

## ORIGINAL ARTICLE

### ASSESSMENT OF EMOTIONAL INTELLIGENT IN HYPERTENSIVE ADULTS AND NORMAL ADULTS: A COMPARATIVE STUDY

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#### ABSTRACT:

**Background:** Hypertension is viewed as one of the most elevated reasons for mortality and morbidity; and one of the fundamental driving foundations for cardiovascular disease. Emotional intelligence means the limit of the person to acknowledge the truth their capacity tackle passionate issues and adapt to stress and forces. The present study was planned to assess emotional intelligence in hypertensive adults and normal adults. **Materials and method:** For the study, we selected sample of 50 subjects. 25 out of 50 were hypertensive and had heart disease and 25 were normal adults. The subjects were selected randomly from the population. The demographic data and information about the subject was collected using personal data sheet. The emotional intelligence of the subjects was measured using Indian version of Emotional Intelligence Scale given by Thingusum and Ram in 2000. **Results:** The mean emotional intelligence score of Hypertensive subjects was  $94.28 \pm 15.66$  and of normal subjects was  $132.73 \pm 16.28$ . on comparing both score, the difference was observed to be significant. **Conclusion:** From the results of current study, we conclude that hypertensive subjects have significantly lower emotional intelligence as compared to normal healthy subjects.

**Keywords:** Blood pressure, emotional intelligence, hypertension, health.

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#### INTRODUCTION:

Today, the cardiovascular disorders are considered as the most fundamental medical issues, so that as per the report of World Health Organization the reasons for 22% of death on the planet are due to cardiovascular sicknesses<sup>1, 2</sup>. As indicated by measurement of the Ministry of Public Health, Medical Care and Medical education, the reason for around 39% of the entire people alluding to community healthcare centers is the disorders in blood circulation. Fundamental hypertension and coronary illness are two sorts of cardiovascular ailment that are exceedingly influenced by mental anxiety. The mental stress of patients is reported to greatly affect the cardiovascular diseases especially, essential hypertension and coronary artery disease.<sup>3, 4</sup> Hypertension is viewed as one of the most elevated reasons for mortality and morbidity; and one of the fundamental driving foundations for cardiovascular disease. Emotional intelligence means the limit of the person to acknowledge

the truth their capacity tackle passionate issues and adapt to stress and forces.<sup>5</sup> These days, numerous researchers and scientists have turned their consideration regarding the effect of individual and social life and their prosperity and disappointment. Passionate knowledge is another part of human insight that incorporates consciousness of enthusiastic and utilizing them for settling on the correct choices in life and to continue brain research injury<sup>5</sup>. Passionate knowledge incorporates both effect inner and outside components, its inside components incorporate the level of mindfulness, self-idea, feeling of freedom, limit with regards to self-fulfillment and furthermore assurance. Its outside components incorporate relational connections, simplicity of compassion and awareness of other's expectations.<sup>6</sup> Behavioral medicinal mediations, especially in cases of hypertension and coronary illness, have been centered on limiting anger and anxiety for quite a long time, as research has recommended these two qualities to be hazard factors for these maladies. From one perspective,

creating enthusiastic insight can improve the person's soundness even with disappointments, control his mental state and disposition, pick up him selfmastery and the capacity to conquer enticements and abstain from sinking profound into difficult contemplations.<sup>7, 8</sup> Studies have reported that there is a double fold risk of diseases such as asthma, heart diseases, headache, git ulcers in patients with chronic anxiety, pessimism, constant stress or hatered and who are deficient in emotional intelligence.<sup>9</sup> Hence, the present study was planned to assess emotional intelligence in hypertensive adults and normal adults.

**MATERIALS AND METHOD:**

For the study, we selected sample of 50 subjects. 25 out of 50 were hypertensive and had heart disease and 25 were normal adults. The subjects were selected randomly from the population.

The demographic data and information about the subject was collected using personal data sheet. The emotional intelligence of the subjects was measured using Indian version of Emotional Intelligence Scale given by Thingusum and Ram in 2000. This scale is a modification of Emotional Intelligence Scale developed by

Schutte(1988). 33 items were included in the questionnaire in which patient had to mark their response from 1 (strongly agree) to 5 (strongly disagree). The reliability rate of 0.90 was given by Schutte. The questionnaire was given to all the subjects and was asked to fill the questionnaire. The complete protocol to fill the questionnaire was explained to the subjects.

The scoring of different patients was recorded and statistically analyzed using SPSS software for windows. Student's t-test and Chi-square test were used to analyze the significance of data. A p-value of 0.05 was predefined to be statistically significant.

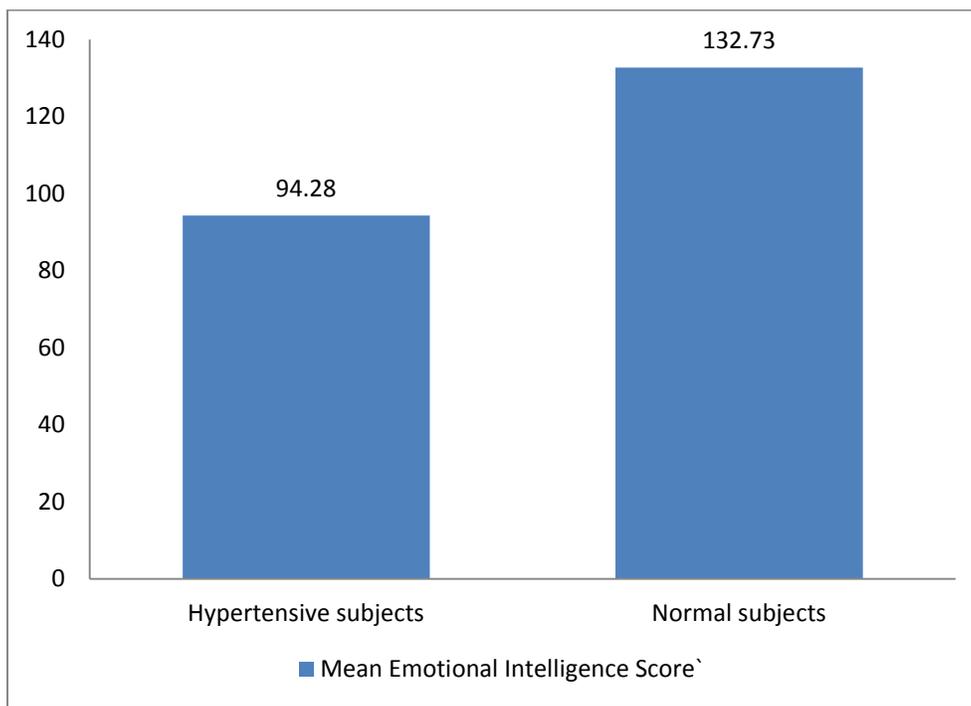
**RESULTS:**

**Table 1** shows the mean Emotional Intelligence score of Hypertensive and normal subjects. Total number of subjects included in the study was 50 in number. Out of 50 subjects, 25 were hypertensive and other 25 were normal subjects. The mean emotional intelligence score of Hypertensive subjects was 94.28±15.66 and of normal subjects was 132.73±16.28. on comparing both score, the difference was observed to be significant with t value >0.01 [Figure 1].

**Table 1:** Mean Emotional Intelligence score of Hypertensive and Normal subjects

Variables	No. of subjects	Mean Emotional Intelligence Score`	t-value
Hypertensive subjects	25	94.28±15.66	9.02
Normal subjects	25	132.73±16.28	

**Figure 1:** Showing mean Emotional Intelligence score of Hypertensive and Normal subjects



**DISCUSSION:**

In the current study, we compared the emotional intelligence of normal and hypertensive subjects. We observed that the normal subjects have higher emotional intelligence as compared to hypertensive patients. Similar studies are conducted by other researchers and have found similar results. Ballard ME et al performed a study to examine cardiovascular, overt motor, and verbal-reported responses to interadult emotional expressions, including anger, and to challenging task situations in a sample of 49 10–14-year-old children of hypertensive (EH) and normotensive parents (NT). Sons of EH parents showed greater systolic blood pressure reactivity to interadult anger and to the digit span task than sons of NT parents. A consistent pattern was not found for girls. Marital distress and overt maternal anger expression predicted verbal-reported and overt-motor responses to interadult anger. Family history of EH and sex did not predict these responses. The authors conclude that (a) heightened systolic blood pressure response to stress may be found in sons of EH parents before they are diagnosed to have EH disorders, (b) relations between family history of EH and cardiovascular response may be sex moderated, and (c) vulnerability to stress may be related to specific familial histories and backgrounds. Petra H. Wirtz et al conducted a research with objective to identify psychological correlates of physiological stress reactivity in systemic hypertension. This was a cross-sectional, quasiexperimentally controlled study. Study participants underwent an acute standardized psychosocial stress task combining public speaking and mental arithmetic in front of an audience. The study was conducted in the population in the state of Zurich, Switzerland. Subjects included 22 hypertensive and 26 normotensive men. They assessed the psychological measures social support, emotional regulation, and cognitive appraisal of the stressful situation. They found poorer hedonistic emotional regulation (HER) and lower perceived social support in hypertensives, compared with normotensives. Compared with normotensives, hypertensives showed higher cortisol, epinephrine, and norepinephrine secretions after stress as well as higher systolic and diastolic blood pressure. Cortisol reactivity and norepinephrine secretion were highest in hypertensive men with low HER. In contrast, hypertensives with high HER did not significantly differ from normotensives in both cortisol and norepinephrine secretion after stress. Epinephrine secretion was highest in hypertensives with low social support but was not different between hypertensives with high social support and normotensives. The authors concluded that both low social support and low HER are associated with elevated stress hormone reactivity in systemic hypertension.<sup>10, 11</sup>

Ricci Bitti PE conducted a case control study and investigated the association of hostility, as measured by the Cook and Medley Hostility Scale (HO), and anger, as measured by the Multidimensional Anger Inventory (MAI),

with CHD and EH in 80 CHD patients, 80 EH patients, and a control group of 80 healthy adults from Italy. Cases revealed significantly higher scores than controls in two subsets of HO and in two subscales of MAI. Some of these subscales appeared to be age-dependent. The results indicate that particular components of anger-hostility could be taken into consideration when studying psychological risk factors for CHD and EH. Goldstein IB et al determined whether there is a gradual increase in BP between individuals with two hypertensive parents, one hypertensive parent, and normotensive parents and whether this increase is apparent with both ambulatory and casual BP assessments in men as well as in women. A total of 220 healthy men and women, aged 22 to 50 years, completed two 24-h ambulatory BP sessions (one work day and one off work day). Based on family history information obtained from parents, three groups were formed: subjects with two hypertensive parents, one hypertensive parent, and normotensive parents. Work and off work days did not differ; analyses were based on mean values of the 2 days. Men with two hypertensive parents had higher daytime and night-time ambulatory BP than men with normotensive parents. Those with one hypertensive parent had intermediate BP levels. Ambulatory BP was not associated with family history in women. Also, men with one or two hypertensive parents had higher ambulatory BP than women with hypertensive parents, whereas offspring of normotensive parents exhibited no sex differences in BP. The authors concluded that elevated systolic and diastolic BP throughout the day and night seems to characterize men with two hypertensive parents. In evaluating the relationship between family history of hypertension and BP, it is important to use ambulatory BP measures, differentiate between individuals with one and with two hypertensive parents, and focus on gender differences in BP.<sup>12, 13</sup>

**CONCLUSION:**

From the results of current study, we conclude that hypertensive subjects have significantly lower emotional intelligence as compared to normal healthy subjects.

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