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Research Article

ASSESSMENT OF QUALITY OF LIFE IN HYPERTENSIVE PATIENTS AT A TERTIARY CARE HOSPITAL

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ABSTRACT

Hypertension is one of the most important preventable causes of premature morbidity and mortality in the world. Because of morbidity and mortality and the cost to society, hypertension emerged as an important public health challenge. The management of hypertension involves the long term therapy of a primarily asymptomatic disease, the treatment of which may cause side effects which lead to problems with medication adherence and hence leads to an impaired quality of life. This study was aimed to assess the impact of pharmacist mediated patient counselling on the quality of life of hypertensive patients. The prospective study was carried out at the department of medicine in HKES's Basaveshwar Teaching and General Hospital (BTGH), Kalaburgi. Patients were categorized into test group and control group by simple randomization technique. Patients were followed-up for a period of six months. At each meeting, the quality of life, blood pressure and adherence were analyzed. About 130 Patients were enrolled, in that 60 were in the Test group and 60 were in the Control group. At the baseline there was no significant difference between the blood pressure and QOL scores. Test group showed improvements in the quality of life score from the baseline to 2nd follow-up (>10 units). This study concludes that the pharmacist plays an important role in the improving the quality of life of hypertensive patients. The study confirms that the pharmacist mediated patient counseling helped in better management of Hypertension and improved the quality of life in physical, psychological, social and environmental health dimensions of Hypertensive patients.

Key words: Hypertension, PHARM-D, Patient counselling, WHO BREF QOL, Medication adherence

INTRODUCTION

According to the JNC 8, Hypertension is defined as systolic BP level of ≥140mmHg and diastolic BP of ≥90mmHg. [1] Hypertension (high blood pressure) is not a disease but an important risk factor for cardiovascular complications.[2] Patient counseling helps the patients increase the medication adherence behavior, reduce the cost, minimize the drug related problems and increase the patient's satisfaction i.e., an individual's perceptions of their position on 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 various counseling aids also help in better understanding their disease and treatment, which further helps in managing their health.

Throughout the world approximately 972 million people are suffering from Hypertension, and approximately 7.1 million deaths per year may be attributable to hypertension.[3,4] In 1990 cardiovascular diseases caused 2.3 million deaths in India and this number is projected double by the year 2020.[5]

The present study of Assessment of Quality of life in Hypertensive Patients was carried out with the objective to assess the quality of life in hypertensive patients with reference to their physical, psychological, social and environmental health dimension.

Reseachers have attempted to standardize the construct of quality of life to have broad applications in health care policy and management; however, clinical research in hypertension should focus on the components of health-related quality of life that influence patient outcomes with regard to behaviours affecting adherence .Antihypertensive agents that maximize patient accetance and quality of life are now available.[6,7]

MATERIALS AND METHODS

A Prospective and Observational study was conducted to determine the quality of life in hypertensive inpatients and out-patients at the Department of Medicine, Basaveshwar Teaching and General Hospital (BTGH), Gulbarga, for a period of six months. The survey was done by using the WHOBREF Questionnaires on social, physical, personal and psychological factors related to the patients.

The study included 140 patients, among them 120 completed the study whereas 20 patients dropped out of the study. Hypertensive patients were randomly assigned to the intervention (n = 60) or test group (n = 60). The intervention consisted of patient counselling conducted by PharmDs focusing on a patient's medication adherence and QOL. Patient information aids (Leaflets) were given to both the study groups. Patient counselling was provided to the test group patients only. Measurements took place at baseline, and after 1 and 2 months of follow-up using the WHO-BREF questionnaire for QOL. The data was analyzed by suitable statistical method. (student's T- test)

Patients diagnosed with hypertension were enrolled in the study considering the inclusion and exclusion criteria. Details regarding demography, disease, education, history of disease, co-morbidities, family history and treatment were collected from the medical records in a data collection form and through patient interview during patient counseling.

The inclusion criteria were

- Hypertensive patients of either sex, above 18 years of age.
- Patients suffering with HTN and are on medication.
- Hypertension alone or with less than four co-morbidities. (MI, Diabetes Mellitus, Asthma, IHD)

The exclusion criteria were

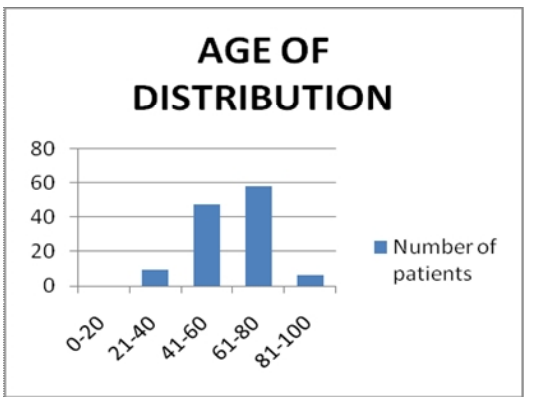
- Pregnant /lactating hypertensive patients.
- Hypertension with more than four co-morbid conditions.

RESULTS AND DISCUSSION

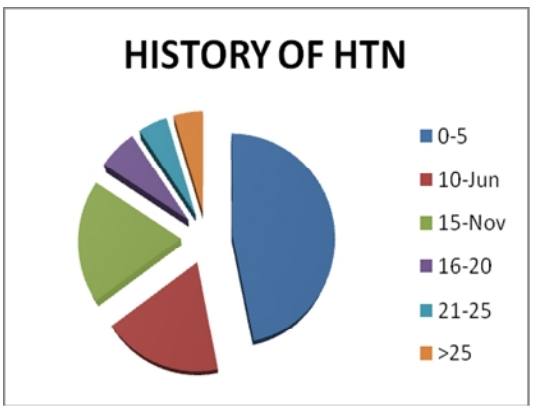
In-total, 140 patients were enrolled in the study, 60 were in the test group and 60 were in the control group and 20 patients were under the drop-out list. From the baseline to second follow up there was no significant difference between the blood pressure and QOL scores in the control group while the test group showed improvements in QOL scores from the baseline to the second follow-up (> 10units), which says that by patient counselling i.e. educating the patients about the medication adherence and by maintaining the healthy diet, it is possible to improve the quality of life of the hypertensive patients. Also, the clinical pharmacist plays an important role in the improvement of the quality of life in hypertensive patients.

Table 1: Detail of patients enrolled into the study

Gender	Number of patients	Number of dropouts	% of patients
Male	60	7	53(40.45%)
Female	71	4	67(51.14%)
Total	131	11	120(99.99%)



Graph 1: Age Distribution of the patients



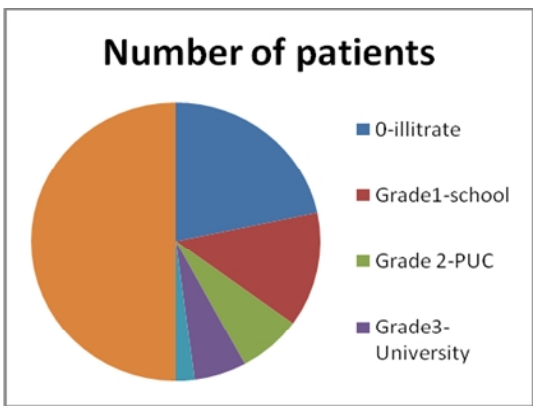
Graph 2: Patients having histroy of hypertension

Table 2: Patient details for Co morbidity

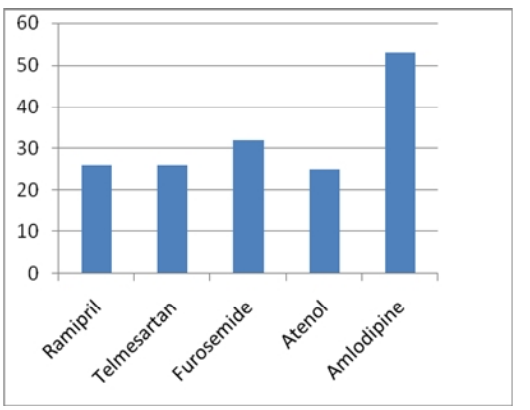
Patient details	Number of patients	% of patients
With Co-morbidities	84	70.00%
Without Co-morbidities	36	30.00%
Total	120	100.00

Table 3: Details for Family History

Family history	Number of patients	% of patients
Having	17	14.16
Without	103	85.83
Total	120	100



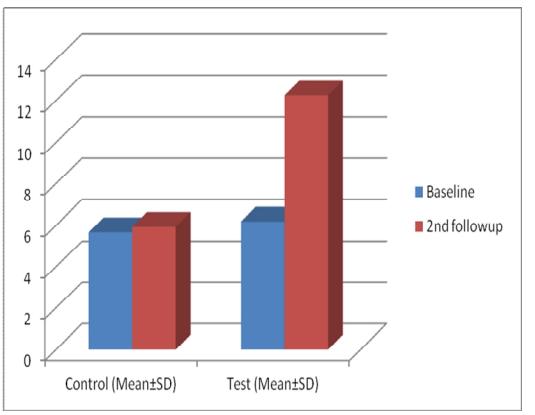
Graph 3: Details for Educational History



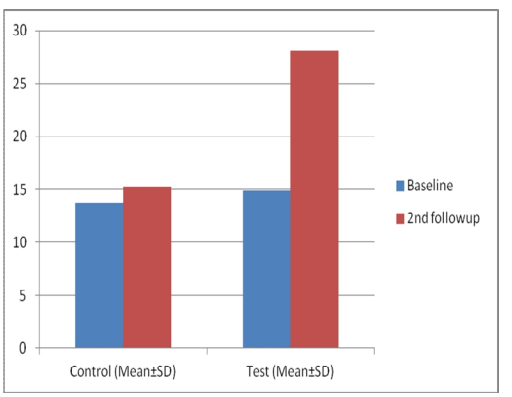
Graph 4: Pateints for Drugs Prescribed

Table 4: Quality of life scores of test and control group

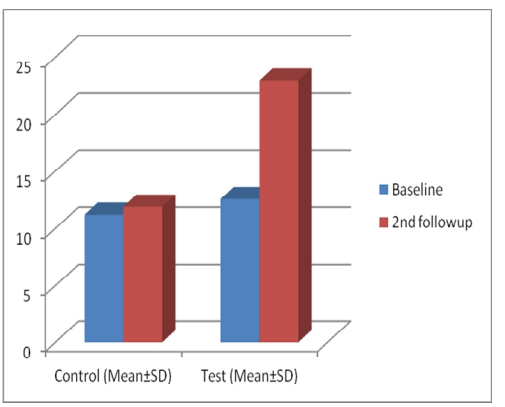
QOL	Control (Mean±SD)	Test (Mean±SD)	Z-value	P – value	Significant
Domain-1 (Physical)					
Baseline	13.78±2.55	14.90±3.12	3.99	P<0.001	Not significant
2nd follow-up	15.25±1.12	28.08±3.26	20.76	P<0.001	Highly significant
Domain-2 (Psychological)					
Baseline	11.20±2.41	12.57±2.95	1.36	P>0.05	Not Significant
2nd follow-up	11.90±1.12	22.97±2.84	19.67	P<0.001	HS
Domain-3 (Social)					
Baseline	5.67±1.51	6.18±1.86	0.88	P>0.05	Not Significant
2nd follow-up	5.93±1.73	12.25±1.58	19.27	P<0.001	HS
Domain-4 (Environmental)					
Baseline	13.65±1.89	16.28±3.82	5.91	P>0.05	Not Significant
2nd follow-up	14.05±1.02	33.97±3.00	28.21	P<0.001	HS



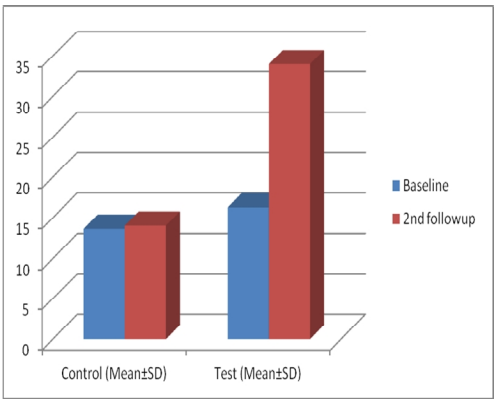
Graph 5: Domain (Physical)



Graph 6: Domain 1 (Psychological)



Graph 7: Domain (Social)



Graph 8 : Domain 2 (Environmental)

CONCLUSION

There are inadequate resources for patients to obtain information about their treatment. By considering the answers to the WHO-BREF Questionnaires given to them on baseline and follow-ups, it is concluded that, the patients in test group who had received extensive counseling from a pharmacist regarding their disorder and its management showed a better improvement in treatment outcomes, patient knowledge and QOL, than patients in the control group. The study also emphasizes the potential of a clinical pharmacist to play an important role as a Patient Counselor in the management of Hypertensive patients.

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