Stroke is the third leading cause of death in the U.S. An ischemic stroke occurs when the blood supply to part of the brain is suddenly interrupted; a hemorrhagic stroke occurs when a blood vessel in the brain bursts, spilling blood into the spaces surrounding the brain cells.\(^1\)

The most important risk factors for stroke are hypertension, heart disease, diabetes, and cigarette smoking. Other associated risks include excessive alcohol consumption, high blood cholesterol levels, illegal drug use, and genetic or congenital conditions. Data from MediMedia’s Hospital Diagnosis and Therapy Audit confirm that patients who are hospitalized after a stroke have most of these risk factors (Figure 1).\(^2\)

In addition to risk factors based on medical conditions, demographics such as age, sex, and race also influence the incidence of stroke. Table 1 shows the increasing number of African-Americans who are being hospitalized for strokes. This group is also experiencing strokes at an earlier age and with worse outcomes than whites. Of the African-Americans who have had a stroke, 36.2% are younger than age 60, compared with only 18% of white patients. African-Americans have longer hospital stays than do whites (8.3 days vs. 6.5 days), and their mortality rates are higher (8.5% vs. 7.1%).

There are also sex differences in the incidence of stroke and recovery. Men have a lower mortality rate than women (5.5% vs. 6.9%) and are less likely to require aftercare in a nursing home (15% vs. 20%); however, men younger than 70 years of age are hospitalized more often for strokes than are women of the same age (44% vs. 34%).

Stroke is a major cause of disability that places a large burden on the public health system. The major risk factors (hypertension, heart disease, and diabetes) can be treated with medication, diet, and exercise. If these diseases are under control, the risk of stroke decreases.

The data cited in this article are available free of charge to hospitals that participate in the PharmScope Insights program. The program specializes in helping hospital pharmacies target areas for performance improvement by providing benchmarks from a panel of 80 hospitals nationwide. For information about joining PharmScope Insights, a division of MediMedia USA, Inc., visit the Web site at www.mminfotech.com and click on Hospitals.

REFERENCES

2. Hospital Diagnosis and Therapy Audit, 1999–2004. Yardley, PA: MediMedia USA.