

## ABSTRACT

Ischaemic heart disease and cerebrovascular diseases are the two leading causes of hospital mortality in Sri Lanka. Hypertension is a key risk factor for both these conditions.

This study on hypertension was carried out to assess (a) the prevalence, (b) level of screening, (c) awareness, treatment and control status, (d) prevalence of risk factors, (e) association of risk factors in univariate and multivariate setting, and (f) knowledge, in the urban, rural and estate sectors in the Matale district.

Using a multistage random sampling technique, a sample of 6080 (urban 1650, rural 2750 and estate 1680) persons between 25 and 64 years of age were selected. Of those selected, 88.2% participated in the study.

The prevalence of hypertension in the urban, rural and estate sectors was 16.8%, 8.0% and 8.7% respectively. The standardised prevalence rate for the Matale district was 8.0%.

Overall, 75.9% of the respondents had been previously screened for hypertension (urban 82.5%, rural 77.4% and estate 67.5%), it being significantly higher for females. Only 31.6% of the respondents had got their blood pressure measured during the previous 12 months (urban 38.5%, rural 31.6% and estate 25.8%). In general it was significantly higher among females. The percentages of persons who had got their blood pressure measured during the previous 12 months increased with age, in all three sectors. Only 8.9% of the respondents had seen a physician recently, regarding high blood pressure on their own initiative (urban 11.9%, rural 8.7% and estate 6.7%).

Of the hypertensives, 40.8% were aware that they had hypertension (urban 48.0%, rural 44.7% and estate 22.6%). Of the known hypertensives, 61.2% (urban 79.6%, rural 70.8% and estate 33.3%) were on regular treatment while only 12.3% (urban 21.3%, rural 12.4% and estate 3.3%) had their blood pressure controlled at the time of the survey.

Of the known hypertensives, 64.3% reported a reduction in salt intake, while only 9.6% reported taking regular exercise.

Among males, the prevalence of smoking was 37.3% (urban 5.2%, rural 58.2% and estates 48.4%), and regular alcohol consumption 34.7% (urban 14.8%, rural 33.3% and estates 56.1%) while 3.2% of the females in the estate sector reported consuming alcohol regularly.

The prevalence of obesity was 12.4% (urban 24.2%, rural 10.0% and estate 3.1%). A majority of persons reported consuming more than twice the amount of salt recommended (6 g/day) by the WHO.

When discrete multivariate statistical methods were used (log linear model), out of the risk factors, age and obesity were the variables that entered the 'best' fitting model in all three sectors. This was confirmed with the general linear model approach using systolic blood pressure as the quantitative dependant variable.

Overall, only 20.6% of respondents (urban 30.0%, rural 19.8% and estate 12.5%) had an adequate knowledge on hypertension, while only 31.7% of the public health care staff had an adequate knowledge on hypertension.

Findings from this survey show that hypertension is a significant health problem in the Matale district. The current screening practices in detecting hypertensives are inadequate, and also, the treatment and control status of hypertension among hypertensives are inadequate. Age

and obesity were the most important variables with regard to hypertension.

Other than a disease oriented programme to prevent and control hypertension, it is also important to implement factor oriented programmes such as anti-smoking and anti-alcohol, proper dietary practices, adequate physical exercise etc., in order to prevent and control non-communicable diseases. This study also highlights the necessity for interventional programmes to improve the knowledge towards the disease of hypertension not only among the general population but also among the primary health care staff.