

ABSTRACT

This study was designed to examine the relationship between stress and essential hypertension among factory workers. Hypertensives were identified through screening, clinical investigations and questionnaire stating details of health related problems. Seven males and females under the age of 50, whose blood pressure remained above 140/90 and twenty-three matched normotensives were selected. The mean age for males and females was 34.4 and 44.2 respectively.

Data were obtained by way of taking blood pressure readings at three intervals, a.m., noon and p.m., on Fridays (day 1) and repeated again on Monday (day 2), along with anxiety state and anxiety trait psychological inventory administered on both days.

No significant differences between groups and sex were found on systolic, diastolic, age and measures of anxiety state and anxiety trait. Comparisons of correlation showed no significant relationships between anxiety state and anxiety trait compared with systolic and diastolic blood pressures. However, results showed signi-

ficant positive relationships between anxiety state and anxiety trait, and between systolic and diastolic blood pressures. There was also, a negative correlation between anxiety state and age. The results of this finding indicate that as age increases, stress (anxiety state) decreases.

Between systolic and diastolic blood pressures, there was no obvious linear relationship with age. However, when these variables were examined by means of graph, by age group, it was found that the 30-39 years age group had a lower mean systolic pressure than either age groups, 20-29 and 40-50 years. Results showed that females in the 40-50 age group, tended to have higher blood pressure but lower anxiety than their male counterparts.

There were significant differences between hypertensives and normotensives on measures of systolic and diastolic pressure. The hypertensives showed a trend of higher anxiety state, suggesting a greater level of stress than the normotensives. It is evident that psychological and social-environmental factors must be taken into account in the aetiology of essential hypertension.

These results suggest that further research on essential hypertension and psychological factors on a longitudinal basis may be valuable in determining the aetiology of essential hypertension.