The presentations and accompanying papers during this session of the Princeton Conference highlight that although we have seen favorable trends in stroke burden in the United States (eg, declining incidence and mortality rates), stroke continues to represent a major challenge to public health. As described by Kim et al, stroke will take on increasing importance in the United States because of changing demographics (ie, the graying of America) and globally because of unfavorable trends in vascular risk factors and limited resources to address chronic diseases in developing countries. Although favorable trends have been observed in stroke mortality, we as a nation face pronounced race disparities in stroke risk and mortality as described by Howard. Although epidemiological data have provided us with knowledge of the unequal distribution of stroke in our population, a clearer understanding of the causes of these immense disparities, including the role of both traditional and nontraditional risk factors, is required to design and implement interventions to reduce the public health burden of stroke in blacks. The work presented by Howard from the Reasons for Geographic And Racial Differences in Stroke (REGARDS) Study demonstrates how we might use epidemiological data to begin to address these questions. As described by Kleindorfer et al, we also continue to struggle with low rates of stroke treatment mainly attributed to the strict time window for therapy with tissue-type plasminogen activator. As they note, much emphasis has been placed on expanding the time window for treatment >3 hours; however, a denial by the US Food and Drug Administration to expand the window and a potentially small proportion of patients presenting in the 3- to 5-hour window after stroke has blunted potential gains from the treatment. Although the treatment remains a powerful intervention, the low prevalence of use limits its public health impact. The lack of wide use of tissue-type plasminogen activator reinforces the need for quality improvement efforts to increase the use, such as those coordinated through national registries, including the Get With the Guidelines (GWTG) program, supported by the American Heart Association. As described by Schwamm, there is great potential for improvement in the quality of stroke health care through the GWTG registry. The advantages of this rich data source include the detailed clinical data and substantial sample size, permitting even the impact of treatment differences with relatively minor impact on outcomes to be described with precision. As noted, a downside to this data source is the lack of longer term outcomes. The potentially negative impact on recruitment that might result from requiring informed consent to gain such information remains a conundrum, perhaps challenging the creativity of future investigators to find solutions and add even greater usage to this data source.

Disclosures

None.

Reference


Keywords: epidemiology ▪ mortality ▪ risk factors ▪ stroke ▪ temporal change ▪ tissue plasminogen activator
The Current State and Future of Stroke: Introduction
Lynda D. Lisabeth and George Howard

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