



PREVALENCE OF TYPE OF STROKE WITH REFERENCE TO GENDER, AGE AND OCCUPATION

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ABSTRACT

Worldwide, stroke is a major cause of disability. In every society, stroke is a considerable cause of death and disability which is both a preventable and a treatable disease. Stroke considered as a one of the principal causes of morbidity and mortality in elderly in the developed world and in all industrialized countries and it is the leading cause of disability. About 30% of stroke survivors are permanently disabled and require assistance to perform their activities of daily living (ADL). Stroke occurring rate is the same in men and women but women are more probable to die. Stroke, either ischemic or hemorrhagic is more common in men than in women. Stroke incidence was about 30% higher in men than in women in Western Europe. Hence the present study was undertaken to evaluate the prevalence of stroke with reference to gender, age and occupation. From the present study it has been concluded that the prevalence of stroke is more in the case of male than female with respect to age, occupation and gender. Ischemic stroke is more common in the case of both male and female. But the percentage is more in male than female.

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INTRODUCTION

Stroke is considered as a precious disease from human, family and community perspectives (Carlo, 2009). Stroke ranks number four among all causes of death after heart disease, cancer and chronic lower respiratory disease in terms of mortality (Legge *et al.*, 2011). Stroke constitutes a substantial health care problem and is characterized by a high burden of disease from health care and public health perspectives in both worldwide and in the United States and the incidence rate of stroke is higher in African American than Caucasian (Sergeev, 2011). It is a second commonest cause of death approximately 9% (Mondal *et al.*, 2012). Stroke is the fourth major cause of disease burden after heart disease, HIV/AIDS and unipolar depression worldwide (Joubert *et al.*, 2008).

Stroke is the third most common cause of death and is the main cause of acquired adult disability in high-income countries (Langhorne *et al.*, 2009). In 2005, it is reported that about 5.7 million deaths occur due to stroke, 87% occurred in low and middle income countries where 80% of the population lives in rural areas (Joubert *et al.*, 2008). In low and middle income countries (LMIC) approximately 85% of all stroke deaths are registered which also account for 87% of total losses due to stroke in terms of disability-adjusted life years (DALYs) calculated worldwide in 72 million per year (Carlo, 2009).

Stroke is a common neurological condition, mostly seen in developing country. Day by day there is increasing the number

of stroke patient, in different areas. In India stroke also causes death where health support including rehabilitation is not available. For proper rehabilitation of stroke patient need multi-disciplinary team approach treatment. In this condition only medical management is not enough rather than the therapeutic management which also essential for stroke management. Hence the present study was done to know the occurrence of stroke with respect to gender.

METHODOLOGY

Study design

Cross sectional study design has been adopted.

Sampling method

Simple random sampling technique was used to select study subjects.

Sample size

A total number of 50 stroke patients between the age group of $\pm 35 - 70$ years were selected for the study. The sample consisted of 40 male patients and 10 female patients

RESULTS AND DISCUSSION

Around two thirds of the affected patients are above 65 years a stroke may occur at all ages, even in very young children, and can have many causes (Geurts *et al.*, 2004) Stroke, either ischemic or hemorrhagic is more common in men than in women (Zhang *et al.*, 2011). Stroke incidence was about 30%

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higher in men than in women in Western Europe (Appelros *et al.*, 2009). Stroke is the third and fourth leading cause of death in women and men in the United States respectively (Sergeev, 2011). In 2002, stroke mortality in black men and women in the United States were 81.7 and 71.8 per 100 000 population respectively (Mensah, 2008). Under the age of 65 years more than half of men and women who have a stroke die within 8 years (Gordon *et al.*, 2004).

Among study subjects 14 participants were male and 8 participants were female in age group between 35-50 years and 26 were male and 2 were female above in age group between 51-70 years (Table-1) Their mean age was 53.38 (±8.65) years and minimum age was 35 years and maximum age was 70 years. 12 (24%) participants were between 35-48 years, 10 (20%) were between 49-50 years, 13 (26%) were between 52-55 years and 15 (30%) were between 58-70 years. Overall 44% participants were between age group 35-50 years and 56% participants were between age group 51-70 years, where 80% participants were male and 20% participants were female (Table-2). Among participants 40 (80%) were male subjects and 10 (20%) were female participants. 35 (70%) were ischemic stroke and 15 (30%) were hemorrhagic stroke (Table-3) In this study about 30 (60%) people were lived in rural area and about 20(40%) people were lived in urban areas.

The study showed that ischemic stroke was more common than hemorrhagic stroke.

Table 1 Showing the Age & Gender distribution of the study subjects

Age in Years	Male		Female	
	No.s	%	No.s	%
35-50	14	28.00%	8	16.00%
51-70	26	52.00%	2	4.00%
Mean ±SD	53.38 ± 8.65			

Table 2 Occupation of the study subjects

Occupation	Number (n)	%
Private Job	16	32%
Agriculture	1	2%
Factory worker	2	4%
Businessmen	15	30%
Unemployed	2	4%
Housewife	6	12%
Teacher	7	14%
Retired army officer	1	2%
Total	50	100%

The above table shows that most of the study subjects 16 (32%) were private job holders, 15 (30%) were businessmen, 7 (14%) teacher, 6 (12%) were housewife.

Table 3 Cross tabulation between type of stroke of and gender of the study subjects

Gender	Type of Stroke		Total	%
	Ishemic	Haemorrhagic		
Male	29	11	40	80%
Female	6	4	10	20%
	35	15	50	100%

Among 50 participants of stroke patients 40 (80%) were male subjects and 10 (20%) were female participants. 35 (70%) were ischemic stroke and 15 (30%) were hemorrhagic stroke.

CONCLUSION

The prevalence of stroke is more in the case of male than female with respect to age, occupation and gender. Ischemic stroke is more common in the case of both male and female. But the percentage is more in male than female.

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