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A STUDY TO EXPLORE THE RISK OF STROKE AMONG ADULTS AT SELECTED URBAN COMMUNITY IN MYSURU

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ABSTRACT

Background of the study: The incidence of stroke is increasing every year, between 180 to 300 per 100000 people. The incidence increases vertically with age and unhealthy lifestyle. About 20% of patients with an acute stroke will die within a month, and 50% of those who survive will be left with physical disabilities. In stroke, the burden of care is very high due to the chronic nature of the disease itself, the researchers were motivated to explore the risk of stroke among young adults residing in urban areas to sensitize them to the risk factors of stroke and to take preventive actions. **Methodology:** The descriptive study design was adopted in the study and 100 urban adults were included in the study as a study sample. The data was collected from the samples by using the following tools. The Proforma for selected personal variables and life-style risk assessment tool for stroke and it was validated by experts. The reliability of the tool was established by the split-half method. The reliability and pilot study revels the study was feasible. **Results:** The analysis of the study revealed that personal variables such as gender, marital status, blood pressure, dietary pattern have an association between the risk of stroke. Thus, it was concluded that lifestyle modifications in this aspect prevent the occurrence of stroke. **Conclusion:** The main aim of the study was focused on assessing the risk of stroke among urban adults at selected urban community in Mysuru. Data was collected among 100 samples and the data was analysed by descriptive and inferential statistics. The analysis of the study revealed that personal variables such as gender, marital status, blood pressure, dietary pattern have a significant association with the risk of stroke.

KEYWORDS: Explore, Risk of Stroke, Adults, Urban community.

INTRODUCTION

India is facing a double burden of communicable and non-communicable diseases. Stroke is a leading cause of death and disability in India. Stroke prevalence rates are 84-262/100,000 and 334-424/ 100,000 in rural and urban areas, respectively. The incidence rate is 119-145/100,000 based on recent population-based studies.

Stroke has multiple risk factors and largely occurs when a patient has a combination of risk factors. The modifiable risk factors for stroke include blood pressure, tobacco use, physical activity, low fruit and vegetable intake, alcoholism, being overweight, and diabetes mellitus.

Approximately 800,000 people in the United States suffer from stroke annually and it causes disability and death. About 20% of patients with an acute stroke will die within a month, and 50% of those who survive will be left with physical disabilities. Every four minutes, one patient died in America from a stroke. Stroke is a medical emergency and needs immediate treatment which is important for preventing death and disability from strokes.

A population-based survey of neurological disorders in Bengaluru from 1993-1995 systematically identified prevalent stroke cases in defined urban and rural areas. The age-adjusted prevalence of stroke in this study was 262/100,000 people. The prevalence of stroke in rural areas was higher (165/100,000) compared to urban areas (136/100,000). The two Kolkata-based studies19,20 showed a rising trend in the prevalence of stroke, with 262/100,000 people affected during 1993-1995, 334/100,000 persons in 1999, middle-income, and 545/100,000 in 2005. The prevalence of stroke in men (46.78/100,000 persons) was higher than in women (41.52/100,000 persons).

METHODOLOGY

The descriptive survey design is used in this study and it's a non-experimental research approach to explore the risk for stroke among urban adults in selected community area. The accessible population for the present study consists of adults between the age of 25 to 45 years and who fulfil sampling criteria. 100 adults were taken as sample through purposive sampling. Institutional ethical clearance was obtained along with written permission from the authority has taken. The samples are selected by using non probability purposive sampling technique. Before data collection, the investigator introduced herself and about the purpose of the study. The confidentiality of their identity and responses was assured in order to ensure their cooperation and prompt response. After obtaining informed consent, the tools were administered. The data was collected by using proforma for personal variables and life style risk assessment tool for stroke and checking parameters such as Blood pressure, Height, weight and BMI and the average time taken to collect the data was 20-30 minutes. The researcher used to check the parameter such as height, weight and blood pressure and the tool was filled by the investigator using home survey method.

RESULT

The computed frequency and percentage of personal variables reveals that, 70% of the adults is less than or equal to 40 years and they are male, 79% them are studied PUC/Degree 67% is having the income of less than 20 thousand per month, 60% were married. 82% of adults belongs to Hindu religion and 70% having mixed diet and having mild hypertension i.e. more than 120/80 mm Hg. 77% had 150cms in hight and 62% weights 60kg. 57% doesn't have history of stroke in their family and their BMI is 62% had18 – 24.9 kg/m^2 and 38% has above 25 kg/m^2.

The scores of adults regarding risk of stroke ranged from 20-44. It also revealed that the mean score was 32.49 with a standard deviation of 5.513 and a median of 33. The obtained risk score of adults was further classified into two groups based on the risk of stroke.

Frequency and percentage distribution of adults according to their risk of stroke

Risk of stroke	Frequency	Percentage
High risk	50	50%
Low risk	50	50%

The association between the risk of stroke with selected personal variables are computed and the variables like gender, marital status, blood pressure, dietary pattern have found to be significant and the other variables such as age, education, income, religion, height, weight, stroke in family, BMI doesn't have the significant association.

DISCUSSION

The current study shows that men are high risk of getting Strock (S.B. Owais et al. 2024), the marital status and the supportive family members of Strock has better prognosis Ali and divorced and widowed adult shows higher chance of getting Strock. (Moradi et al 2025) high blood pressure and uncontrolled hypertension is the key factor in risk of Strock and it is one among the modifiable variable by reducing 5 mm of hg cut down the risk up to 13% (Alexander C. Razavi et al 2025) dietary pattern are inversely proportional to the causation of cardiovascular problem and high cholesterol and their by the chance of strokes are quite high switching to DASH diet and Mediterranean diet are quite promising (Karam G 2023).

CONCLUSION

Thus, it was concluded that, the study was revealed that some personal variables such as gender, marital status, dietary pattern, blood pressure have significant relation between risk of stroke. The demographic variables such as age, education, income, religion, height, weight, stroke in family, BMI doesn't have the significant association with the risk of stroke.

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