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Original Research Article

Study of the Quality of Life (QOL) of hypertensive patient using WHO-QOL-BREF questionnaire in Tertiary Care Hospital

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ABSTRACT

Background: Hypertension is an important risk factor for cardiovascular disease and has become a major global burden on public health. The prevalence of hypertension is high and the prescription containing antihypertensive drugs is increasing day by day associated with other diseases such as diabetes, hypercholesterolemia, and cardiovascular disease.

Materials & Methods: A cross-sectional observational study was carried out on 200 patients diagnosed with hypertension at a single unit of a tertiary care hospital. WHO-QOL BREF questionnaire scores were filled in the CRF.

Results: Quality of Life was better in female Hypertensive patients as compared to males.

Conclusion: Quality of Life must be evaluated for Hypertensive patients so as to identify and improve affected domains which may help in controlling Blood Pressure.

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INTRODUCTION

Hypertension is one of the most common worldwide disease affecting humans. Because of the associated morbidity and mortality and the cost to society, Hypertension is an important public health challenge. Hypertension is a disease of complex etiology, affecting 972 million people worldwide. It is estimated that the worldwide prevalence of hypertension would increase from 26.4% in 2000 to 29.2% in 2025 (Kearny, 2005).

Hypertension is an important risk factor for cardiovascular disease and has become a major global burden on public health (Lawes, 2006).

The prevalence of hypertension is high and the prescription containing antihypertensive drugs is increasing day by day associated with other diseases such as diabetes, hypercholesterolemia, and cardiovascular disease. In India cardiovascular diseases

(CVD) caused 2.3 million deaths in the year 1990; this is projected to double by the year 2020. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease deaths in India. There is a strong correlation between changing lifestyle factors and increase in hypertension in India. Pooling of epidemiological studies shows that hypertension is present in 25% of the urban and 10% of the rural population in India. At an underestimate, there are 31.5 million hypertensive in rural and 34 million in urban populations. A total of 70% of these would be Stage I hypertensive. Recent reports show that Stage I hypertension carries significant cardiovascular risk and there is a need to reduce this blood pressure (Gupta, 2004).

Quality of Life: According to WHO Quality of Life is 'individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". The terms "quality of life" and more specifically "health related quality of life" (HRQOL) refer to the physical, psychological, and social domains of health, seen as distinct areas that are influenced by a person's experiences, beliefs, expectations, and perceptions (Wolf, 2004).

Individuals' perceptions of their quality of life may be affected not only by their illness but also by their therapy. This is the case with individuals who have hypertension. Many patients with mild to moderate hypertension have no symptoms. Nevertheless, antihypertensive drug therapies are frequently associated with unpleasant side effects that may have an impact on many aspects pertaining to quality of life (Lawrence, 1996; Fletcher, 1989).

This definition reflects the view that quality of life refers to a subjective evaluation, which is embedded in a cultural, social, and environmental context. (As such, quality of life cannot be equated simply with the terms "health status", "lifestyle", "life satisfaction", "mental state" or "well-being"). Many components of quality of life cannot be observed directly. They are usually evaluated according to classical principles of item-measurement theory. This theory proposes that there is a true quality of life value, which may be measured indirectly by asking a series of questions known as "items" (Tom, 2003).

Because the WHO-QOL focuses upon respondents' "perceived" quality of life, it is not expected to provide a means of measuring in any detailed fashion symptoms, diseases or conditions, nor disability as objectively judged, but rather the perceived effects of disease and health interventions on the individual's quality of life. The WHO-QOL is, therefore, an assessment of a multi-dimensional concept incorporating the individual's perception of health status, psycho-social status, and other aspects of life.

In clinical practice, the WHO-QOL assessments will assist clinicians in making judgments about the areas in which a patient is most affected by the disease and in making treatment decisions. In some developing countries, where resources for health care may be limited, treatments aimed at improving quality of life through palliation, for example, can be both effective and inexpensive (Viktil, 2007).

Together with other measures, the WHO-QOL-BREF will enable health professionals to assess changes in quality of life over the course of treatment.

Hypertension may have a significant impact on the quality of life of those who suffer from these conditions. The objective of the present study is to measure health-related quality of life among patients suffering from hypertension and any temporal changes in their quality of life.

MATERIAL & METHODS

This was a prospective observational study that was carried out ON 200 Patients at the Department of Medicine, Ward No 12 & 4A, K.E.M. Hospital, Parel, Mumbai. Approval of the ethics committee was taken prior to the initiation of the study.

Inclusion Criteria

- Patients diagnosed with hypertension.
- Patients admitted in general medicine ward under NDK unit in KEM Hospital.
- Age: - ≥ 18 years.
- Patients of either sex.

Exclusion Criteria

- Patients were not willing to give Informed Consent.

Hypertensive patients were identified from all patients admitted in the male & female general medicine wards. They were screened & enrolled after they fulfilled the inclusion & exclusion criteria. Patients with known cases of Hypertension (HTN) admitted for other reasons inward were included in this study. The Patient Information Sheet (PIS) was provided to the selected patients in vernacular language. All doubts & queries were solved by the study investigator. When patients were voluntarily ready to participate in the study, voluntary informed consent was taken. After filling the Informed Consent Form (ICF), patients were interviewed for details of demography, past medical history, current medications & co-morbid conditions. Blood Pressure (BP) was recorded at the time of the interview.

All the information of the patient was recorded in Case Record Form (CRF) & BP was taken regularly till the patient stayed in the ward & the effect of the antihypertensive drug recorded in the form of changes in the systolic & diastolic BP. Analysis of the level of QOL of the hypertensive patient was done by calculating scores of the questionnaire form. Data collected were analyzed by Statistical Package for the Social Sciences (version 19) & the result was drawn.

RESULTS

Table: The study found that females had better quality of life as compared to males.

Category	Physical Domain	Psychological Domain	Social Domain	Environmental Domain
Overall	83.75	75.06	41.07	95.45
Males	81.43	71.39	40.38	89.03
Females	88.23	82.17	42.41	97.91
18-39 yrs	84.72	73.27	41.40	91.09
40-59 yrs	85.45	77.38	41.22	97.64
Above 60 yrs	81.75	73.12	41.22	94.75

	Overall perception of QOL	Overall perception of Health	Physical	Psychological	Social Relationship	Environment
Mann-Whitney U	2876	3542	3185	2416.000	4111.500	1881.000
Wilcoxon W	11650	12320	11940	11194.000	12889.500	10659.000
Z	-4.486	-2.611	-3.440	-5.363	-.983	-6.740
Asymp. Sig. (2-tailed)	.0001	.009	.001	.0001	.326	.0001

a. Grouping Variable: Sex

Quality of Life

- All the patients enrolled in the study completed the WHO-QOL BREF questionnaire.
- All patients needed the help of either medical personnel or their relatives to fill the questionnaire. The WHO-QOL BREF contains four domains Physical, psychological, social relationship, and environmental domain. Scores are calculated after filling out the Questionnaire. Following are the detailed scores regarding the quality of life of the patients.

Quality of life was found to be better in the age group of 40-59 yrs as compared to other age groups. Physical domain scores, psychological domain scores, and Environmental domain scores were better in the age group of 40-59 years compared to other age groups. Social domain scores were almost equal in all age groups.

DISCUSSION

A Mann-Whitney U test was conducted to evaluate the Quality of Life scores of males and females. From this data, it can be concluded that there is a statistically significant difference between the Quality of life of males and females. It can be further concluded that females elicited statistically significantly higher Quality of Life scores than males ($P = 0.001$). Only the

social relationship domain was found not significant ($P = 0.32$).

Our study evaluated variations in different domains of QOL of Hypertensive patients depending upon demographic data. Quality of Life evaluated using the WHO-QOL BREF questionnaire indicates that Females have better Quality of Life as compared to Males. Patients enrolled in this study belonged to a low socio-economic group, maybe which is why the quality of life scores was low in males as compared to females.

WHO-QOL BREF assessment is a promising tool for measuring different aspects of Health-related Quality Of Life in patients on Anti-Hypertensive drug therapy from patients' point of view. Quality of life was found to be better in the age group of 40-59 yrs as compared to other age groups. Physical domain scores, psychological domain scores, and Environmental domain scores were better in the age group of 40-59 years compared to other age groups. Social domain scores were almost the same in all age groups.

Patients with Hypertension also need monitoring of their Quality of Life to better understand which particular domain is particularly affected.

The WHOQOL assessments will assist clinicians in making judgments about the areas in which a patient is most affected by the disease, and in making treatment decisions. In some developing countries like India, where resources for health care may be limited, treatments aimed at improving quality of life through palliation, for example, can be both effective and

inexpensive. Together with other measures, the WHOQOL-BREF will enable health professionals to assess changes in quality of life over the course of treatment.

CONCLUSION

Quality of Life must be evaluated for Hypertensive patients so as to identify and improve affected domains which may help in controlling Blood Pressure.

Limitations of the study: The data was collected only in a single unit of the Department of Medicine, and in 36 weeks clinical posting, topic selection, protocol writing & ethics committee approval took a period of 12 weeks, data collection would be in 12 weeks & analysis of data took 12 weeks period. A larger study involving more units done and over a period of 6 months-1 years would make it possible to apply WHO-QOL Questionnaire to antihypertensive drugs to determine their effect on QOL which could not be done in our present study.

Recommendations: Prescription audits and Quality of Life studies should be conducted on a multicentric basis so that we can approach patients with hypertension with more appropriate treatment strategies.

CONFLICT OF INTEREST

None declared.

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REFERENCES

- Fletcher AE, Chester PC, Hawkins CM. The effects of Verapamil and Propranolol on quality of life in hypertension. *Journal of Human Hypertension*.1989; 3: 125-130.
- Gupta R. Trends in hypertension: epidemiology in India: *Journal of Human Hypertension*, 2004; 8:73-78.
- Kearney PM, Whelton M, Reynolds K, Muntner P, Whelton PK. Global burden of hypertension: analysis of worldwide data. *Lancet*, 2005; 365:217-22.
- Lawes CM, Vander Hoorn, Law MR, Elliott P, MacMahon S, Rodgers A. Blood pressure and the global burden of disease: Part II: estimates of attributable burden', *Journal of Hypertension*. 2000-2006;24: 423-430.
- Lawrence WF, Fry back DG, Martin PA. Health status and hypertension: A population-based study, *Journal of Clinical Epidemiology*; 1996; 49:1239-1245.
- TomW, AndyK, Alan R Haycox. *Journal of Social Medicine*. 2003; 96:11:525-531.
- Viktil K, Blix HS, Moger&Reikvam. Polypharmacy as commonly defined is an indicator of limited value in the assessment of drug-related problems' *British Journal of Clinical Pharmacology*.2007; 63: 187-95
- Wolf Maier K, Cooper RS, Kramer H . Hypertension treatment and control in five European countries, Canada, and the United States. 2004;43:10.