Transitional processes and gender differences in cause-specific mortality and their role in the emergence of mortality inequalities, 1971-2008

Katalin Kovács, Hungarian Demographic Research Institute

Following the 1970s, when mortality inequalities by education were negligible in Hungary, inequalities started rising in about 1980 and they continued to do so till the early 2000s, then they levelled off. Examining this period our previous analysis of cause-specific mortality had identified emerging inequalities from causes closely connected to the quality of nutrition from about 1980. Inequalities in mortality from diseases connected to smoking and alcohol consumption started rising between 1975 and 1985. The present study aims to explore the gender-specific aspects of these processes. Under an unlinked cross-sectional design we examined the trends of mortality from 56 different causes by gender and education. Our data source was the mortality register of the Hungarian Statistical Office. Population estimates for the years 1971-2010 and projections for the years 2002-2008 were calculated on the basis of census data. Yearly cause-specific standardized mortality ratios were calculated and corrected to changes in the coding system, which occurred 3 times between 1971 and 2008. These estimated trends were broken down to linear trends and the sequences of the different types of trends (stagnating, increasing, declining) were classified into patterns. Patterns of male and female mortality proved to be largely similar. In the case of some diseases not only the patterns but also the magnitude of mortality were similar (arrhythmia, influenza), while regarding the majority of the causes of death male mortality revealed the same pattern but showed much higher level than female mortality (ischemic heart disease, stroke, cirrhosis). Exceptions were lung cancer and some other smoking-related cancers. Thus the main drivers of growing mortality inequalities were similar among men and women with the exception of smoking. Smoking related causes of death contributed to female mortality inequalities since 1985. Differences regarding patterns by education were important both in regard to alcohol and nutrition related causes.