

Original Research

Assessment of psychiatric illness among hypertensive patients

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ABSTRACT:

Background: Hypertension is the most important modifiable risk factor for all-cause morbidity and mortality worldwide and is associated with increased risk of cardiovascular disease (CVD). The presence and extent of associations between onset of common mental disorders and subsequent adult onset hypertension is unclear. Hence; the present study was conducted for assessing psychiatric illness along hypertensive patients. **Materials & methods:** A total of 50 hypertensive patients were enrolled. Hypertension was defined as systolic blood pressure (SBP) values of 130mmHg or more and/or diastolic blood pressure (DBP) more than 80 mmHg. Complete demographic and clinical details of all the patients were obtained. A Performa was made and questionnaire based assessment of all the patients was done for evaluating the psychiatric illness. Assessment of spectrum of psychiatric illness and its associated factors was done. **Results:** Among these 50 patients, psychiatric illness was seen in 38 percent of the patients. Out of these 19 patients, depression, delirium and anxiety were seen in 14 percent, 16 percent and 8 percent of the patients respectively. Among the patients with psychiatric illness, majority of them had duration of hypertension of more than 10 years. A significant positive correlation was observed while correlating psychiatric illness with duration of hypertension. **Conclusion:** Hypertensive patients are more commonly affected by delirium and depression because of long term effect of hypertension on mental health.

Key words: Hypertension, Psychiatric illness

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INTRODUCTION

Hypertension is the most important modifiable risk factor for all-cause morbidity and mortality worldwide and is associated with increased risk of cardiovascular disease (CVD). Fewer than half of those with hypertension are aware of their condition, and many others are aware but not treated or inadequately treated, although successful treatment of hypertension reduces the global burden of disease and mortality. The aetiology of hypertension involves the complex interplay of environmental and pathophysiological factors that affect multiple systems, as well as genetic predisposition.¹⁻³

A global hypertension prevalence of 26% is projected to ascend to 29% by the year 2025. Like patients with other chronic medical conditions, hypertensive patients experience many profound emotions which increase their risk for the development of mental

health disorders particularly anxiety and depression. Imperative to the management of hypertension is the need for patients to adhere to pharmacological and non-pharmacological therapies and these negative emotions may adversely influence their adherence behaviour. Anxiety and lower adherence rates have been observed for asthma, heart failure, haemodialysis and contraceptive use, although other authors noticed greater adherence among the majority of their patients with anxiety disorder.⁴⁻⁶ The presence and extent of associations between onset of common mental disorders and subsequent adult onset hypertension remains unclear. Much of the literature in this area has employed symptom screening scales, which may not discriminate well between different negative emotions, and little of the literature in this area has assessed common mental disorders. Much work has focused on specific psychological domains rather than

on the relative contributions of a range of symptoms or disorders, and no data are available on the effects of mental disorder comorbidity on subsequent hypertension. Further, there is little if any work examining the possibility that such associations may vary by gender or over the life course.⁵⁻⁸ Hence; the present study was conducted for assessing psychiatric illness along hypertensive patients.

MATERIALS & METHODS

Hence; the present study was conducted for assessing psychiatric illness along hypertensive patients. A total of 50 hypertensive patients were enrolled. Hypertension was defined as systolic blood pressure (SBP) values of 130mmHg or more and/or diastolic blood pressure (DBP) more than 80 mmHg. Complete demographic and clinical details of all the patients were obtained. A Performa was made and questionnaire based assessment of all the patients was done for evaluating the psychiatric illness. Assessment of spectrum of psychiatric illness and its associated factors was done. Recording of all the results was done in Microsoft excel sheet followed by analysis by SPSS software.

RESULTS

Analysis of a total of 50 hypertensive patients was done. Among these 50 patients, psychiatric illness was seen in 38 percent of the patients. Out of these 19 patients, depression, delirium and anxiety were seen in 14 percent, 16 percent and 8 percent of the patients respectively. Among the patients with psychiatric illness, majority of them had duration of hypertension of more than 10 years. A significant positive correlation was observed while correlating psychiatric illness with duration of hypertension.

Table 1: Psychiatric illness in hypertensive patients

Psychiatric illness	Number of patients	Percentage
Depression	7	14
Delirium	8	16
Anxiety	4	8
None	31	62

Table 2: Correlation of psychiatric illness with duration of hypertension

Duration of hypertension	Psychiatric illness present	Psychiatric illness absent	p- value
Less than 5 years	4	12	0.00 (Significant)
5 to 10 years	5	11	
More than 10 years	10	8	

DISCUSSION

Previous work has suggested significant associations between hypertension and psychological symptoms such as depression, anxiety, and anger. The existence

of such associations would be consistent with work indicating that such symptoms are accompanied by alterations in peripheral and central neuro-endocrine systems, or may have a range of behavioral correlates, which may in turn have persistent adverse effects on physical health. At the same time, there is little prospective data directly demonstrating a link between alterations in neurophysiology or behavior and subsequent hypertension, and it has also been suggested that being labeled as hypertensive itself leads to psychological symptoms.⁷⁻¹⁰ Hence; the present study was conducted for assessing psychiatric illness along hypertensive patients.

Analysis of a total of 50 hypertensive patients was done. Among these 50 patients, psychiatric illness was seen in 38 percent of the patients. Out of these 19 patients, depression, delirium and anxiety were seen in 14 percent, 16 percent and 8 percent of the patients respectively. Stein DJ et al used the data from the World Mental Health Surveys (comprising 19 countries, and 52,095 adults). After psychiatric comorbidity adjustment, depression, panic disorder, social phobia, specific phobia, binge eating disorder, bulimia nervosa, alcohol abuse, and drug abuse were significantly associated with subsequent diagnosis of hypertension (with ORs ranging from 1.1 to 1.6). Number of lifetime mental disorders was associated with subsequent hypertension in a dose-response fashion. For social phobia and alcohol abuse, associations with hypertension were stronger for males than females. For panic disorder, the association with hypertension was particularly apparent in earlier onset hypertension. Depression, anxiety, impulsive eating disorders, and substance use disorders were significantly associated with the subsequent diagnosis of hypertension.¹⁰

In the present study, among the patients with psychiatric illness, majority of them had duration of hypertension of more than 10 years. A significant positive correlation was observed while correlating psychiatric illness with duration of hypertension. Ojike N et al examined the association between psychological distress and hypertension. They used data from the National Health Interview Survey for 2004-2013. Hypertension was self-reported and the 6-item Kessler Psychological Distress Scale was used to assess psychological distress (a score ≥ 13 indicated distress). They used a logistic regression model to test the assumption that hypertension was associated with psychological distress. Among the study participants completing the survey (n = 288,784), 51% were female; the overall mean age (\pm SEM) was 35.3 ± 0.02 years and the mean body mass index was 27.5 ± 0.01 . In the entire sample, the prevalence of psychological distress was 3.2%. The adjusted odds of reporting hypertension in psychologically distressed individuals was 1.53. The findings suggested that psychological distress is associated with higher odds of hypertension

after adjusting for other risk factors for high blood pressure.¹¹

CONCLUSION

Hypertensive patients are more commonly affected by delirium and depression because of long term effect of hypertension on mental health.

REFERENCES

1. Kaveh K, Kimmel P. Compliance in hemodialysis patients: multidimensional measures in search of a gold standard. *Am J Kidney Dis.* 2001;37(2):244–266.
2. Schweitzer R, Head KB, Dwyer J. Psychological factors and treatment adherence behavior in patients with chronic heart failure. *J Cardiovasc Nurs.* 2007;22(1):76–83.
3. Walsemann KM, Perez AD. Anxiety's relationship to inconsistent use of oral contraceptives. *Health Educ Behav.* 2006;33:197.
4. Cochrane R. Hostility and neuroticism among unselected essential hypertensives. *J Psychosom Res.* 1973 Jul;17(3):215–218. [PubMed] [Google Scholar]
5. Eastwood MR, Trevelyan H. Stress and coronary heart disease. *J Psychosom Res.* 1971 Sep;15(3):289–292. [PubMed] [Google Scholar]
6. Goldberg DP, Blackwell B. Psychiatric illness in general practice. A detailed study using a new method of case identification. *Br Med J.* 1970 May 23;1(5707):439–443.
7. Heine B. Psychogenesis of hypertension. *Proc R Soc Med.* 1970 Dec;63(12):1267–1270.
8. KESSEL WI. Psychiatric morbidity in a London general practice. *Br J Prev Soc Med.* 1960 Jan;14:16–22.
9. Kim HK, Park JH. Differences in adherence to antihypertensive medication regimens according to psychiatric diagnosis: results of a Korean population-based study. *Psychosom Med.* 2010;72(1):80–87.
10. Stein DJ, Aguilar-Gaxiola S, Alonso J, et al. Associations between mental disorders and subsequent onset of hypertension. *Gen Hosp Psychiatry.* 2014;36(2):142-149.
11. Ojike N, Sowers JR, Seixas A, et al. Psychological Distress and Hypertension: Results from the National Health Interview Survey for 2004-2013. *Cardiorenal Med.* 2016;6(3):198-208.