The education-specific evolution of the cause of death pattern in Hungary

Mortality in Hungary is high in general, compared to the EU. For example, mortality in Hungary from major cardiovascular conditions such as ischaemic heart disease and stroke was higher by 140 and 65 percent (retrospectively) than the EU average in 2008. Trends of mortality from major conditions and their deeper exploration are of major concern for all those who would like to diminish the burden of high mortality in Hungary. (Figure 1)

Major trends of cause-specific mortality can be examined under the framework of Omran’s epidemiologic transition theory. Our research programme examines trends and their turning points by separating populations by education. The major question is if better educated can be regarded as pioneers who would be followed by the less educated as far as cause-specific mortality is concerned. The study covers the period between 1971 and 2008, taking into account the changes in the coding of causes of death.

Preliminary results indicate that for some large groups of diseases, among which the most important is stroke, trends turned at the same time for all educational groups. (Figure 2)

For other important and large groups of diseases, the trends of mortality of those with lower education “followed” the trends exhibited by the better educated with various “lag-time” intervals. The lag-time ranged between 3 and 40 years depending on the disease group. (Figure 3)

The study of preventable causes showed that disparities in access to preventive care play an important role in shaping the overall mortality pattern. For some causes of death, however, the hypothesis that changes in the mortality pattern of those with lower education resemble that of people with higher education was not confirmed: mortality trends of the less and the more educated are still diverging for some diseases, such as lung cancer.

Source: WHO (Figure 1)
HCSO, own calculation (Figure 2, Figure 3)