Letters to the Editor

Economy and mortality in Eastern and Western Europe between 1945 and 1990: the largest medical trial of history

From IMRE BONCZ1* and ANDOR SEBESTYÉN2

A previous issue (December 2005) of the Journal was devoted to publications analysing the relationship between economic growth and mortality. The investigations presented in two papers1,2 came to a contradictory outcome in terms of the relation between economic growth and mortality in the United States. We would like to draw the attention of another practical example on this topic.

Between 1945 and 1990 Europe was divided by the ‘iron curtain’ into two different parts: the Western European or capitalist and the Eastern European or socialist countries. The two groups of countries followed a different development pattern regarding many factors including—among others—economy and mortality. This period of 45 years in Europe can be considered as the largest medical ‘trial’ of history.

The study design’ was planned during the Second World War in the city of Jalta by the political leaders of the Soviet Union, United Kingdom, and United States of America. The countries (therefore the patients) were assigned into two

Figure 1  ‘The epidemiological iron curtain’ in Europe: standardized death rates for all causes, all ages per 100 000 population in 1990. Source of data: WHO Health for All Database

1 Department of Health Policy, National Health Insurance Fund Administration (OEP), Budapest, Hungary.
2 County Baranya Health Insurance Fund Administration, National Health Insurance Fund Administration (OEP), Pécs, Hungary.
* Corresponding author. Department of Health Policy, National Health Insurance Fund Administration (OEP), 1139 Budapest, Váci út 73/A, Hungary. E-mail: boncz.i@oep.hu
different groups: the Western European countries and the Eastern European countries. The two groups have been closed for decades, i.e. there was neither any real communication between them nor any flow of patients. The interventions included many factors influencing health status like—among others—lifestyle, health culture, behaviour and habits of the population, health care infrastructure and manpower, health expenditures, regulatory framework, environmental factors, social deprivation, etc. The outcome of the trial can be measured by both economic and epidemiological indicators.

Owing to the limited availability of data from the Eastern European countries, the effect of interventions and the outcome of the ‘trial’ could have been assessed mainly only after the social changes of 1990. The gap in life expectancy between the countries of Central and Eastern Europe and the countries of Western Europe was closing up during the 1950s and early 1960s. In the Eastern European countries mortality rates had increased or were virtually unchanged since the mid-1960s, especially in middle-aged and elderly men. However from the mid-1960s the health status in the former socialist countries stagnated or deteriorated, whereas in the Western countries it improved steadily. By 1990 it became clear that on a long term, the Eastern European countries underwent a significant decrease in life expectancy and an increase in mortality while the Western European economies also experienced a collapse compared with the Western ones. Around 1990 we realized that although the political changes destroyed the physical iron curtain made of steel and stone it remained alive in epidemiological terms (Figure 1).

The epidemiological and economic indicators showed a further decline after the social and political changes in 1990 on a short term. In Eastern Europe cardiovascular mortality rates reached a maximum in the period 1990–94. By 1990 there was a 4 year gap in life expectancy, which, by 1997, in men, had widened to 6 years. The decrease in gross domestic product (GDP) was 3% in the Czech Republic, 13% in Hungary, 42% in Lithuania and Russia, and 60% in Ukraine. Mortality changes after 1989 in Eastern Europe were correlated with changes in GDP and changes in income inequalities.

The papers by Tapia Granados and Brenner reveal the importance of within country changes in mortality and economy based on the example of the United States, but we would like to emphasize this relationship between the countries of Eastern and Western Europe. The political status and economic background of the two parts of Europe between 1945 and 1990 with the existence of the iron curtain had a significant effect on the health status of the population, which should be investigated more in detail.

Conflict of interest: None.

References
7 Marmot M. Epidemiology of socioeconomic status and health: are determinants within countries the same as between countries? Ann N Y Acad Sci 1999;896:16–29.

doi:10.1093/ije/dyl075
Advance Access publication 25 April 2006

Centrally planned economies, economic slumps, and health conditions
From JOSÉ A TAPIA GRANADOS

I am not sure why Boncz and Sebestyén, while ignoring contributors providing specific comments on Eastern Europe to the IJE debate on mortality and economic growth, refer in their letter to other contributions in which nothing is said about the issue. Whatever Boncz and Sebestyén’s reasons for this, they discuss colourfully the division of Europe in Yalta (1945) into an American and a Russian sphere of influence, describing it as ‘the largest medical trial in history,’ in which the two groups of patients—countries—separated by ‘the iron curtain,’ were assigned to two different treatments, ‘capitalism’ and ‘socialism.’ Clever or gaudy, the metaphor seems to be stretched and I am doubtful to what extent it may be useful as a heuristic device. Indeed, a large portion of one ‘treatment group,’ the USSR, had been ‘treated’ from 1917. Then, after 1945, countries like China, Cuba, Vietnam, Ethiopia, etc. were included in a similar ‘treatment’ group, though this happened in other continents and not behind the European ‘iron curtain.’ Insofar as ‘the iron curtain’ refers to the lack of civil liberties,