



Prevalence of Stroke in Fayoum Governorate, Egypt: A Community-Based Study
J Stroke Cerebrovasc Dis 2019 Sep;28(9):2414-2420.

Hala A. Shaheen 1, **Wafaa Y. Abdel Wahed**2, and Sharbat T. Hasaneen,3

1. Neurology Department, Faculty of Medicine, Fayoum University, Fayoum, Egypt.
2. Public Health and Community Medicine Department, Faculty of Medicine, Fayoum University, Fayoum, Egypt. Electronic address: wafaayousif313@yahoo.com.
3. Community Nursing Department, Faculty of Nursing, Fayoum University, Fayoum, Egypt.

Abstract

Background: Stroke is a highly prevalent disease with consequent mortality and morbidity. Few community based studies have been conducted only in upper Egypt to estimate prevalence of stroke. **Objectives:** This study was designed to find out the prevalence of stroke in Fayoum Governorate & to study some associated risk factors. **Methods:** through this community based cross-sectional study 4784 participants aged more than or equal to 18 years old were enrolled. A multi-stage random sample technique was followed to choose the study sample. A predesigned interviewer-administered structured questionnaire was used. Suspected stroke case by screening questionnaire was referred to the neurologist. **Results:** The Crude prevalence of stroke was 16 out of 1000 with confidence interval of proportion (12.6%-19.7%). The age adjusted local (Fayoum 2017 census) prevalence rate was 7.97 out of 1000, age adjusted prevalence rate (Egypt population 2017) was 1.05 out of 1000. Age-adjusted World Health Organization standard world population prevalence rate was 1.69 out of 1000. The crude prevalence of ischemic stroke was significantly higher than hemorrhagic stroke 11.9 versus 3.9 out of 1000 population. The most prevalent risk factor was smoking among males, followed by obesity then hypertension. The prevalence of stroke was significantly higher among participants affected with hypertension, diabetes, heart diseases, obesity, and smoking. Logistic regression analysis showed that having hypertension, diabetes, heart diseases, atrial fibrillation, obesity, and smoking were reported risk factors of stroke. **Conclusions:** The prevalence of stroke in Fayoum governorate was 1.6%. Hypertension, diabetes, heart diseases, obesity, and smoking were reported risk factors of stroke.

Keywords: Fayoum Governorate; Stroke; prevalence; risk factors; screening.