(44.2%) of patients have severe problems with washing and dressing. Regarding the regular activity domain, 48 (40 %) patients have severe difficulties completing their usual tasks. Regarding the pain/discomfort category, 52 (43.3 %) patients report severe pain and discomfort. In the realm of anxiety and depression, 93 (77.5%) of patients exhibit severe anxiety and depression. Regarding the mean of the patients with hypertension's mean of awareness and quality of life domains. The mean of awareness is (32.41%), mobility (6.5 %), personal care (6.73 %), usual activity (6.72 %), pain/discomfort (7.08 %), anxiety/depression (8.23%), and overall quality of life (35.2%) In a descriptive study (The QOL of villagers in rural Vietnam with high blood pressure), the finding shows that patients had poor (QOL) in the psychological life aspect related to hypertension (Ha et al. 2014). In a descriptive study (Assessment of Qol in Hypertensive Patients), the finding indicated that hypertension reduces the physical and mental quality of life (Kaliyaperumal et al. 2016). Xu et al. (2016) found

that they had poorer scores on physical functioning, the role of physical discomfort, health and vitality, mental health, and social functioning than participants with hypertension. Bhandari et al. (2016) found that patients with hypertension have a low quality of life. Katsi et al.'s (2017) study (Arterial Hypertension and Quality of Life about Health) found that hypertensive patients have poor mental and physical health. Uchmanowicz et al.'s (2018) study (Adherence to therapy recommendations among senior hypertension patients is influenced by their quality of life) found that The (pt) judged their (QOL) most accurately in the psychological domain. They scored an average of 14.6, 14.46, 14.38, and 13.01 in environmental, social, and physical well-being, respectively. Gabal et al.'s (2018) study (Patients with hypertension in an Egyptian village and their quality of life) found that hypertension affected patients' quality of life (90.8%). They had poor physical fitness, (79.5%) feelings, (78.2%) daily activity, (76.4%) social activities, (94.3%) change in health, and (61.1%) overall health affected. Xiao et al. (2019) found that patients with hypertension had poor physical function, body pain, physical activity, social function, and mental status. Nurchayati and Karim's (2019) study (Patients with hypertension with a robust support system from their families are happier and more fulfilled) found that 57 % of patients with hypertension had poor (QOL). Wong et al.'s study (2019) (Using the EQ-5D-5L, a study of the health-related quality of life of adults with high blood pressure was done in China's Hong Kong Special Administrative Region) discovered that people with high blood pressure had a lower self-reported quality of life. Azar et al. (2020) found that the QOL for people with high blood pressure is average and not good.

CONCLUSIONS:

The median quality of life for patients different by demographic factors like age, level of education, occupation, and length of disease. Patient awareness is significantly related to demographic variables such

as age, education, occupation, and duration of disease.

RECOMMENDATIONS:

1. Educate patients with hypertension about hypertension risk factors.
2. Teach patients about control hypertension methods.
3. Encourage them to regular monitoring of blood pressure.
4. Educate patients about anxiety and depression management to enhance their psychological status.
5. Educate the patient on the average ratio of pressure.

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TABLES:

Table (1): Distribution of patients' quality of life according to demographic characteristics

Variables	n	%	Mean of QoL	SD	Test Value ^a
Age					
26-35	6	5	25.5	6.77	X ² =72.5 P=0.000
36-45	15	12.5	27.4	4.22	
46-55	42	35	30.6	6.33	
56-65	31	25.8	39.34	5.73	
66-75	26	21.7	44.3	1.54	
Gender					
Female	45	37.5	36.4	8.22	X ² =1.82 P=0.176
Male	75	62.5	34.5	8.33	
Education					
Illiterate	30	25	43.6	2.92	X ² =49.5 P=0.000
Primary	21	17.5	36.6	6.82	
Intermediate	12	10.0	29.8	5.31	
Secondary	15	12.5	33.1	8.02	
Institute	15	12.5	31.7	6.87	
College	27	22.5	30.3	8.25	
Occupation					
Not work	32	26.7	42.5	4.11	X ² =46.5 P=0.000
Housewives	17	14.2	32.9	7.93	
Worker	14	11.7	33.6	7.56	
Employee	48	40	30.5	7.33	
Retired	9	7.5	41.3	4.92	
Residence					
Rural	49	40.8	36.6	8.44	X ² =2.82 P=0.093
Urban	71	59.2	34.2	8.13	
Disease period by years					
1-10	88	73.3	32.4	7.62	X ² =39.6 P=0.000
11-20	26	21.7	42.5	4.55	
21-30	6	5	45	0.00	

Table (2): Distribution of the patient's quality of life

Items	N	%
Mobility		
I have no problems with walking around		
No problems	32	26.7
Some or moderate problems	39	32.5
Extreme problems	49	40.8
I have some problems with walking around		
No problems	29	24.2
Some or moderate problems	42	35.0
Extreme problems	49	40.8
I am confined to bed		
No problems	32	26.7
Some or moderate problems	39	32.5
Extreme problems	49	40.8
Personal care		
I have no problems with washing or dressing myself		
No problems	24	20.
Some or moderate problems	44	36.7
Extreme problems	52	43.3
I have some problems with washing or dressing myself		
No problems	23	19.2
Some or moderate problems	44	36.7
Extreme problems	53	44.2
I am unable to wash or dress myself		
No problems	23	19.2
Some or moderate problems	44	36.7
Extreme problems	53	44.2
Usual activities (e.g., work, study, housework, family or leisure activities)		
I have no problems performing my usual activities		
No problems	20	16.7
Some or moderate problems	52	43.3
Extreme problems	48	40.0
I have some problems with performing my usual activities		
No problems	19	15.8
Some or moderate problems	53	44.2
Extreme problems	48	40.0
I am unable to perform my usual activities		
No problems	19	15.8
Some or moderate problems	53	44.2
Extreme problems	48	40.0
Pain/discomfort		
I have no pain or discomfort		
No problems	9	7.5
Some or moderate problems	59	49.2
Extreme problems	52	43.3

Table (3): Mean and standard deviation of patients' quality of life related to hypertension

Variables	Mean	Median	SD	Min	Max
Awareness	32.41	34	5.49	19	40
Mobility	6.5	6	2.41	3	9
Personal care	6.73	6	2.27	3	9
Usual activity	6.72	6	2.14	3	9
Pain/discomfort	7.08	6	1.86	3	9
Anxiety/depression	8.23	9	1.53	3	9
Quality of life	35.2	36	8.31	18	45