

عنوان مقاله:

Longitudinal Pattern of Cancer Mortality Rates among Iranian Population from ۱۹۹۰ to ۲۰۱۵, Using a Growth Mixture Model

محل انتشار:

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خلاصه مقاله:

Background: Cancer is among the most important causes of death worldwide. This disease is the third main cause of death in Iran. Method: In the present study, mortality rates of Iranian men and women due to various cancers were analyzed using a database from ۱۹۹۰ to ۲۰۱۵ (in ۵-year intervals), available in the Global Burden of Disease (GBD) study. For statistical modeling, Latent Growth Mixture Models (LGMMs) were used to determine the subgroups of cancers, in which cancers within each group had similar trends of mortality rates over the period of study. Result: The LGMM identified ۳ classes for both female and male data. For females, most cancers were allocated to the class with a slow increase in cancers mortality over time. Cancers in Class ۲, including breast, stomach, trachea, bronchus and lung, colon and rectum, liver, brain, and nervous system, ovarian, and pancreatic had an increasing trend until ۲۰۰۰; then, they reached a fixed trend during ۲۰۰۰-۲۰۰۵, followed by showing an increasing trend once again. In the last class, leukemia showed a decreasing trend of mortality rate over time. For male data, most cancers were allocated to the class with a very slowly increasing trend in mortality rate over time. In both Class ۲ (including bladder, brain and nervous system, liver, non-Hodgkin lymphoma, and pancreatic cancers) and Class ۳ (including breast, larynx, leukemia, prostate, stomach, trachea, bronchus, and lung cancers), there was an increasing trend of mortality rate over time until ۱۹۹۵ and then it reached an almost stable trend during ۱۹۹۵-۲۰۰۵ followed by an increasing trend once again. Conclusion: Hence, the general status of cancer mortality rates shows an ascending trend. Therefore, it is necessary to provide programs for early detection, screening, preventing, public health program planning, and patient care improvement.

کلمات کلیدی:

cancer, Mortality Rate, GBD study, Growth mixture model, Iran

