rural areas). László Hablicsek uses a more refined analysis in his paper. Abridged life tables for 150 subregions are prepared for two periods (1980–1984 and 1997–2001) with a detailed description of the methodology used. Subregions are classified into five categories according to the dynamics of their socio-economic development. Several measures of variation are used to analyse changes in mortality differentials among them. The author demonstrates that spatial differences have increased markedly among the 150 subregions over the 15–20 years covered by the analysis. "Life expectancy and the probability of reaching very high ages increased rapidly in the group of dynamically developing subregions. This was due to a sharp decline in middle aged mortality following a transitory increase. Such a decline did not happen in the groups of stagnating and declining small regions. Life expectancy at birth of their inhabitants increased at a much slower pace, and there was a significant decline in probabilities of survival to very old ages; actually more middle aged died than 20 years ago." (p. 164)

## HUNGARIAN MORTALITY PATTERNS IN A EUROPEAN PERSPECTIVE AROUND THE YEAR 2000: SOCIAL AND GEOGRAPHICAL DIVIDES No. 77.

## DARÓCZI, E., KOVÁCS, K.

The present volume contains six essays on various aspects of health status and mortality trends in Hungary in a European comparative perspective. Findings derive from studies on *Trends and socio-economic determinants of health and mortality* prepared by the authors within the frame of a larger research project entitled *Socio-economic embeddedness of demographic processes*. The project was initiated and coordinated by the Demographic Research Institute of the Hungarian Central Statistical Office and supported by the National Research and Development Programme (NKFP/5/128). The authors are research scholars at the same institute.

The introductory paper of the volume offers a historical review of the stagnating or increasing mortality levels in the former socialist countries of Europe during the last third of the 20<sup>th</sup> century. The role of changing demographic composition of population and epidemiological transition is discussed in this process. Changes in male and female mortality levels are presented for 43 European countries by broad age categories (infants, young and middle aged population and the elderly) as well as by major causes of death. The author

relies mainly on publications of the Council of  $Europe^2$  and a comprehensive study by Vallin and Meslé in this field  $(2001)^3$ .

Concerning the formation of the sharp East–West divide on the mortality map of Europe, the paper emphasizes that it did not simply derive from the stagnating/increasing mortality levels in former socialist countries – which failed to accomplish the so called 'cardio-vascular revolution' – but also due to spectacular improvements in the Mediterranean. The economic and political transition around 1990 created a new fault line between the 'Visegrád Four' – i.e. Czech Republic, Hungary, Poland and Slovakia which succeeded to reorientate their negative mortality trends–and the other former socialist countries where such a turnover was not attained or mortality still increases (e.g. Russia).

The second essay looks into the development of East-West mortality divide from a 'local' point of view. In search for reasons behind high Hungarian mortality rates, Etelka Daróczi introduces a multi-factor analysis to investigate cross-national variations in mortality levels in Europe at the end of the 20<sup>th</sup> century. While the previous analysis merely relied on demographic components of change, this study introduces macro economic and social indicators as explanatory variables for cross-national variations in mortality. The general level of economic development, measured by GNP per capita (at purchasing power parity), was found to be the most powerful explanatory factor for cross-country variations in male and female life expectancies, both at birth and at the age of 65. When differences in GNP per capita were controlled for, only one variable proved to be significant for 'explaining' both male and female life expectancies at birth and at the age of 65 alike: the indicator of income (consumption) inequalities. From among the other macro level explanatory variables used in the analysis (indicators of unemployment, level of education, health care and smoking), only the relative number of physicians proved to be significant and only in the case of female life expectancy (both at birth and at the age of 65). Thereby the author considers the availability of medical doctors as a typical 'feminine' factor of influence in understanding cross-national variations in mortality.

Katalin Kovács' paper offers a critical review of the ample literature discussing the relationship between income inequalities and mortality. Following a highly informative summary of conflicting views and research findings, she concludes: "Richard Wilson's original tenet according to which there is a statistically significant, positive relationship between high level income inequalities and mortality levels, could not be proved. Does this mean that income inequalities have no effect

http://www.coe.int/t/te/tsocial\_cohesion/population/d%E9mo211960EN.PDF

196

<sup>&</sup>lt;sup>2</sup> Recent demographic developments in Europe 2002.

<sup>&</sup>lt;sup>3</sup> Vallin, J. and Meslé, F. 2001. "Trends in mortality in Europe since 1950: age-, sex-and cause-specific mortality." In Vallin, J., Meslé, F. and Valkonen, T. (eds.): *Trend in mortality and differential mortality. Population Studies* (36): 31–184.

on mortality? Not at all. Income inequalities were found to have an influence on the levels of *infant* mortality in welfare states even though welfare was measured by such a rough indicator as national income (...). In countries where some sort of cultural homogeneity can be assumed for the country as a whole but their major geographical units markedly differ in their levels of income inequality (as in the United Kingdom or the United States), income inequalities were found to have an influence on the general level of mortality, in particular on that of the middle aged." (p. 97)

The fourth paper analyses mortality differentials among Hungarian middle aged men and women by education and region of residence at the turn of the 20<sup>th</sup> century. Earlier studies on Hungarian mortality differentials only introduced either one or the other dimension in their analyses. The novelty of this paper is the combination of educational levels (expressed in five categories) with the regions of residence (Budapest and 19 counties). Thereby it was possible to separate population composition effects from geographical impact. The study demonstrated variations in the 'hierarchical slope' of mortality levels from county to county and variations in the geographical mortality pattern by the level of education. It was found that regional mortality differentials cannot be fully explained by varied social composition of counties. Significant regional differences can also be found in mortality levels of people having the same level of education: the difference being larger among the less educated than among those with high education. This stands for both sexes. When social status and region of residence are taken into account in combination, female mortality differentials get accentuated. The author concludes that excess male mortality and larger mortality differentials among groups men than among groups of women - if measured along a single dimension - should not conceal important social differences in female mortality.

The next paper adds a new dimension to the analysis of differential mortality. Katalin Kovács first presents various explanatory models and research results focussing on excess mortality of single, widowed and divorced persons over married people. Then she analyses temporal changes in excess mortality of various non-married groups in Hungary, using standardised mortality ratios. The subject is particularly relevant since mortality differentials by marital status are not only significant but have been recently increasing in this country. The author concludes the paper by saying that " ... the extent of relative excess mortality of the non-married over the married population is similar in Hungary to that experienced in other [European] countries. Nevertheless – due to large absolute mortality differentials in this country – there are highly important variations in health status and survival probabilities, hidden by this 'average' relative excess mortality, which deserve special attention." (p. 174)

The analysis of demographic phenomena, including mortality differentials, typically requires interdisciplinary approach. This is demonstrated by the last paper of the volume in which Katalin Kovács examines a stimulating theoreti-

cal and methodological issue: in what way is it possible to use the individual causes of death-classified according to medical diagnostic criteria and listed in the International Classification of Diseases-in sociological analyses where the aim is to find relationship between social processes and cause-specific mortal-ity?

198