Comparative analysis of mortality by causes of death in countries with highest life expectancy

Abstract
The main objective of this study was to compare the level of mortality from selected causes of death among countries with highest life expectancy at birth. The development of mortality intensity during the period 1995–2010 was observed. Causes of death analysis was complicated with adoption of 10th revision of ICD, what occurred during the observed period in all countries except Japan. The latest revision has brought modification of definition of some causes of death, what resulted in significant increase or decrease of total numbers of deaths from these causes of death in years following the revision’s adoption. These fluctuations of time series of numbers of deaths were removed with double classification. The intensity of mortality by causes of death in selected countries was compared through direct standardization and decomposition. In the first part of the analysis the level of mortality by main groups of death was compared. In the next step followed comparison of the intensity of mortality from selected causes of death among countries. During more detailed analysis was observed similar evolutionary tendencies in level of mortality from the most frequent causes of death among individual countries. The mortality level from the most frequent causes of death often differed across analyzed countries.

Keywords: causes of death, life expectancy, Australia, reconstruction of the time series, double classification, France, Italy, Japan, Spain