

BULGARIA AND THE OTHER NEW EU MEMBER STATES: TRENDS IN THE HEALTH STATUS AFTER TWENTY YEARS OF TRANSITION

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ABSTRACT

This paper analyzes the trends in the basic indicators of population's health status in the twenty years of post socialist transition of Bulgaria. The processes and tendencies in this country are placed in the broader context of the developments in the other post-socialist countries, particularly, the new EU member states. Thus the approach adopted in the paper is the comparative one. Although the whole period is under consideration, emphasis is placed on the last 5-10 years. After stagnant or even decreasing life expectancy at birth in the 1990s, this indicator has been showing a positive trend throughout the last decade. Even though the numbers are comparable to the values in some other EU12 countries, they are still one of the lowest among all EU Member States. Although the last few years have seen a slight decrease in overall mortality rates, mortality in Bulgaria is still substantially higher than in any other EU country. Whilst the cardiovascular mortality has decreased in the last decade, it is still the highest in the European Union and several times higher than the EU average. Child mortality (both infant and under-five) has been decreasing, but Bulgaria still lags behind the EU average and even the average of the EU12. Perinatal mortality rate is twice as high as the respective values for the EU-12. The positive tendencies in population health status, as subtle and fragmented as they seem to be, are mainly attributable to the stabilization of the political situation in the country starting from 2000-2001, and especially to the economic upsurge in the mid-2000s.

Key words: health status, life expectancy, mortality, cardiovascular mortality, child mortality

INTRODUCTION

The development of public health indicators in Bulgaria has been among the major challenges in the last twenty years. The transition from a command to a market economy and to a democratic form of government has been expected to ultimately result in an improvement of the health status indicators through the better utilization of resources, long run increase in real incomes as well as a more efficient health care system providing high quality of services. The results from the first twenty years of transition, however, have proved to be quite ambivalent: although there is a slight trend of improvement, the dynamics of the change has not been particularly impressive, varying overtime, with inconsistencies and fluctuations, even deteriorations in some years.

The immediate impetus for writing this paper has come from the author's involvement in the preparation of the forthcoming issue on Bulgaria of Health Care Systems in Transition (HIT). The HITs are published within the framework of the European Observatory on the Health Care Sys-

tems, coordinated by the World Health Organization European Center and are country-based profiles of the health care system in each country and of the reform initiatives in progress or under development. Although comparisons with other countries are inevitable and encouraged in the HITs, in the course of the study of the major trends in the health status indicators in Bulgaria, it became obvious that less clear was the overall picture, the situation in countries with similar characteristics and path. The next step in the investigation appeared quite logical: to analyze and assess the tendencies in Bulgaria at a more general background.

MATERIALS AND METHODS

The approach adopted in this paper is the comparative one. The processes and tendencies in this country are placed in a broader, international context of the development of the other post-socialist EU member states. The study examines trends across ten Central and Eastern European countries which became members of the European Union after May 2004 and 2007. The paper aims at identifying the specificity of the trends in public health in Bulgaria at the background of the commonalities of the transition process which can help enlighten the future policy-making.

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Bulgaria taken as a reference country, the other countries considered are Poland, the Czech Republic, Hungary, Slovakia, Slovenia, Estonia, Latvia, Lithuania and Romania. Where appropriate, the averages of the European Union member states (EU27), the old member-states of the Union before 2004 (EU 15) and the new member states (EU12) are also considered.

The data on health status are obtained mainly from the one of the most comprehensive sources of comparable statistics, the World Health Organization's Health for All database (HFA-DB) for the European region. Additional information was extracted from database of Eurostat. The main indicators of population health considered are life expectancy, mortality and infant mortality.

Although the whole two decade period is taken into consideration, emphasis is placed on the last five-ten years.

DISCUSSION

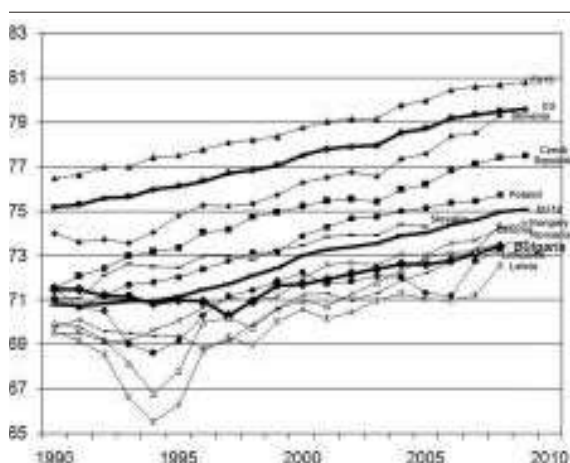


Figure 1. Trends in life expectancy at birth in EU12 member states, 1990-2009 (or nearest year available)

Life expectancy is a comprehensive measure of population health status. It is considered an indicator which comparatively well reflects the health performance of society as a whole, not only and predominantly that of the health system. Throughout the last two decades average life expectancy in the EU27 continued to demonstrate a favourable trend, rising from 75.18 in 1990 to 79.59 in 2009, that is by 5.9% (7). However, while the old EU member states have experienced a steady and continuous improvement (by 5.6%), the development of life expectancy in the former Eastern bloc countries that are now members of the EU, although rising in general (by 6%), has not been that stable. It has been characterized by fluctuations, even deterioration, particularly in the 1990s. Behind this general trend there are considerable variations among the countries. In Bulgaria, similar to most of the new member states, there has been a deterioration in the 1990s with a dip in 1997, after which the life expectancy has started to stabilize and slowly to rise (see Fig. 1).

From the perspective of the depth of the fluctuations, some of the Baltic countries underwent earlier in the 1990s much

more pronounced downward swings than Bulgaria. This is attributed to the general hardships of the transformation process and the proper performance of the public institutions, including those related to health care (2). In Bulgaria, in particular, the dip in life expectancy can be easily associated with the severe and profound "transition crisis" in 1996/97 (1), which was almost unique, as it combined fiscal, banking and currency crises. The severity of the deterioration of the macroeconomic situation can be illustrated by the dynamics of two macroeconomic indicators: the cumulative decline of GDP in these two years was more than 18% and the hyperinflation at the beginning of 1997 was 1058% (6). The rates of increase of life expectancy throughout the whole period have been rather sluggish, too: the overall percentage change between 1990 and 2008 is 2.7%, which is the second lowest (after Lithuania) among all EU12 countries. In 2008, with life expectancy of 73.41, Bulgaria lagged behind the EU27 average by some 6 years, by more than 7 years behind the EU15 average and by more than a year and a half behind the EU12 average. The only two other countries with a slightly lower life expectancy were Latvia (72.53) and Lithuania (73.23) (7). Worth mentioning is the progress in life expectancy for the last two decades in some of the central European countries: in the Czech republic it rose by almost 6 years or 8.3%, in Hungary by 5 years or 7.2%, in Slovenia – by 6 years or 7.2%.

Table 1. Life expectancy at birth, by gender, 2009 or latest available year

Countries	LE total	LE female	LE male	LE F-M
Bulgaria	73,4	77,1	69,8	7,3
Czech republic	77,5	80,6	74,3	6,3
Estonia	74,3	79,6	68,7	10,9
Hungary	74,5	78,5	70,3	8,2
Latvia	72,5	77,8	67	10,8
Lithuania	73,2	78,8	67,6	11,2
Poland	75,7	80,1	71,3	8,8
Romania	73,6	77,5	69,9	7,6
Slovakia	74,3	78,2	70,3	7,9
Slovenia	79,3	82,6	76,5	6,1
EU27	79,5	82,6	76,5	6,1
EU15	80,8	83,5	78	5,5
EU12	75	79,1	71	8,1

Similarly, the sex difference on life expectancy in Bulgaria is substantial and persisting, with a slight tendency of widening: 7.3 in 2008 versus 6.7 in 1990 (see Table 1). Bulgaria had the lowest female life expectancy at birth of all the new EU member states and the fourth lowest life expectancy for men before the three Baltic states.

Another important indicator of a population health status is mortality. Similar to the region as a whole, the overall mortality rate from all causes of death in the new EU member states gradually and steadily declined after 1991 to reach an average age-standardized death rate (SDR) of 872.6 per 100 000 population in 2009. (The age-standardized death rate is useful for comparisons among countries, because the effects of differences in the age distribution of population are eliminated.) The rates in the different countries vary significantly, however. The Czech Republic is the only country, in which the mortality rate has been steadily decreasing throughout the whole period. All the other countries experienced “a mortality crisis” (3) in the first phase of the reforms, in the early 1990s. In some of them, however, the rise in mortality was swiftly and fully reabsorbed and the following years the decrease was steady and substantial (see Figure 2).

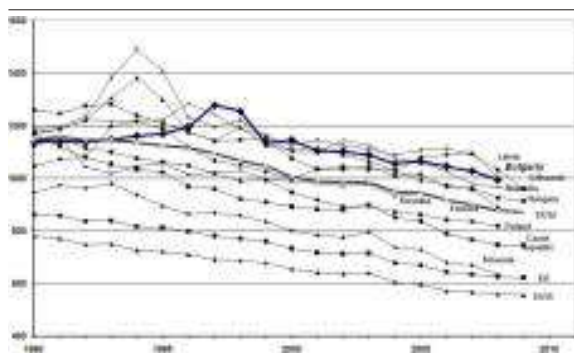


Figure 2. Trends in all cause mortality in EU12 member states, 1990-2009 (or nearest year available)

For example, SDR in Estonia (2008) fell by 35% compared to the peak 1994; in Hungary (2009) – by 29% compared to the peak 1993; in Latvia (2008) – by 32.5 compared to the peak 1994, in Slovenia (2008) – by 35% compared to the peak 1991, and in Poland (2008) – by 29% compared to the peak 1991.

In Bulgaria the overall mortality rate started to rise in 1993, reached it highest level in 1997 and since then has begun going down. However, the decline has been modest (22% in 2008 compared to the peak 1997) and not that steady (there was a slight increase in 2005). The last few years show a further decrease. The number of deaths in 2008 was 110 523, which is by 2 481 less than 2007, and in 2009 it was 108 068, which is by 2 455 less than 2008 (5). Still, with the low rates of change, in 2008-2009 Bulgaria had the second highest mortality in the EU (after Latvia only) with SDR of 995.39 (7).

In addition, the male mortality rate was, on average, 55% higher than the female rate in 2009 across all new EU member states. In Bulgaria, male SDR in 2008 is 1278.96, which is the fourth highest in the EU after the three Baltic states. The female rate of 766.14, however, is the highest in EU12.

The analysis of the causes of mortality in Bulgaria shows that similar to many other European countries, the main cause of death are the diseases of the circulatory system. The standardized death rate (SDR) for these diseases has

been fluctuating since the 1980s, with a peak in 1997 and 1998 (814 and 813.1 respectively – not in table) and decreasing ever since. However, in 2008 it was still the highest in the European Union with 611.3 deaths per 100 000 (see Figure 3). By comparison, Romania, the country with the second highest SDR, registered 558.3 deaths per 100 000. In the same year, Bulgaria's SDR for the diseases of the circulatory system was 1.4 times higher than the EU12 (439.9), 2.5 times higher than the EU27 average (240.4) and 3.3 times higher than the EU15 average (188.3) (7). This unfavourable trend can be attributed to still prevailing unhealthy habits and behaviour (unbalanced diet, high rate of smoking and low physical activity), psychosocial factors, and insufficient health promotion, prevention and treatment of risk factors.

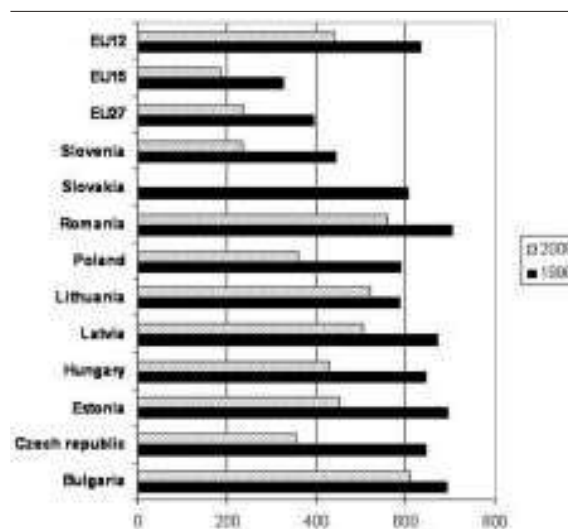


Figure 3. SDR, diseases of the circulatory system, all ages per 100 000

Malignant neoplasms (cancer) have been the second most common cause for mortality in the last couple of decades. In 2008, the SDR for malignant neoplasms in Bulgaria (171.6) was slightly below the EU27 average (173.6), well below the EU12 average (199.40), but above the EU15 average (166.88). However, the dynamics in Bulgaria (similar to Romania) is different. In contrast to the general trend of falling malignant neoplasms SDR in the EU, Bulgaria's SDR has been increasing since 2000 (see Figure 4).

Death attributable to external causes (injury or poisoning) and respiratory diseases are at a comparable level. In 2008, the SDR for external causes was 44.88 which is higher than the EU27 average, 38.7 and the EU15 average, 32.9 but much lower than the EU12 average, 61.0 and SDR for respiratory diseases was 41.62, slightly lower than the EU27 and EU15 averages, 44.5 and 44.9, respectively (7). In 2009, again, the main three causes for death in Bulgaria were diseases of the circulatory system (66.0% of all cases), malignant neoplasms (15.9%) and the diseases of the respiratory system (3.8%) (5).

Infant mortality has been decreasing in the last 30 years in Bulgaria. From 2000 to 2009 infant (under-one) mortality

significantly decreased from 13.3 to 8.6 per 1 000 live births. Under-five mortality also decreased from 17.4 in 2000 to 10.0 per 1 000 live births in 2009. Both indicators report a drop of 5 to 6% a year. Nevertheless, with this rate, Bulgaria still lags behind the new Member States' average and the EU27 average. In 2008 the number of infant (under one) deaths per 1000 live births in Bulgaria was approximately twice the EU 27 average (4.4 per 1000) and the second highest rate in the EU after Romania (11.0 per 1000) (7). The observed annual reduction rate of 5 to 6% in child mortality is a positive trend but it results more from Bulgaria's overall social and economic development than from specific progress in the healthcare system. There are significant regional differences in the infant mortality rate, the lowest being registered in Blagoevgrad (4.8) and Sofia-capital (5.7) and the highest in Sliven (21.6) and Dobrich (12.7). The infant mortality in the rural areas has been 50% higher than in the urban areas (4).



Figure 4. SDR, malignant neoplasms, all ages per 100 000

Maternal mortality shows a steady downward and has fallen to slightly above the average rate of EU. In 2008, the maternal death rate was 6.4, while the EU27 average was 6.1 (7). The neonatal mortality rate (from day 0 to day 28 per 1000 live births) roughly halved, from 10.4 in 1980 to 5.4 per 1000 live births in 2009, but is still above the EU12 average (4.2 in 2008) and twice the EU15 average (2.6 in 2008). The postneonatal morbidity rate (from day 29 to day 365 per 1000 live births) demonstrates an even more impressive decline, from 15.0 per 1000 in 1980 to 3.6 per 1000 in 2009. However, this is still disproportionately high compared to the EU27 average (1.5 in 2008), even more so to EU15 average (1.2 in 2008) as well as compared to some other eastern European countries such as Hungary (1.8 in 2008) and Poland (1.7 in 2007). The data reveal a more lagging catch up progress in perinatal mortality rates (the sum of stillbirths plus the deaths before day 6 inclusive). Although this rate decreased from 15.0 in 1980 to 10.5 in 2008, this is still almost twice the EU12 average (5.7 in 2008) and at least 50% higher than Romania's (8.0 in 2008). In general, positive changes in the child mortality components in the last decade can be attributed to the stabilization of the political and economic situations in the country and the improving welfare of most of the families. However, insufficient progress in some of the sub-types of child

mortality may point to deficiencies in the health care system. The SDR per 100 000 from acute respiratory infections, pneumonia and influenza in children under 5 years in 2008 in Bulgaria was 30.7 compared to 1.5 in Hungary, 3.7 in Poland, 5.2 in the EU27 and 1.3 in the EU15 (7).

CONCLUSION

A summary of recent changes in Bulgaria's health status, analyzed above, shows:

- After a stagnant and even decreasing life expectancy at birth in the 1990s, this indicator has been showing a positive trend in the previous decade. In 2009 it was 73.43, 69.90 for men and 77.08 for women. Although the values of this indicator are comparable to the values in some other EU12 countries, it, however, is still one of the lowest among all EU member-states, being 6 years below the EU27 average, even more so compared to EU15 average – by more than 7 years and by more than a year and a half below the EU12 average.
- Although the last few years show a slight decrease in mortality, the decline has been modest and not that steady. Mortality in Bulgaria is still substantially higher than any other EU country (with the exception of Latvia).
- Whilst the cardio-vascular mortality has been decreasing in the last decade, it is still the highest in the European Union, being several times higher than the EU average.
- With respect to cancer mortality Bulgaria has a relatively moderate position in the European Union. However, contrary to the general tendency of reduction of malignant neoplasms deaths in the EU, this type of mortality has been consistently increasing in Bulgaria since 2000.
- Child mortality (both infant and under-five) has been decreasing but Bulgaria still lags behind the EU average and even the new member-states' average. Particularly unfavourable are the values of the indicator for perinatal mortality, being twice as high as the respective values for the EU new member-states' average.

The positive tendencies in population health status, as subtle and fragmented as they seem to be, are mainly attributable to the stabilization of the political situation in the country starting from 2000-2001, and especially to the economic upsurge in the mid-2000s. However, the insufficient progress in the dynamics of some of the indicators, particularly of some sub-types of child mortality may point to possible deficiencies in the health care system. Analysis suggests that Bulgaria has a considerable way to go before achieving the health outcomes in the EU15 Member States or even those in most of the countries that joined the EU in 2004.

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