## **Letter to the Editor**



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## **Epidemiology and Socioeconomic Factors in Egypt**

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Egypt is the most populated nation in the Middle East and the second most populous on the African continent, with an estimated 78 million people. Although the educational system is one of the most advanced in the area, there is a chronic lack of fresh epidemiological data. Due to the collaboration with colleagues from Southern Egypt University, I had the chance to work on a cohort of Egyptian stroke patients and face the peculiar confounders of a survey in the cardiovascular field [1, 2].

The recent work by Abd Allah et al. [3] and the later comment by Cicorella [4] offer a nice overview on the clinical aspects regarding the examined population. Unfortunately, there is a lack of consideration of many conditions we should take into account while studying such a dynamic country.

We should remember how the geopolitical features of Egypt present a real challenge to researchers. The main dichotomy for Egyptian citizens is the demographical division into those who live in the major urban areas and the farmers in rural villages. Almost the whole population is concentrated along the banks of the Nile (notably Cairo and Alexandria) as well in the Suez Canal area.

In Egypt, according to recent estimates, more than 4% of the population currently lives abroad. Also, Egypt has been ranked among the top 10 countries receiving remittances worldwide. Recently, the flow of remittances amounted to over 9 billion US dollars, which constitutes more than 8% of Egypt's gross domestic product [5].

The last 40 years have seen a rapid increase in population due to medical advances and a massive increase in agricultural productivity. Egyptians are by far the largest ethnic group in Egypt at 94% of the total population. But Egypt also hosts an unknown number of refugees and asylum seekers, estimated to between 500,000 and 3 million.

International migration has become a vital aspect of labor markets within the so-called 'Middle East and North Africa' region. After the second Gulf war, the migration rate witnessed an upward trend. The last traumatic change was caused by the Iraq-Kuwait war in 1990. At that time, almost all Egyptian migrants in Iraq and Kuwait returned to Egypt. This slowdown in international migration substantially impacted the Egyptian economy by raising poverty and unemployment rates, and by ceasing a portion of the remittances [6, 7].

All types of medical care are available in Egypt and health care generally enjoys a good reputation. Modern hospitals and clinics are commonplace throughout the country, particularly in Cairo, and these can either be state-run or privately owned hospitals. The general feeling is that most professionals and health care providers will expect payment in cash, regardless of whether you have health insurance. Thereby access to health care facilities in Egypt is mostly possible for higher social classes, as has also been nicely depicted in a recent survey on older adults [8]. According to independent committees, the social insurance programs in Egypt and the use of cost recovery in some public-sector institutions combined greater inequality in the access to health care resources when evaluated by both income level and gender [9]. A similar aspect may seriously bias the results of the survey, compromising any possible speculation. In similar settings, a tailored analysis of socioeconomic confounders involved (i.e. income, work, dwelling area, ethnicity, education) is recommended.

## Disclosure Statement

The author has no conflict of interest.

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