

RISK OF HYPERTENSION AMONG ADULTS IN JAFFNA DISTRICT

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The aim of this study was to identify the risk of hypertension among adults (above 18 years) in Jaffna District. This was a community based cross sectional descriptive study: multi stage stratified cluster sampling. In the first stage of sampling the population was stratified into urban and rural sectors. The primary sampling unit was a *Grama Niladari* division (GND). Considering proportion of the population, 7 and 25 clusters were selected from the urban and rural sectors respectively. In each GND, selected unit of enumeration was a household. Only one adult from each identified household was randomly selected. Blood pressure measurements were carried out by standard method. Of the 511 subjects, 224 (43.8%) were males. Mean ages of the study population, males and females was 45.65(\pm 14.46), 47.51(\pm 14.98) and 44.20 (\pm 13.89) years respectively. Mean Systolic Blood Pressure (SBP) in the total study population was 117.95(\pm 17.74) mm Hg and it was 121.43 (\pm 17.93) and 115.22 (\pm 17.12) mm Hg in males and females respectively. Mean Diastolic Blood Pressure (DBP) was 77.21(\pm 11.02), 79.26 (\pm 11.17) and 75.67(\pm 10.63) mm Hg in the study population, males and females respectively. Prevalence of hypertension (SBP/DBP \geq 140/90 mm Hg) was 23.7% (95% CI: 20.1-27.6) while it was 29.9% (95% CI: 24-36.4) among the males and 18.8% (95% CI: 14.5-23.9) among the females. Males were 2 times more likely to develop hypertension than females (95% CI: 1.414-3.053, p <0.001). Subjects in the age group greater than 65 years carried 28.3 times higher risk of developing hypertension when compared with the individuals in the age group of 18-34 years (p <0.001, 95% CI: 11.743-68.304). Similarly subjects in the age group of 50-64 years were 10.4 times more likely to develop hypertension than the subjects in the age group 18-34 years (p <0.001, 95% CI: 4.957-22.016). Furthermore, subjects in the age group 35-49 years had a risk of 4.1 times to develop hypertension when compared with the subjects in the age group of 18-34 years (p <0.001, 95% CI: 1.889-8.805). In conclusion, prevalence of hypertension in Jaffna district (23.7%) was lower than the rest of the country (28.4%).

Key words: *Systolic blood pressure, Diastolic blood pressure, Hypertension, Risk.*