

The Secondary Analysis of South Asian Populations from Stroke in Hispanic and African-American Regional Population (SHARP) Study

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Background: Population based studies are essential to assess the incidence, morbidity, and mortality associated with stroke for different ethnicity, age, and sex in a community. Such studies can be used to measure and monitor the impact of new preventive strategies on the incidence and outcome of stroke. South Asians are one of the fastest growing minorities in the United States. There are no published studies on incidence of stroke among South Asians population. We report the incidence of stroke among South Asians population in the Newark area in year 2000.

Methods: A cross-sectional study was performed to identify all new and recurrent strokes that occurred in 2000 in the Newark, New Jersey. A retrospective review of 1129 patients with stroke was performed at five regional hospitals to determine the stroke subtypes, cerebrovascular risk factors, investigations performed, treatment provided, and outcome among different ethnicities in Newark area. Data from Census 2000 was used to obtain information about total pupation, race distribution, and sex and age distribution among different races.

Results: A total of 1129 patients were admitted with new or recurrent stroke to five hospitals in Newark area in year 2000. The incidence of stroke among South Asians was the highest compared to other ethnic groups. Out of 1428 South Asians population in the Newark area, 15 had stroke (ischemic stroke 7, intracerebral hemorrhage 5, and transit ischemic attack 3). The estimated incidence of stroke among South Asian in the year 2000 was (1050 per 100,000 persons). This incidence was several folds higher than the incidence observed in other ethnic groups in Newark (see Table). The estimated mortality rate among South Asians was 70 per 100,000 persons which is comparable to the high rate observed within the stroke belt in the United States.

Table 1: Comparison of incidence of stroke and mortality rate among different ethnicity groups in Newark in 2000.

Ethnicity	Incidence of stroke per 100,000	Mortality per 100,000
White	331	47
African-American	497	57
Hispanic	138	12
South Asian	1050	70

Conclusions: Our study suggests a high incidence of stroke and mortality among South Asians in Newark area in the year 2000. Community based interventions are desperately required to reduce the rate of stroke in South Asians in the United States.

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