

Original article :

Assessment of Psychiatric Illness in Hypertensive Patients at a Tertiary Care Teaching Hospital

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Abstract

Background: Hypertension, defined as a systolic blood pressure ≥ 140 mmHg and/or a diastolic pressure ≥ 90 mmHg, is one of the most common chronic diseases. Studies examining the association of hypertension with psychological distress, such as anxiety and depressive symptoms, have produced mixed findings. Hence; the present study was undertaken for assessing the prevalence of psychiatric illness in hypertensive patients.

Materials & Methods: A total of 56 hypertensive patients were enrolled in the present study. Complete demographic and clinical details of all the patients were obtained. A self-framed questionnaire was made and prevalence of psychiatric illness among hypertensive patients was assessed.

Results: Psychiatric illness was found to be present in 26.78 percent of the patients (15 patients). Significant results were obtained while assessing the age-wise, gender-wise and residence-wise distribution of psychiatric illness among hypertensive patients. Anxiety and depression were the most common psychiatric illness encountered among hypertensive patients.

Conclusion: Anxiety and depression are commonly present among hypertensive patients.

Keywords: Hypertension, Psychiatric Illness.

INTRODUCTION

Hypertension, defined as a systolic blood pressure ≥ 140 mmHg and/or a diastolic pressure ≥ 90 mmHg, is one of the most common chronic diseases. The overall hypertension prevalence among the adult population was estimated at 26.4% in 2000; moreover it has been reported that this prevalence increased from 23.9%, in 1994, to 29.0%, in 2008, in the USA; from 25.0%, in 1993, to 43.2%, in 2006, in Mexico; and from 15.3%, in 1995, to 24.5%, in 2005, in Canada among other countries.¹⁻³ Studies examining the association of hypertension with psychological distress, such as anxiety and

depressive symptoms, have produced mixed findings. Several studies have reported positive associations, whereas others have observed weak or no associations. There is even some evidence to suggest lower blood pressure (BP) in participants with depressive or anxiety disorders. A related issue is the effect of labelling patients as hypertensive. Several studies have suggested that individuals 'labelled' as hypertensive might adopt a sick role that can impair quality of life.⁴⁻⁶ Hence; the present study was undertaken for assessing the prevalence of psychiatric illness in hypertensive patients.

MATERIALS & METHODS

The present study was undertaken in the Department of Psychiatry, Prathima Institute of Medical Sciences, Nagunur, Karimnagar, Andhra Pradesh (India) and it included assessment of prevalence of psychiatric illness in hypertensive patients. Ethical approval was obtained from institutional ethical committee and written consent was obtained from all the patients after explaining in detail the entire research protocol. A total of 56 hypertensive patients were enrolled in the present study. Criteria described previously in the literature were used for diagnosing hypertension.¹

Exclusion criteria for the present study included:

- Patients with history of any other systemic illness,
- Patients with history of trauma,
- Diabetic patients

Complete demographic and clinical details of all the patients were obtained. A self-framed questionnaire was made and prevalence of psychiatric illness among hypertensive patients

was assessed. All the results were recorded in Microsoft excel sheet and were analyzed by SPSS software. Chi- square test was used for assessment of level of significance.

RESULTS

Assessment of a total of 56 hypertensive patients was done in the present study. Psychiatric illness was found to be present in 26.78 percent of the patients (15 patients). Among these 15 patients, 11 were males while the remaining 4 were females. Mean age of the hypertensive patients with psychiatric illness was 46.5 years. Majority of the patients belonged to the age group of 30 to 50 years. Most of the hypertensive patients with psychiatric illness (10 patients) belonged to urban residence.

In the present study, significant results were obtained while assessing the age-wise, gender-wise and residence-wise distribution of psychiatric illness among hypertensive patients. Anxiety and depression were the most common psychiatric illness encountered among hypertensive patients.

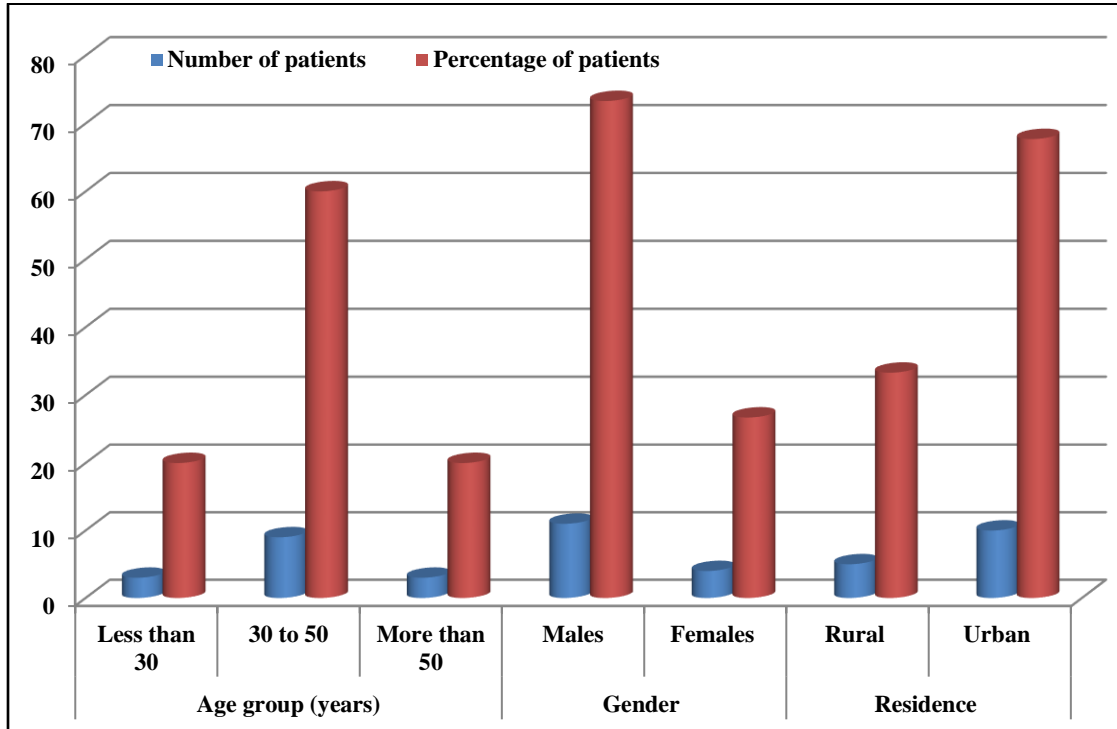
Table 1: Prevalence of psychiatric illness

Parameter	Number of patients	Percentage of patients
Prevalence of psychiatric illness	15	26.78

Table 2: Demographic data of hypertensive patients with psychiatric illness

Parameter		Number of patients	Percentage of patients	p-value
Age group (years)	Less than 30	3	20	0.00 (Significant)
	30 to 50	9	60	
	More than 50	3	20	
Gender	Males	11	73.3	0.02 (Significant)
	Females	4	26.7	
Residence	Rural	5	33.3	0.03 (Significant)
	Urban	10	67.7	

Graph 1: Demographic data of hypertensive patients with psychiatric illness



DISCUSSION

Many people have high blood pressure (hypertension). But they usually don't notice it – which means that over time it can damage blood vessels. Having blood pressure that is always too high can make you more likely to have a heart attack, a stroke or kidney problems. The higher is the blood pressure, the greater is the risk of developing these medical conditions. Chronic forms of morbidity, including mental disorders and hypertension, play a central role in shaping the burden of disease in the developing world. In South Africa there is a high prevalence of mental disorders, with an estimated 16% of adults living with an anxiety disorder and 10% with major depression. Hypertension is a leading risk factor for mortality and morbidity worldwide, accounting for approximately 6% of global deaths.^{7,8} Hence; the present study was undertaken for assessing the prevalence of psychiatric illness in hypertensive patients.

In the present study, assessment of a total of 56 hypertensive patients was done. Psychiatric illness was found to be present in 26.78 percent of the patients (15 patients). Among these 15 patients, 11 were males while the remaining 4 were females. Mean age of the hypertensive patients with psychiatric illness was 46.5 years. Majority of the patients belonged to the age group of 30 to 50 years. Most of the hypertensive patients with psychiatric illness (10 patients) belonged to urban residence. Grimsrud A et al examined the association between hypertension and depression and anxiety in South Africa. Data come from a nationally-representative survey of adults (n=4351). Overall 16.7% reported a previous medical diagnosis of hypertension, and 8.1% and 4.9% were found to have a 12-month anxiety or depressive disorder, respectively. In adjusted analyses, hypertension diagnosis was associated with 12-month anxiety disorders but not 12-month

depressive disorders or 12-month comorbid anxiety-depression. Hypertension in the absence of other chronic physical conditions was not associated with any of the 12-month mental health outcomes (p-values all <0.05), while being diagnosed with both hypertension and another chronic physical condition were associated with 12-month anxiety disorders, but not 12-month depressive disorders or comorbid anxiety-depression. These are the first population-based estimates to demonstrate an association between hypertension and mental disorders in sub-Saharan Africa.⁹

In the present study, significant results were obtained while assessing the age-wise, gender-wise and residence-wise distribution of psychiatric illness among hypertensive patients. Anxiety and depression were the most common psychiatric illness encountered among hypertensive patients. Johansen A et al investigated these associations in a large population sample. 55,472 participants in the Nord-Trøndelag Health Study (HUNT 2, 1995-1997), Norway, who completed the Hospital Anxiety and Depression rating Scale, were divided into 3 groups according to their diastolic blood pressure and antihypertensive treatment status. A cut-off of ≥ 90 mmHg diastolic blood pressure was used to identify hypertensive status. Differences in anxiety and depression symptom

levels in untreated and treated hypertensives (all treatments) versus the normotensive reference group were explained by differences in age and gender distribution in the three groups in this study. However, the receipt of two or more antihypertensive drugs was associated with depressive symptoms alone (OR = 1.40, 95% CI = 1.03-1.90), but not with symptoms of anxiety (OR = 1.14, 95% CI = 0.83-1.57) or mixed anxiety and depression (OR = 1.19, 95% CI = 0.82-1.72) in the fully adjusted model, compared to untreated hypertension. Antihypertensive monotherapy (all agents) nor any single antihypertensive drug class were associated with symptoms of depression, anxiety, or mixed anxiety and depression. There may be a positive association between multi antihypertensive drug use and symptoms of depression, whereas this was not found in persons with symptoms of anxiety or mixed anxiety and depression. This might reflect poor antihypertensive treatment adherence leading to polypharmacy, or other unfavorable health behaviors in people with symptoms of pure depression.¹⁰

CONCLUSION

From the above results, it can be concluded that anxiety and depression are commonly present among hypertensive patients. However; further studies are recommended.

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