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Cancer Incidence in Egypt: Results of the National Population-Based Cancer Registry Program

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Abstract

Background. This paper aims to present cancer incidence rates at national and regional level of Egypt, based upon results of National Cancer Registry Program (NCRP). Methods. NCRP stratified Egypt into 3 geographical strata: lower, middle, and upper. One governorate represented each region. Abstractors collected data from medical records of cancer centers, national tertiary care institutions, Health Insurance Organization, Government-Subsidized Treatment Program, and death records. Data entry was online. Incidence rates were calculated at a regional and a national level. Future projection up to 2050 was also calculated. Results. Age-standardized incidence rates per 100,000 were 166.6 (both sexes), 175.9 (males), and 157.0 (females). Commonest sites were liver (23.8%), breast (15.4%), and bladder (6.9%) (both sexes): liver (33.6%) and bladder (10.7%) among men, and breast (32.0%) and liver (13.5%) among women. By 2050, a 3-fold increase in incident cancer relative to 2013 was estimated. Conclusion. These data are the only available cancer rates at national and regional levels of Egypt. The pattern of cancer indicated the increased burden of liver cancer. Breast cancer occupied the second rank. Study of rates of individual sites of cancer might help in giving clues for preventive programs.
The results of the East Azerbaijan Population-based Cancer Registry show a high incidence of cancer in this province, especially gastrointestinal cancers. Moreover, these programs are essential for estimating the burden of cancer in specific populations, particularly when seeking to provide a framework for clarifying community-based risk factors and monitoring efforts to control cancer [2–4]. A National Pathology-based Cancer Registry Program was started in Iran in 2001 and was subsequently rolled out to all provinces, including the East Azerbaijan province [5]. However, there were large differences in the coverage of cancer registry program in all state and provinces of Iran, which made this program cover about 60-70% of all cancer cases data. Studies on cancer incidence rates in the U.S. military population are few. Using the data from the Department of Defense Automated Central Tumor Registry (ACTUR) and the Defense Manpower Data Center, Thompson et al. (8) found that the incidence of testicular cancer among active-duty members of the military had increased over time. National comparison data were obtained from the SEER program of the National Cancer Institute (14). SEER collects and publishes cancer statistics from population-based cancer registries. Cervical cancer screening can result in the detection of precancerous lesions and the treatment of these lesions may lower cervical cancer incidence rates.