

# HEALTH-RELATED QUALITY OF LIFE OF HYPERTENSIVE PATIENTS

Muhammad Ahsan ul Haq

College of Statistical and Actuarial Sciences, Punjab University Lahore-Pakistan.

m.ahsan@kics.edu.pk

**ABSTRACT:** *Objective: Hypertension is considered to be a significant threat for the mankind in the developing countries as well as in developed countries. The present study was conducted to assess the health-related quality of life (HRQOL). Methodology: a cross sectional study was conducted. Information collected, using a self-administered questionnaire. A sample of 200 patients was included in the study. For statistical analysis purpose Mann Whitney U test and Kruskal Wallis H test were used for analysis purpose. The results: findings show that patients irritated quickly, they are vulnerable to deal their emotion in hypertension. It is found disease not affects their memory and they feel relief after taking the treatment. Patients lost their weight, speaking power was affected, family life affected due to hypertension and patients anxious about their future health. The risk of hypertension and getting angry quickly was more in females than males. Conclusion: hypertension disease is a silent killer in our society. The majority of people does not understand the symptoms of hypertension, this disease can be overcome with proper treatment and on proper time.*

**Keywords:** HRQOL; Hypertension; Gender; Age

## INTRODUCTION

In Pakistan, approximately 18 million persons expected to sufferer in high blood pressure and seventy percent are not aware about this disease [1]. Hypertension is recognized as high blood pressure, it is an exceptionally regular and genuine condition that can prompt or confound numerous well-being issues. In spite of the fact that hypertension is frequently gathered as asymptomatic, it is connected with impeded Health-related Quality of life (HRQOL) due to intricacies or co-morbidities, attention to the determination and undesirable impacts from antihypertensive prescriptions. The most usually distinguished areas incorporate physiological, psychosocial, sociological, and otherworldly [2].

High blood pressure classified into two types’ primary (Essential) or secondary. Vital hypertension is the hypertension that has no known reason, hereditary elements may include in it. Secondary hypertension is the term for hypertension with regard to cause, for example, kidney illness, endocrine disorders, oral contraceptives and diabetes. Blood pressure has additionally divided into two types Systolic and Diastolic circulatory blood stream. Systolic weight is the upper which is the weight pushed amid the pulse and the lowest or second, number is the diastolic weight, which is the pressure as the heart is resting between beats. Ordinary circulatory strain is considered under 120/80 mmHg. Regularly more thought is given to the systolic circulating strain as a real hazard component for cardiovascular infection for individuals in excess of 50 years of age. The larger part of individuals have systolic circulating strain climbs step by step with age because of expanding

hardness of expansive corridors, long haul assembles up of plaque, and the expanded commonness of cardiovascular and vascular illness. It is at some point called the quiet executioner on the grounds that an individual could have it for a considerable length of time without actually knowing it. It can be an exceptionally perilous disease if not treated appropriately incorrect time in a right manner.

The Framingham study explained that blood pressure can become the reason of heart failure, renal disease, kidney damage, cerebral hemorrhage and organ damage. In our society majority of people are unaware about the causes of hypertension due to an absence of indications until real muddling emerges. Indications of hypertension may be gentle and obscure, cerebral pain, morning migraine, tinnitus-ringing or buzzing in ears, wooziness, disarray and papilledema. Despite the fact that specialists don’t comprehend what causes hypertension more often than not, they do know a couple of elements that can intensify hypertension, smoking (Nicotine), obesity and being overweight, stress, salt and alcohol.

Numerous cross-sectional and cohort studies have provided important and valuable information about the quality of life for hypertension patients. Quality of life is a typical term that envelops various segments of an individual’s social and mental status. Essentially expressed, it is the capacity of an individual to capacity regularly in the public arena, as saw by the individual [4]. Comparative studies exist about quality of life

**Table 1. Basic information about hypertension, according to Seventh Joint National Committee (JNC-7)**

Classification of blood pressure measurements according to JNC-7		
Category	Systolic blood pressure	Diastolic blood pressure
Optimal	<120	<80
Normal	<130	<85
Pre-hypertension	130-139	85-89
Hypertension Stage-I (mild)	140-159	90-99
Stage-II (moderate)	160-179	100-109
Stage-III (severe)	>180	>110

was made by the group of Spain on two bunches of subjects, one influenced by hypertension and an alternate of the populace, matched in age, sex and living arrangements with the previous gathering and of the same size. The survey was made and the results acquired were discovered to be pretty much the same as those reported by creators in other European nations of comparable socio-demographic conditions. Hypertensive patients reported critical lower scores of value of life than the overall public in more than half of the measurements investigated: prosperity and physical limit, social working, positive inclination and mental working.

Hypertension scores were lower than those without hypertension in the wake of controlling for age, sex, socio demographic variables and co-dismalness. Past myocardial localized necrosis were connected with lower health and imperativeness [5]. Relationship exists among diverse physical danger variables of heart disease and hypertension and to discover the primary driver of hypertension in the patients of area Muzaffarabad. An example of 156 hypertensive patients was examined. There were discovered that the presence of hypertension in the patients was because of eight significant danger variables, age, month to month pay, a number of youngsters, tolerant sugar level, cholesterol level, smoking and conjugal status while just family history variable was not related to hypertension [6].

Both analysis and treatment of hypertension may prompt undesirable changes in the personal satisfaction of hypertensive patients. The employments of non-medication treatment, for example, practice and weight reduction are helpful to advertise the expanded wellbeing and prosperity. A portion of the undesirable impacts of analysis may be dictated by training and advising of patients and it might be useful to include the persistent life partner or other relatives to diagnose the hypertension. Strong and orderly catch up is likewise prone to lessening the poor impacts of conclusion on mental prosperity and social conduct [7].

The end of the study was not hypertension or antihypertensive medication, treatment or control seems to

lower HRQOL in the elderly Spanish populace. Yet among ladies, familiarity with hypertension is connected with lower HRQOL, regardless of progress of way of life proposed by the doctor. The effect of hypertension marking on HRQOL may be attributable partially to the medicine of antihypertensive medications [3]. Explore the relationship of mental anxiety and personal satisfaction among patients with the cardiovascular infection of hypertension in addition to stroke or hypertension just. Patients with stroke had a noteworthy lower QOL than patients without stroke and a fundamentally more elevated amount of anxiety. Mental anxiety was altogether related to all spaces of QOL among non-stroke patients. The same mental and social demographic elements demonstrated little effect on the stroke patients. Wage and sexual orientation were the main socio demographic elements being essentially connected with the physical (Training) and social (Sex) areas of QOL in stroke patients. Mental anxiety was emphatically corresponded with all areas of QOL in patients without stroke and was just part of the way connected with QOL among patients with stroke [8]. The prime aim of this study was to assess the physical functioning, check mental health and the social behavior of hypertensive patients.

## METHODS

A sample of 200 patients was selected from General hospital using time based sampling technique. Time based sampling was used for purpose of data collection. The duration of the sample collection was 15 days. A self-administered questionnaire was used for data collection. Descriptive and inferential analysis was performed. Frequencies and percentages were compute of demographic variables, and for inferential purpose ,we use chi-square test to find association between categorical variables. For the purpose of means comparison of two or more than two groups use Mann Whitney U test and Kruskal Wallis H test.

**Table 2. Frequency distribution of variables**

Variables	S D	D	N	A	SA
Get irritated quickly	10(5.0)	23(11.5)	6(3.0)	56(28.0)	105(52.5)
Feeling helpless to deal emotion in high Blood Pressure	19(9.5)	30(15.0)	27(13.5)	79(39.5)	45(22.5)
Memory works still of hypertension	16(8.0)	51(25.5)	5(2.5)	85(42.5)	43(21.5)
Feel relief after taking treatment	13(6.5)	25(12.5)	21(10.5)	110(55.0)	31(15.56)
Feel vigility in your activities	21(10.5)	32(16.0)	20(10.0)	55(27.5)	72(36.0)
Traveling is problematic because of hypertension	30(15.0)	20(10.0)	7(3.5)	63(31.5)	80(40.0)
Lost weight due to hypertension	47(23.5)	27(13.5)	32(16.0)	66(33.0)	28(14.0)
Thinking power affect due to hypertension	35(17.5)	70(35.0)	12(6.0)	58(29.0)	25(12.5)
Speaking power affect due to hypertension	75(37.5)	45(22.5)	14(7.0)	49(24.5)	16(8.0)
Social interaction affect because of hypertension	44(22.0)	45(22.5)	20(10.0)	66(33.0)	25(12.5)
Family life affected because of hypertension	20(10.0)	39(19.5)	19(9.5)	77(38.5)	45(22.5)
Anxious about your future health	18(9.0)	20(10.0)	26(13.0)	55(27.5)	81(40.5)

SD= Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree

**RESULTS**

Descriptive statistics were summarized in terms of frequencies and percentages of categorical variables. The results show that among 200 patients, seventy percent (70%) were females and 48.4% patients belong to age category 35-50. Education of patient's categories is as follows:

48.9% illiterate, 20.3% middle, 17.4% matric and 13.4% intermediate and above. It is found that 91.3% respondents were married. Fifty percent respondents' family monthly income is 7000-17000 and 30.1% respondents are from the rural area and 69.9% from the urban area. For duration of disease it is found that, 68% patients have less than 3year, 17.4% between 3year-6year, 3.9% between 6year-9year and 10.7% above 9year. Hypertension generally divided into two categories, 83.5% patients have systolic and 16.5% diastolic type of hypertension.

The above table-2 shows that 52.5% strongly agree patients get irritated quickly and 39.5% in favor they are defenseless to deal their emotion in hypertension. It is found 42.5% disease not affects their memory and they feel relief after taking the treatment. It is observed that 36.0% respondents are strongly agreed that they feel vigily in their activities and 40.0% due to hypertension traveling is more problematic for them, 33.0% patients lost their weight, 37.5% strongly disagree speaking power is affected due to hypertension. It is found that 19.5% disagree about hypertension affect their social interaction with friends and family.'38.5% patients agreeing that family life affected and patients anxious about their future health.

By using Chi-square test we found that association exist between gender and hypertension, thinking power and interaction with friends and family life associated with hypertension, duration of disease and comfortable sleep, type of hypertension and anxious about future health, comfortable sleep and vigily in activities are associated. We found that

age, income and education are also associated with hypertension.

From present study it is concluded that risk of hypertension is higher in married patients than single patients, females more getting angry hurriedly than males, taking medicine in high BP is same among the people belonging to both rural and urban areas, type of hypertension is not equally distributed among different age groups, traveling is not equally problematic among the people belonging to both rural and urban areas type of hypertension is different between male and females and different age categories.

Table 4 shows the results of Kruskal Wallis H test, hypertension risk is more in age category 35-50 as compare to others. It is also conclude that in hypertension memory works in the same way among different age groups, feeling vigily in activities in high BP is same among different age groups, traveling is equally problematic because of hypertension in different age groups, effects of hypertension on thinking power are same among different age groups, in different age groups the problem of laziness are same. This test examines the respondents of different education levels, income groups and duration of hypertension. It is concluded that taking medication is equally distributed among different education levels, taking medication is equally distributed among different income groups, feeling relief after taking treatment are same different time durations, Memory work even in hypertension and duration of hypertension are equally distributed, due to the hypertension, weight loss problem is same among different time durations, due to the hypertension, thinking power not equally effected among different time durations and Because of hypertension, feeling muscles pain is same among different time durations.

**Table 3. Median differences between two groups**

Null Hypothesis		Mean Ranks	Test Statistic	P-Value
Married and unmarried patients irritate quickly	<i>Gender</i> Single	75.01	U =2956	0.01*
	Married	120.96		
Male and female have same opinion according irritate quickly	<i>Gender</i> Male	78.51	U=2572	0.03*
	Female	117.06		
Taking medication in high BP is same among the people belonging to both rural and urban areas.	<i>Area</i> Urban	86.88	U =3654	0.795
	Rural	88.82		
Traveling is equally problematic among the people belonging to both rural and urban areas.	<i>Area</i> Urban	127.89	U =3005	0.02*
	Rural	77.76		
Type of hypertension is equally distributed among males and females.	<i>Gender</i> Male	88.16	U =1787.5	0.009*
	Female	86.98		
Type of hypertension is equally distributed among different age groups.	<i>Type</i> systolic	88.16	U =1787.5	0.001*
	diastolic	86.98		

\*\* Significant at  $\alpha = 0.01$

\* Significant at  $\alpha = 0.05$

**Table 4. Mean differences between more than two groups**

Null Hypothesis			Test Statistic	P-Value
With hypertension memory works in the same way among different age groups.	Age	Mean Ranks	H=24.33	0.042*
	less than 35	88.41		
	35-50	90.49		
	50-65	87.13		
	above 65	113.50		
Feel muscles pain in high BP is same among different age groups.	Age	Mean Ranks	H=31.15	0.029*
	less than 35	95.03		
	35-50	92.51		
	50-65	86.36		
	above 65	124.36		
Traveling is equally problematic due to hypertension in different age groups.	Age	Mean Ranks	H=23.11	0.049*
	less than 35	86.13		
	35-50	84.38		
	50-65	86.26		
	above 65	106.80		
Effects of hypertension on thinking power are same among different age groups	Age	Mean Ranks	H=22.14	0.05*
	less than 35	86.04		
	35-50	87.76		
	50-65	82.19		
	above 65	103.02		
Feeling laziness is same in different age groups	Age	Mean Ranks	H=29.28	0.019*
	less than 35	83.87		
	35-50	86.22		
	50-65	109.27		
	above 65	90.66		

\*Significant at  $\alpha = 0.01$ \*Significant at  $\alpha = 0.05$ 

## DISCUSSION

Hypertension, as known high blood pressure, it's a very common and serious condition that can lead or complicate many health problems. Hypertension is mental stress, which bitterly affected the quality of life. Hypertension affects the physical functioning, role physical, mental health, social functioning, bodily pain, role of emotions, depression and health in the quality of life. Treatment and duration of hypertension also affected the quality of life. Two hundred patients of hypertension were selected from General hospital. Seventy three percent participants of this study were females, 42.9% respondents were illiterate and majority 94.3% patients were married. 86.3% respondents have the systolic blood pressure and rest have the diastolic. Most of the respondents i.e. 64.0% who have the hypertension last three years. It is observed that 65.1% respondents taking medication and rest are not taking medication. Age is a statistically significant with hypertension; risk of hypertension is higher in age categories 35-50 and 50-65 as compared to less than 35 and greater than 65 years old patients. In developed countries, it is considered that only 23% of deaths occur below the age of 70 years. However, in south Asia, 52% of CVD deaths occur among people with age under 70 years [9-11]. Hypertension and quickly irritated due to hypertension is higher in females as compared to males. Low income increases the risk of hypertension than higher income categories. Low and middle-income countries bear a large burden of cardiovascular disease, accounting for 87% of disability adjusted life years lost. CVD has become a major cause of mortality and morbidity in low income South

Asian countries as well [11, 12]. The health related quality of life of the married persons effecting more than unmarried hypertension patients.

Hypertension affects patients' life like they get angry hurriedly, Feeling helpless to deal emotion in high Blood Pressure, memory does not work properly. The majority of respondents was strongly agreed for anxious about their future life. By using Chi-square test we found that association exists between gender and hypertension, thinking power and interaction with friends and family life associated with hypertension, duration of disease and comfortable sleep, type of hypertension and anxious about future health, comfortable sleep and vigility in activities are associated. We found that age, income and education are also associated with hypertension.

## CONCLUSION

The study concludes that the occurrence of hypertension and its types are strongly related to the variables such as gender, age, marital status and income. Hypertension affects health related quality of life of persons. Patients feel they irritate quickly and feel vigility in their activities; hypertension affects the memory, social interaction, family life, gets angry hurriedly. Hypertension affected on the physical functioning, mental health, social functioning, bodily pain, role of emotions, depression and health in the quality of life. Treatment and duration of hypertension also affected the quality of life. Hypertension disease is a silent killer in our society. The Majority of the people do not understand the

symptoms of hypertension, this disease can be overcome by proper treatment and on proper time.

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