Assessing the prevalence of selected cardiovascular risk factors of stroke among known hypertensive patients admitted to the medical wards at Teaching hospital Jaffna

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Introduction and objective: Stroke, a leading cause of global disability and the third most common cause of death, is largely influenced by cardiovascular risk factors with hypertension as the main contributor. Sri Lanka has a hypertension prevalence rate of 10.4 per 1000 population with a 2:1 male-to-female ratio. This study describes the prevalence of known selected cardiovascular risk factors of stroke and assesses the association of socio-demographic, lifestyle and healthcare-related factors with the presence of selected cardiovascular risk factors of stroke among known hypertensive patients admitted to the medical wards at Teaching hospital Jaffna

Methods: A hospital-based cross-sectional study was conducted from Feb 2022 to Jul 2023 among 455 hypertensive patients admitted to the medical wards of Teaching Hospital Jaffna. Data were collected via interviewer-administered questionnaires and data extraction sheets and analysed with SPSS. The analysis includes descriptive statistics such as percentages, frequency distributions, median, range. The chi-square test was used to test for associations.

Results: Of the 455 participants, 80.7% had more than one selected risk factor and 65.1% had 2-3 selected risk factors with a median and range of 2 and 7, respectively. The distribution of the selected risk factors were as follows: 58.9% diabetes mellitus, 36.5% dyslipidaemia, 9.9% with alcohol intake and 5.5 % with vascular disease & smoking habits. Being a male ($p=0.001$) has a significant association with having more than one selected risk factor. There was a significant association with family history, unhealthy food practices and healthcare-related factors such as drug compliance and regular clinic follow up of diabetes mellitus. Family history of dyslipidaemia and regular clinic follow up were significantly associated with dyslipidaemia at the p value of 0.05.

Conclusion and recommendations: Majority of patients had more than one risk factor of stroke. Among the 7 selected risk factors, there is a two-fold increase in the distribution of diabetes mellitus and dyslipidaemia over 8 years. Multi-comorbidities (more than one selected risk factor) are common, certain lifestyle factors are contributing and health-related factors like compliance must be considered in management.

Keywords: Cardiovascular risk factors, Stroke, Sociodemographic and lifestyle related factors, Hypertension, Jaffna