

The Epidemiology of Stroke in Northern Palestine: A 1-Year, Hospital-Based Study

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Background: Although stroke is one of the leading causes of morbidity and mortality worldwide, no studies on stroke were reported from Palestine. The objective of this study was to identify the risk factors and incidence rates of stroke in a well-defined area in north Palestine (i.e., the district of Nablus) with 362,159 native Palestinian inhabitants. *Methods:* All patients admitted to Al-Watani governmental hospital from September 2006 to August 2007 and given the diagnosis of acute stroke were included in the study. Diagnosis of stroke was confirmed by computerized tomography scan. Demographic characteristics and clinical data pertaining to the patients were obtained from their medical files. *Results:* A total of 186 patients with stroke (95 female and 91 male) were identified during the study. The average age of the patients was 69.09 ± 10.9 years. Among the total patients, 112 had a first-ever stroke (FES) and 74 had recurrent stroke (RS). Hypertension, diabetes mellitus, and renal dysfunction were the most common risk factors with comparable prevalence in both FES and RS. The majority of patients (153; 82.3%) had ischemic stroke subtype whereas 33 (17.7%) had hemorrhagic stroke subtype. The overall (FES + RS) annual crude incidence rate of stroke was 51.4 per 100,000 persons whereas the annual crude incidence rate of FES was 31 per 100,000 persons. The age-adjusted incidence rates were 54.5 (FES) and 89.8 (FES and RS). The overall inhospital mortality was 21% and was higher in patients with RS than in those with FES. *Conclusion:* Modifiable risk factors were common among patients with stroke. Better control of these risk factors might decrease incidence of stroke and all consequences thereafter. Incidence rate and inhospital mortality of stroke reported in this study were within the range reported from other Arab countries. **Key Words:** Stroke—incidence rate—Palestine.

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Stroke is one of the leading causes of morbidity and mortality worldwide.¹ Ethnic and racial variations in risk factors, incidence rates, and outcome of stroke are well documented.²⁻⁸ Therefore, epidemiologic studies

on stroke in different parts of the world are needed. Such data are important for health policy makers to direct resources and implement preventive measures, especially in developing countries where stroke is still a true economic and health burden. Although epidemiologic studies on stroke were carried out in different parts of the world including some neighboring Arab countries,⁹⁻¹² there were no published data from Palestine. In Palestine, the Ministry of Health is the major provider of medical services for a total population of 4,151,668 inhabitants. In the northern part of Palestine, Nablus district is a well-defined area with a total population of 362,159 native Palestinian inhabitants (Fig 1). Al-watani Hospital is the only referral governmental hospital in Nablus district that offers medical services to patients with acute stroke.

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