



PREVALENCE OF ANXIETY AMONG PATIENTS OF HYPERTENSION.

Psychiatry

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ABSTRACT

Aims— Literature suggests anxiety is highly prevalent among patients diagnosed with hypertension; we evaluated the prevalence of anxiety among patients of hypertension.

Methods— It was a cross sectional observational study. All subjects were assessed for inclusion – exclusion criteria, and on qualification they were requested to fill up Socio-demographic data sheet and anxiety scales or asked verbally and filled up by investigators.

Results— Sample consisted of 142 subjects with mean age of 45.85 ± 7.98 years, the mean duration of hypertension was 6.95 ± 3.72 years and mean weight of the sample was 73.69 ± 7.04 Kgs. Based on the HADS scoring 40 people were classified as Abnormal (case) of anxiety, which constituted 28.16% of the total sample size.

Conclusions— This study finds a prevalence of 28.16% of Anxiety among patients of hypertension.

KEYWORDS

Hypertension; Anxiety; Prevalence.

INTRODUCTION

Hypertension is very prevalent worldwide and has a wide range and variety of etiology that may be categorized as genetic as well as psychosocial and environmental factors [1,2]. It is a well known fact that cardiovascular system is regulated by the autonomic nervous system, emotional states may have a profound influence on the cardiovascular system, including blood pressure. Anxiety is one of the most common psychiatric illnesses in adults and is a major public health problem in many countries [3,4]. People suffering from depression and or anxiety were at two to three times much higher risk to develop hypertension [5].

Many epidemiological studies have been conducted to address this association, with differing results reported, few in favor and few against this association. Few studies supports that anxiety is associated with hypertension, [6,7], and some studies do not support the role of anxiety symptoms in the development of hypertension [8,9]. This scenario warrants need to investigate the associative relationship between anxiety and hypertension. Identifying and characterizing modifiable risk factors of hypertension remain important for public health and clinical medicine.

Available literature suggests anxiety is present in about 20% to 25% of patients diagnosed with a cardiovascular disease, including hypertension, even in the absence of an adverse events or invasive interventions. [10]

Thus we planned this study to find a prevalence of anxiety among hypertensive patients in our own socio cultural background.

MATERIALS AND METHOD

The aim of the present study was to assess the prevalence of anxiety among patients of hypertension. This study was conducted at medical out patients department at Hi-Tech Medical College and Hospital, Bhubaneswar, which is a tertiary care medical college hospital of Odisha, India. The study protocol was approved by the institutional review board of Hi-Tech Medical College and Hospital, Bhubaneswar. It was a cross-sectional, observational non interventional study carried out over a six months period (December 2017 – May 2018). All consenting patients who attended this hospital for follow up check up for management of hypertension. All recruited subjects who satisfied the inclusion criteria for the study, presence of any other major co morbid medical or other illness was kept as exclusion criteria. Included patients were examined clinically after taking detailed history and their socio demographic variables. They were requested to complete a questionnaire about their socio-demographic data sheet and

questionnaire of HADS. Details of family history of Hypertension, diabetes, and other history of any medical illness were obtained.

TOOLS

Socio-demographic Data Sheet: The socio demographic data sheet included age, religion, occupation, education and clinical information like duration of hypertension and other medical history.

Hospital Anxiety and Depression Scale (HADS) [11]: this is very well validated scale to assess anxiety and depression among hospital based patients. It consists 14 questions, 7 scoring anxiety and 7 scoring depression. Patients were asked to read each question and place a tick against the reply that came closest to how they had been feeling that day. Each answer was scored 0, 1, 2 or 3. The possible range of scores was therefore 0 to 21, with higher scores indicating greater levels of anxiety. Score of 0-7 is considered normal, scores of 8-10 is borderline abnormal and scores of 11-21 is abnormal case.

PROCEDURE: It was a cross sectional observational study. All subjects were assessed for inclusion – exclusion criteria, and on qualification they were requested to fill up Socio-demographic data sheet and anxiety questionnaires were asked verbally and filled up by investigators.

STATISTICAL ANALYSIS:

The collected data of all patients was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0. Data analysis included means and standard deviations for complete sample. Frequency analysis was used to determine the prevalence of anxiety among patients of hypertension.

RESULTS

A total of 142 subjects were included for the study, Table 1 summarizes the sample characteristics. The mean age of the sample was 45.85 ± 7.98 years) with minimum age of 29 years to a maximum age of 65 years in our sample. The mean duration of hypertension was 6.95 ± 3.72 years and mean weight of the sample was 73.69 ± 7.04 Kgs (Table -1).

Among the total sample size of 142 patients 80 patients (56.3 %) reported their occupation as office worker class, and 43.7 % were agricultural or manually working class (n=62). There was history of smoking or smokeless tobacco among 47 (33.1%) of the sample and there was family history of diabetes among 29 (20.4 %) of the sample. Based on the HADS scoring 40 people were classified as Abnormal (case) of anxiety, which constituted 28.16%. (Table -1)

DISCUSSION

We found a prevalence of 28.16 % of Anxiety among 142 patients of hypertension, In our study we found slightly higher prevalence of anxiety, as many other studies reporting prevalence rate for anxiety ranges between 20 to 25 % among hypertensive patients [10]. However Ethiopian study findings were in accordance with our result, as they reported a prevalence of anxiety among 28.5 % hypertensive patients [12]. We found prevalence of anxiety among hypertensive patients on slightly higher side many earlier studies. These found variation in prevalence may be attributable to sample selection and different tools, cut off values or different criteria used. However the Ethiopian study [12] used HADS as our study to quantify anxiety, and their result is almost similar with our finding.

In our study we also found very high prevalence of positive family history of hypertension and diabetes that is 38.7 % and 20.4 % respectively. People with positive family history for essential hypertension may be associated with excessive cardiovascular reactivity and characterized by denial and unwilling to admit neurotic feelings or aggressiveness exhibited exaggerated blood pressure reactivity to experimental tasks [13].

In future we also need larger samples size, along with a matched control group, simultaneous assessment of quality of life, disability and burden of various other cardiovascular problems, along with metabolic problems and follow-up studies to know the longitudinal course of these problems.

CONCLUSION

This study finds a prevalence of 28.16 % of Anxiety among patients of hypertension as measured by anxiety subscale of HADS.

TABLE 1: Sociodemographic and clinical features of the sample

	Mean ± SD	Min	Max
age	45.85 ± 7.98	29	65
Weight	73.69 ± 7.04	59	90
HADS Anxiety total	12.00 ± 3.61	04	19
		n	%
Gender	Male	74	52.1
	Female	68	47.9
Occupation	Official worker	80	56.3
	Manual Worker	62	43.7
Fam H/O HTN	No	87	61.3
	Yes	55	38.7
Fam H/O Diabetes	No	113	79.6
	Yes	29	20.4
H/O Tobacco use	Yes	47	33.1
	No	95	66.9
HADS Anxiety score	No (below 10)	142	82.5
	Yes (above 10)	40	28.16 %

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