

## **EDITORIAL**

### **Health status in the transitional countries of South Eastern Europe**

**Genc Burazeri<sup>1,2</sup>, Peter Achterberg<sup>3</sup>**

<sup>1</sup> School of Public Health, University of Medicine, Tirana, Albania;

<sup>2</sup> Department of International Health, School for Public Health and Primary Care (CAPHRI), Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht, The Netherlands;

<sup>3</sup> National Institute for Public Health and the Environment (RIVM), Bilthoven, The Netherlands.

**Corresponding author:** Genc Burazeri, MD, PhD, School of Public Health, University of Medicine, Tirana;

Address: Rr. "Dibres", No. 371, Tirana, Albania;

Telephone: +355674077260; E-mail: gburazeri@yahoo.com

The former communist countries of South Eastern Europe (SEE) have been undergoing a rapid process of transformation from state-enforced rigid economies to market-oriented societies in the past 25 years. However, these fast changes have unevenly affected various countries and different segments of the populations within each country (1).

According to the World Health Organization (WHO) (2), the estimated life expectancy in Albania in 2012 was the lowest in the region among females (75 years vs. 83 years in Greece, which exhibited the highest female life expectancy in the SEE region) (Table 1). The lowest value for male life expectancy in 2012 was observed in Serbia (72 years) followed by Albania, Macedonia and Montenegro (73 years).

A remarkable difference compared with the other neighbouring countries is the particularly small female-to-male gap in life expectancy in Albania, which in 2012 was only two years, whereas it varied in the other SEE countries between five years (for most of the countries) and seven years (in Croatia) (Table 1). This may suggest that smoking has not been very frequent in Albanian males a few decades ago. As a matter of fact, some evidence from the WHO suggests that lung cancer mortality for Albania in the 1980s was much lower than in many other European countries (3). The male-to-female difference in life expectancy in Eastern European countries is strongly influenced by risk differences mainly smoking, alcohol abuse and road traffic accidents (3).

**Table 1. Life expectancy at birth for selected years in the countries of South Eastern Europe**  
(Source: WHO, World Health Statistics, 2014)

Country	Year: 1990			Year: 2000			Year: 2012		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Albania</b>	67	71	69	68	73	70	73	75	74
<b>Bosnia and Herzegovina</b>	70	75	73	72	78	75	75	80	77
<b>Croatia</b>	69	76	73	71	78	74	74	81	78
<b>Greece</b>	75	80	77	76	81	78	78	83	81
<b>Macedonia</b>	70	75	72	71	76	73	73	78	76
<b>Montenegro</b>	73	79	76	72	77	75	73	78	76
<b>Serbia</b>	69	75	72	69	75	72	72	77	75
<b>Slovenia</b>	70	78	74	72	80	76	77	83	80

According to the Global Burden of Disease (GBD) 2010 Study (4), the age-standardized mortality rate in Albania in 2010 was comparable to Montenegro and Macedonia, which were all remarkably higher than Greece and Slovenia. The known positive association between a higher GDP and health outcomes such as life expectancy and lower standardized mortality rates is certainly of influence in the SEE region too. Conversely, in 1990, interestingly, the age-standardized mortality rate in Albania was the lowest in the region, except Greece. One of the possible explanations for this “paradox” (that is the low mortality rate in the impoverished Albania during communist rule) may relate to Albanians earlier deploying a Mediterranean diet which is assumed to have been particularly protective against cardiovascular deaths (5).

Regarding the total burden of disease, the age-standardized disability-adjusted life years (DALY) in 2010 were the highest among Albanian males and females compared with all the other counterparts in the SEE region (4). On the other hand, the age-standardized DALYs in 1990 in Albanian males resembled the average value of the SEE region. Interestingly, in 1990, the

overall DALYs in Slovenian males were higher than among their Albanian counterparts – a trend which was entirely reversed two decades later (4). This is a clear indication of the differential impact of the political and socioeconomic transition on the health of different populations in SEE region (1). Hence, the poorest countries of the Western Balkans exhibit an unfavourable health profile associated with the rapid socioeconomic transition, whereas the wealthier societies including especially Slovenia and Croatia manifest a gradual improvement in the health status of their respective populations.

Regarding the cause-specific mortality, according to the GBD 2010 Study, the death rate from ischemic heart disease in Albania is the highest in the SEE region (4), in line with dramatic changes in dietary patterns in the past two decades with an increase in processed foods which are rich in salt, sugar and saturated fats (6) and an increase in the prevalence of smoking (6). Furthermore, Albania is the only country in the region which has experienced an increase in the mortality rate from ischemic heart disease and cerebrovascular diseases in the past two decades (4) – indicating an early evolutionary stage of the coronary epidemic, which was observed many decades ago in the Western countries.

Conversely, the age-standardized mortality rate from neoplasms in Albania in 2010 was the lowest in the region (4). This is logical given the low lung cancer mortality rate in Albania, which correlates with all-cancer mortality rate (3). In 2010, Croatia and Slovenia exhibited the highest death rates from neoplasms in the region (4).

Regarding diabetes, in 2010, the age-standardized mortality rate was the lowest in Albania and Greece, whereas in Macedonia it was exceptionally high compared with all the other countries in the region (4) probably due to the high rates of obesity in this population.

The age-standardized death rate from chronic obstructive pulmonary disease (COPD) in Albania in 2010 was one of the highest in the region, whereas the bordering Montenegro exhibited the lowest death rates from this chronic condition (4).

As for the major risk factors, the highest burden of disease in the SEE region due to smoking is observed in Macedonia, whereas Slovenia has made a remarkable achievement in the past twenty years in terms of lowering the burden of disease attributable to smoking almost by halve (4). This is a clear indication of the fact that changes during the transition period have differentially affected different countries in the SEE region.

Greece and Slovenia have the lowest burden of disease due to sedentary behaviour, whereas Serbia and especially Macedonia have the highest burden of disease attributable to physical inactivity (4). However, valid and reliable information on physical activity is difficult to obtain.

Currently, Serbia and Macedonia bear the highest burden of disease due to overweight and obesity in the region, whereas Slovenia and Greece have the lowest (4). Interestingly, in 1990, the age-standardized total burden of disease attributable to overweight and obesity in Albania was, by far and large, the lowest in the region (Greece excluded). Twenty years later, however, Albania resembled the average toll of the region (4).

At the fall of the communist rule, a particularly high burden of disease due to high blood pressure (HBP) was observed in several Yugoslavian republics including Bosnia and Herzegovina, Croatia and especially Macedonia (4). Compared with the other countries of the region, the total burden of disease attributable to raised blood pressure in Albania in 1990 was below the average of the SEE countries (4). Twenty years later, the burden of disease due to HBP in Albania was higher than the regional average. Even worse, Albania is the only country in

the region which has not implemented a program to ensure an effective control and management of hypertension at a population level, in contrast with most of the former Yugoslavian republics which have made a significant progress in this regard (2,4).

In addition, Croatia followed by Macedonia had the highest burden of high cholesterol level at the fall of the communist regime, whereas Albania had the lowest in the SEE region (4). On the contrary, two decades later, Albania had the highest burden of disease due to hypercholesterolemia after Macedonia. All countries of the SEE region except Albania have made a significant progress regarding a considerable lowering of the toll of disease attributable to hypercholesterolemia. Hence, Croatia currently shows a twofold decrease, whereas Slovenia has reduced by 2.5 times the cholesterol-related disease burden (2,4).

Interestingly, in 1990, the age-standardized burden of disease attributable to dietary risks in Albania was the lowest in the SEE region, excluding Greece. Conversely, in 2010, the burden of disease due to dietary risks in Albania was the highest in the region after Macedonia (4).

Essentially, regardless of cross-country differences, a cluster of preventable risk factors (smoking, alcohol abuse, overweight, unhealthy diet, and lack of physical activity) are currently contributing in a very important way to the observed increase in the total burden of non-communicable diseases in SEE countries such as cancer, heart disease, lung and liver diseases, and diabetes. Therefore, preventing youths from starting to smoke and refraining from alcohol abuse and refraining from unhealthy diets and promoting their physical activity are major challenges for all the countries of SEE region. These challenges are now major additions to the older but not yet finished challenge of reducing the existing risks by the still relatively high rates of mortality from infectious diseases, accidents and injuries and perinatal problems in these countries.

At a broader level and given the indicated quick changes and large potential differences in health status and health risks, the health information systems of most of the SEE countries need serious revival, improvement and renewal to allow for an adequate management and assessment of the health status of the respective populations. This includes the monitoring of preventive interventions and of essential steps in healthcare reforms. Furthermore, better statistics, regular health surveys and improved healthcare administrative data will allow for better research into the quality of the health systems and health status of the populations in SEE countries and inequalities within the countries, similar to the approach employed by their EU counterparts. From this point of view, strengthening of the health information systems will significantly support better evidence-based health policy making and priority setting in all of the SEE countries.

## References

1. Burazeri G, Brand H, Laaser U. Public health research needs and challenges in transitional countries of South Eastern Europe. *IJPH* 2009;6:48-51.
2. World Health Organization (WHO). World Health Statistics 2014. WHO. Geneva: Switzerland, 2014.
3. World Health Organization (WHO) – Regional Office for Europe. European health for all database. Copenhagen: Denmark, 2014.

4. Institute for Health Metrics and Evaluation (IHME). Global Burden of Disease Database. Seattle, WA: IHME, University of Washington, 2014. <http://www.healthdata.org> (Accessed: February 27, 2015).
5. Gjonca A, Bobak M. Albanian paradox, another example of protective effect of Mediterranean lifestyle? *Lancet* 1997;350:1815-7.
6. Albanian Institute of Public Health. National health report: Health status of the Albanian population. Tirana, Albania, 2014. <http://www.ishp.gov.al/wp-content/uploads/2015/01/Health-report-English-version.pdf> (Accessed: March 03, 2015).

---

© 2015 Burazeri et al; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.