COMPARATIVE ANALYSES OF THE HEALTHCARE SYSTEMS IN AUSTRIA, ESTONIA, CROATIA, SLOVAKIA AND BULGARIA

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Abstract
The development of the healthcare system in Bulgaria, Croatia (former member of Yugoslavia), Estonia (former member of Soviet Union) and Slovakia (former member of Czechoslovakia) is important as an example of former socialist countries, with centrally planned economy which was transformed into market economy. The aim of this article is to compare healthcare systems in Austria, Estonia, Croatia, Slovakia and Bulgaria as well as the risk factors, effectiveness of the systems, health expenditure, source of revenue and financial flows, out of pocket payments, voluntary health insurance, payment mechanisms, financial protection and equity in financing, equity of access to healthcare, transparency and plans for future development.

The conclusion is that despite some improvements over the last three decades, health outcomes in these Eastern European countries remain unsatisfactory in comparison with Austria and the other leading EU countries. Unhealthy lifestyles persist in these countries and there are large disparities between different socioeconomic groups. In Austria health system is complex, with shared responsibilities between different levels of government and self-governing bodies. Austria performs well in ensuring access to healthcare, it reports the lowest levels of unmet needs for medical care across the EU and, despite relatively high out-of-pocket payments, provides comprehensive financial protection for vulnerable groups.

Keywords: Austria, Bulgaria, Croatia, Estonia, Slovakia, healthcare system, comparative research, health expenditure

INTRODUCTION
The health status of people in European union has improved significant since 1990, due to a range of factors, including reductions in infant mortality, rising living standards, improved lifestyles, better education, as well as advances in healthcare and medicine. Life expectancy at birth in Austria was 81.3 years in 2015, (EU average 80.6 years) in comparison with Estonia (78 years), Croatia (77.5 years), Slovakia (76.7 years) and Bulgaria (74.7 years) [1], and despite improvements in the health status, population ageing and unhealthy lifestyles pose important challenges to these five European countries.

The aim of this article is to compare healthcare systems in Austria, Estonia, Croatia, Slovakia and Bulgaria as well as the risk factors, effectiveness of the systems, health expenditure, source of revenue and financial flows, out of pocket payments, voluntary health insurance, payment mechanisms, financial protection and equity in financing, equity of access to healthcare, transparency and plans for future development.

BACKGROUND
European health policy follows the principle of ensuring equal access to high-quality care for all, irrespective of income, age and gender. Despite some improvements over the last three decades, health outcomes in Eastern European countries Bulgaria, Croatia, Slovakia and Estonia remains unsatisfactory in comparison with Austria and the other leading EU countries.

Although women in these five countries may live longer than men, it is not necessarily the case that they enjoy better health. The gender gap was considerably smaller in terms of healthy life years than it
was for overall life expectancy. Healthy life years are however limited by the fact that these limitations in activity are self-declared, and as such can be influenced by differences in response styles between the sexes or between residents of different countries, for example, it has been shown that women are more prone to report ill health than men. The expected number of healthy life years at birth was higher in Bulgaria (65 years for women, 61.5 for men) than Austria (58.1 years for women, 57.9 for men) and Estonia (56.2 years for women, 53.8 for men), Croatia (56.8 years for women, 55.3 for men), Slovakia (55.1 years for women, 54.8 for men) [2].

Relatively low amenable mortality rates in Austria indicate that healthcare is more effective than rest of selected countries, especially compared to Bulgaria, but in Croatia, Estonia and Slovakia amenable mortality is also about twice as high as the rates in Austria [3]. Amenable mortality rates are higher for men than for women in all of these countries [4]. The six leading causes of amenable mortality are ischaemic heart diseases, cerebrovascular diseases, colorectal cancer, breast cancer, hypertensive diseases and pneumonia. In Bulgaria amenable mortality from cardiovascular diseases is notably high, despite a 17% reduction between 2004 and 2014. About 20,000 deaths (or 19% of all deaths) in 2014 were still considered to be avoidable, much higher than European average of 11%. In Croatia amenable mortality rates are comparatively high for ischaemic heart disease (307 per 100,000 population in 2014) and some forms of cancer, such as lung cancer, breast cancer (second highest rate in the EU in 2014) and colon cancer (also second highest in the EU). These high rates point to potential weaknesses in the quality of healthcare and cancer screening programs.

PREVENTION AND RISK FACTORS

Prevention is the key to avoid ill health and achieve a high level of mental and physical well-being effectively and efficiently, but only a small fraction (3%) of healthcare budgets and political attention are dedicated to prevention. Prevention has been estimated to offer an enormous return on health expenditure with better health outcomes, higher productivity and employability, or saved treatment costs [5].

Non-communicable diseases account for the large extent of the money spent by health and social systems (up to 80% of health care costs). Many of these diseases share the same behavioural risk factors, such as smoking, alcohol consumption, unhealthy diets and nutrition and physical inactivity. In Austria more than 28% of the entire disease burden could be attributed to behavioural risk factors. Almost 24% of Austrian adults were regular smokers in 2014 which is above the EU average of 21% and smoking rates are 83% higher in the lowest-educated population than in the highest-educated population. In Slovakia more than 35% of disease burden can be attributed to behavioural risk factors. The smoking rate among Slovak men is high (30%) in comparison with women (16%) and a higher proportion of 15 year old boys (16%) and girls (18%) smoke which is more than the EU average. In Bulgaria smoking rates are the highest in EU and at least 40% of the entire disease burden can be attributed to behavioural risk factors. While levels of binge are lower than in the other EU countries, per capita alcohol consumption is the fifth highest in the EU. Although adult obesity levels are below the EU average, they have risen by 25% since 2008. In Croatia 36% of the disease burden can be attributed to behavioural risk factors, and in Estonia this percentage is 37.

HEALTH SYSTEMS

In Austria health system is complex, with shared responsibilities between different levels of government and self-governing bodies. Austria performs well in ensuring access to healthcare, it reports the lowest levels of unmet needs for medical care across the EU and, despite relatively high out-of-pocket payments, provides comprehensive financial protection for vulnerable groups. The Austrian health system is relatively expensive, around 3800 EUR was spent on health per capita in 2015 [6]. Also the system has strong focus on hospital inpatient care as indicated by high hospitalization rates. Regional health funds play the most important role in hospital financing, pooling resources from social security institutions (distributed after equalization by another fund), states, local
authorities and the federal government, which allocates its resources via the Federal Health Agency. Austria has the second highest physician-to-population ratio in the EU after Greece. Social insurance funds were the most important source of finance, accounting for approximately 45% of health expenditure in 2015 and 0.7% of long-term care expenditure. The Federation, Lander and local authorities covered approximately 24% of expenditure on health and 81% of expenditure on long-term care.

Health expenditure in Austria as a share of GDP is 10.4% [7], which is above EU average, but has grown more slowly than in many other EU member states since 2005. Contributions for health are generally fixed at 7.65% of gross income (shared between employees and employers). There is no competition between funds. It is projected that healthcare expenditure will grow vastly over the next years. The 2015 Ageing Report (European Commission and European Policy Committee, 2015) projects public spending on health care and long-term care to both increase by 1.3 percentage points of GDP between 2013 and 2060 – well above the average projected increases of the EU for health (0.9 percentage points) and long-term care (1.1 percentage points). As in all developed nations, health expenditure is increasing as average age rises. For instance, the per capita costs of total expenditure for personal health-care services in the 75–84 age group for both men and women are around three times as high as those in the 45–64 age group. For both sexes, the 85+ age bracket in the inpatient sector dictates the shape of the age expenditure profile (approximately 50% of expenditure), followed by long-term care and pharmaceutical costs. In the 0–4, 5–14 and 65–74 brackets, significantly more is spent on men than women. In the 15–44 and 85+ brackets, however, spending per head is higher for women. As far as expenditure for long-term care at home (cash benefits) is concerned, about 50% more is spent on women than on men. More is spent on women than on men in younger age brackets too (or at least as much). This suggests that women are considerably more dependent on support outside the family unit than men [8].

In 2015 total health expenditure in Slovakia was 5 418 million EUR (1619 per capita), which is low compared to Austria, but higher than Bulgaria, Croatia and Estonia [9]. The Slovak health system provides universal coverage for a broad range of services, and guarantees free choice of one of the three health insurance companies, due to several mergers, the health insurance market is shared by one publicly owned health insurance company, which dominates the market, and two smaller private companies. The effectiveness of the Slovak healthcare has improved as a result of stabilization of expenditures in recent years. The increase in healthcare spending was driven by economic growth, which enabled higher revenues from collected contributions. Since 2010, Slovakia has managed to maintain a stable level of public expenditures on healthcare system - 5.6% of GDP. Entire health spending accounted for approximately 7% of GDP, which is lower than Austria, Bulgaria and Croatia [10].

The main sources of public revenues for health spending are contributions from employees and employers (employees pay 14% of their gross monthly income as a mandatory insurance contribution, out of this percentage, employees pay 4% and employers 10%), self-employed, voluntarily unemployed, state insured (comprising mainly economically inactive persons, e.g. retired, children, unemployed) and dividends. Private resources accounted for 25.5% in 2014, which mostly (about 90%) consisted of out of pocket payments. The remaining private sources included investment activities of private entities and informal payments. Because of the very broad definition of the benefits package, voluntary health insurance plays only a very marginal role. According to a survey by Mužík and Szalayová, 2013b, 71.4% of respondents (843 out of 1181 respondents) reported making an informal payment in the form of cash or presents [11].

In Croatia entire health expenditure was 3 246 million EUR (1245 per capita, adjusted for differences in purchasing power) in 2015[12], a little bit higher than Bulgaria, but one of the lowest in EU. As a percentage of GDP Croatia spent approximately 7.4% on health and despite the increase since 2000 is lower than Austria and Bulgaria. Croatia has a mandatory health insurance system, with the Croatian Health Insurance Fund (CHIF) being the only insurer and the main purchaser of health services. The key sources of the CHIF’s revenue are compulsory health insurance contributions (13% of gross salary for employees), which account for about 75% of the total revenues, and funding from the State budget.
(taxation), which accounts for about 15% of the CHIF’s revenues. Supplemental health insurance is voluntary and is purchased individually from either the CHIF or the six private insurers. The CHIF dominates voluntary health insurance market and covers over 2.5 million people out of the total number of 4.3 million people covered under the mandatory scheme. Croatia has pursued a number of important health reforms in recent years, especially in hospital sector. A comparatively large share of health expenditure goes to pharmaceuticals, indicating that efficiency gains may arise if appropriate measures are taken. Pharmaceuticals prescribed at the primary care level are either partly or fully reimbursed by the CHIF, depending on whether they are included on the basic or the supplemental list.

In 2015 healthcare expenditure in Bulgaria was 3 715 million EUR (1224 per capita, adjusted for differences in purchasing power, the third lowest in the EU) [13]. As a percentage of GDP Bulgaria spent 8.2% on health, which is lower than the EU average of 9.9%, but higher than most of East European countries [14]. Bulgaria has a mixed public–private health care financing system, the Ministry of Health is responsible for overall organization and policy formulation, while the National Health Insurance Fund (NHIF) is the main purchaser in the system. Health financing is characterized by low total spending, as well as very high out-of-pocket payments (the highest in EU, accounted for 48% of health expenditures, compared to a 15% average in the EU). A large share of out-of-pocket payments goes to pharmaceuticals, followed by hospital services. Access to health services remains a problem. Some 12% of citizens are without insurance and high out-of-pocket payments threaten access to health care for vulnerable groups, including the Roma, lower income households, and older people. Bulgaria has a comparatively high proportion of physicians but the second lowest proportion of nurses in the EU. Health professionals migrate to other countries in search of better career prospects and better pay, in 2015 2636 medical doctors who had trained in Bulgaria worked abroad.

In Estonia total health expenditure was 1 319 million EUR (1458 per capita, adjusted for differences in purchasing power) [15]. The Estonian health care system is mainly publicly funded through solidarity-based mandatory health insurance contributions, Estonian Health Insurance Fund (EHIF) is the only insurer and the main purchaser of health services. The EHIF operates through four regional departments, each covering one to six counties. Its main responsibilities include pooling funds, contracting service providers, reimbursement of health services and pharmaceuticals plus coverage for sick leave and maternity benefits. Out-of-pocket payments have increased steadily as a proportion of total expenditure on health care, largely through the growth of the private health sector. Private expenditure constitutes approximately 20% of all health expenditure, mostly in the form of co-payments for medicines and dental care. Some 6% of the population has no insurance. Estonia also has the highest level of unmet need for medical care, this is mostly caused by waiting times, which may also reflect on poor coordination and integration. Estonia has invested in e-health and is internationally recognized for its innovations. Most health care providers keep an electronic health record for patients and all health care providers are responsible for sending patient health and health care service provision information to the central health information system.

CONCLUSIONS

Although there is a significant improvement in health indicators, the four countries of Eastern Europe - Slovakia, Bulgaria, Croatia and Estonia are still lagging behind countries like Austria, where the funds earmarked for healthcare are much more. On the one hand, it is because of the stronger economy and on the other hand, because of the determination of health care in Austria as a priority and thus the allocation of much more health resources than the other sectors. In Austria, the distribution of the population among different health insurance funds is based on residence and place of work, and there is no real competition between the funds.

Another general feature of the surveyed countries is the relatively low prevention costs. Along with the similarities between the health systems of former socialist countries, there are also significant differences between them. In Slovakia, unlike in Bulgaria, Croatia and Estonia, there is a competitive insurance model where one state and two private companies compete on the basis of the quality and price of the services. Estonia is one of the countries in Eastern Europe with the introduction of eHealth,
unlike Bulgaria, Croatia and Slovakia, where this process is delayed. A common problem for Slovakia and Bulgaria is the persistence of serious imbalances in access to health care for different geographical areas and social groups.

REFERENCES


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