SOCIOECONOMIC DIFFERENCES IN ADULT MORTALITY IN LITHUANIA

Summary

This study presents the first comprehensive analysis of socioeconomic differences in adult mortality in Lithuania using high quality census-linked data for the period 2001–2005. For the first time ever in Lithuania, the study simultaneously used three socioeconomic dimensions: education, economic activity status, and occupation. Socioeconomic mortality differentials were assessed using both traditional range-type (Poisson regression mortality rate ratios) and innovative Gini-type measures of inequality. This approach allowed the size of socioeconomic mortality differences to be assessed more precisely. While the range-type measures capture only the mortality differences between the groups under study and reference group (the lowest mortality group), the Gini-type measures (average inter-group difference [AID] and the Gini coefficient) reflect the total amount of inequality across all population groups (Shkolnikov et al., 2011). For the evaluation of consequences of mortality differences for public health, the concept of population attributable fraction (PAF) was applied. It allows estimating the share of deaths that could be avoided if socioeconomic mortality inequalities were eliminated. Such information can be further used by policy makers to estimate economic losses due to mortality inequality in the adult (working age) population in Lithuania. Finally, all analyses were performed by detailed causes of death, focussing on causes of death related to health behaviours (smoking and alcohol consumption) and causes of death amenable through medical care and prevention.

The book comprises five parts. The first part presents an overview of the mortality situation in Lithuania in the light of theories of epidemiologic and health transition. The second part describes the census-linked data and methodology used to assess mortality differentials. The third part presents detailed information about relative mortality differentials by causes of death. The fourth part is devoted to the assessment of socioeconomic mortality differentials using two advanced measures of inequality (average inter-group difference [AID] and the Gini coefficient). The fifth part provides estimates of cause-specific population attributable fractions by cause of death.

The study found that the population groups with the highest mortality risk are similar to other countries. Lower than secondary education, unemployed, and economically inactive statuses and the manual worker occupation group were associated with a significantly higher mortality risk. One distinctive feature of the Lithuanian pattern of socioeconomic mortality differentials concerns the strikingly unfavourable situation of farmers and farm workers. Differently from the 'old' EU member states, this group often showed the worst mortality indicators if compared to other occupational groups.

For the majority of causes of death, both relative and absolute mortality inequalities were higher than they are in the 'old' EU member states. The highest absolute population losses related to socioeconomic differences in mortality are attributable to excess mortality due to cardiovascular system diseases, external causes of death, digestive system diseases, and alcohol-related deaths. This suggests the striking prevalence of unhealthy life styles (smoking and alcohol consumption), poor psychosocial conditions, and lack of access to modern medical treatment and prevention among the lower socioeconomic groups in Lithuania.

The highest relative mortality differentials were observed for infectious and respiratory system diseases. These causes of death seem to concentrate exclusively among the lower educated, unemployed, economically inactive and those involved in manual or agriculture work. This suggests the extremely poor (economic and hygienic) living conditions of these groups in Lithuania.

The existence of such striking socioeconomic differences in adult mortality in Lithuania shows that social and economic development has not been sustainable. Extremely high levels of mortality inequalities (especially at working ages) produce substantial economic losses (in terms of health care and social budgets) (Mackenbach, Meerding, Kunst, 2011). It has been suggested that data on mortality and mortality differentials may serve as a powerful tool to provide reliable information about the direct consequences of economic development and reforms on the population (Sen, 1998). International studies recommend that continuous and reliable monitoring of socioeconomic mortality inequalities should be based on high quality census-linked data. Although such data often requires investment of financial and human capital, such monitoring together with properly designed social and health policies would bring considerably higher socioeconomic benefits.