PERFORMANCE OF THE HEALTH CARE SYSTEM IN THE CZECH REPUBLIC AS COMPARED TO EU COUNTRIES AND OTHER EU CANDIDATE COUNTRIES

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This paper summarizes the results of a comparative study focused on health care system performance in EU countries and candidate states in Central and Eastern Europe.

INTRODUCTION

Over the past few years, the World Health Organization (WHO), the Organization for Economic Co-operation and Development (OECD), the World Bank and other international organizations have published many reports and other documents enabling detailed international comparison of health status in various countries and assessment of performance of different health care systems. Such reports make it possible to evaluate the effectiveness and efficiency of health care systems in the context of the social and economic development of different countries in a global measure and to study the influence of health determinants. These publications also serve as good resources for developing national health policies stemming from analyses of health care needs of the inhabitants, economic constraints of different countries and priorities in health care needs assurance (data based policy) rather than arising from ideological aspects only.

OBJECTIVES

The aim of the present study was to contribute to the harmonization process of the Czech Republic with the European Union. An analysis was performed based on the above information resources and relevant data obtained from the Institute of Health Information and Statistics of the Czech Republic.

The goal of the analysis was to compare the performance of health care systems of the first fifteen EU countries and the Central and East-European candidate states with the highest probability of becoming members of the EU in the near future, namely the Czech Republic, Hungary, Poland, Estonia, Latvia, Lithuania, Slovenia and Slovakia.

RESULTS AND DISCUSSION

Table 1. A comparison of health care systems in EU countries and some candidate states

Indicator	EU Members	Candidates	Difference
			in %
GDP per capita (in USD)	19,851	8,372	-57.8
Percentage of GDP spent for health services	8.2	6.4	-22.1
Per capita expenditures on health in USD	1,880	575	-69.5
Public expenditures as a % of total expenditure on health	74.1	82.9	+11.9
Mortality			
boys under 5 years	6.5	13.1	+101.5
girls under 5 years	5.6	10.1	+80.4
men 15-59 years	124.6	270.7	+117.3
women 15-59 years	62.8	101.6	+61.8
Standardized mortality			
men	927.7	1,442.0	+55.4
women	573.9	781.3	+36.1
Life expectancy at birth			
men	74.6	67.1	-10.0
women	80.6	76.5	-5.0
R-index	6.76	5.49	-18.8
OHSA	91.2	83.2	-8.8

Abbreviations:

GDP - gross domestic product

R-index - Responsiveness index, which is used by WHO for assessment of the health care system accessibility, quality, reliability and continuity.

OHSA – Overall Health System Performance – characteristics of the effectiveness of a HC system and how well the targets are fulfilled (WHO).

Note: The data concerning health status indicators are related to the period of 1997–1999, other figures are related to the years 1998–2000.

Table 1 gives basic economic and healthcare indicators to show the differences between EU countries and candidate states.

It is evident that the performance of the economies of the candidate countries is less than a half that of the first 15 EU member countries, but per capita expenditures on health care in the candidate countries are even lower than it should correspond to the level of their

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economies. The coefficients of variance confirm that the first fifteen EU countries represent a more homogeneous unit in comparison with the group of the candidate countries in view of the economic performance as well as expenditures spent on health care services. There are also significant differences among the respective candidate countries, both in the performance of their economies and the expenditure on health care services.

The percentage of the expenditure on health care services coming from public resources in the candidate states is 9 % higher than EU countries. Nevertheless, in the EU countries the majority of financial resources on health care services (around 75%) also stems from public resources, i. e. from the system of obligatory health insurance and/or from the taxes.

There are remarkable differences in selected strategic indicators of the health status of the population, particularly for mortality. In the candidate states, the mortality of children under 5 years is nearly twice as high as in EU countries. The mortality of adults at the age of sixty is also more than two-fold. A more detailed analysis has shown that there is a moderately strong correlation between the indicators of health status and economic power expressed as GDP per capita. This correlation is higher than that between the expenditures on health care and the health status of the population. This confirms that in addition to genetic factors the economic conditions of life and life style themselves are the most important factors affecting the health status of the population.

The life expectancy in men in the candidate states is around 7 years lower in comparison with the situation in the fifteen EU countries. In women this difference equals 4 years. The indicators of life expectancy follow a similar pattern to the indicators of standardized mortality. The way to improve life expectancy seems to increase economic power in candidate countries and have an associated improvement in living conditions. Many analyses show the importance of changes in behavior of the population who aim to prevent and decrease risk factors jeopardizing human lives.

The differences in responsiveness indexes and performance of health care systems (as assessed by WHO) between these two groups are not as extreme as the level of the economic indicators and indicators of the health status of the population. This may be explained by the fact that the candidate states are using their economy and other possibilities for the health promotion in a relatively efficient way to support the health status of the population. There is, however, great variability among different candidate states. In particular, Slovenia and the Czech Republic have more favorable indicators in comparison with the average of the other candidate countries.

Table 2. Basic parameters of health care system in the Czech Republic (CR) and the differences between the mean of the EU members and some candidate states

Indicators	Czech Rep.	Difference between CR and mean of		
		EU countries	candidate states	
		in %		
GDP per capita (USD)	12,709	-35.9	+51.8	
Percentage of GDP	7.6	-6.9	+19.5	
spent for health services	3			
Per capita expenditures	993	-47.3	+72.7	
on health in USD				
Public expenditures as a %	92.3	+24.6	+11.3	
of total health expendit	ures			
Mortality				
boys under 5 years	6	-7.7	-54.2	
girls under 5 years	5	-10.7	-50.5	
men 15-59 years	173	+38.8	-36.1	
women 15-59 years	73	+16.2	-28.1	
Standardized mortality				
men	1,203	+29.7	-14.2	
women	954	+66.2	+22.1	
Life expectancy at birth				
men	70.7	-5.2	+5.1	
women	78.2	-3.0	+2.2	
R-index	5.8	-14.5	+5.1	
OHSA	87.8	-3.7	+5.5	

Abbreviations:

GDP - gross domestic product

R-index – Responsiveness index, which is used by WHO for the assessment of the health care system accessibility, quality, reliability and continuity.

OHSA – Overall Health System Performance- characteristics of the effectiveness of a HC system and how well the targets are fulfilled (WHO).

Note: The data concerning health status indicators are related to the period of 1997–1999, other figures are related to the years 1998–2000.

The figures in Table 2 clearly show that the performance of the Czech economy is 36 % lower in comparison with the average of fifteen EU countries, but 52 % higher than the average of the selected CEE candidate countries. The expenditures, which have been released of all resources on the health care services by counting on purchasing power parities, are around half the level of the EU countries, but they are almost 73% higher in comparison with the average of the candidate states.

The expenditure stemming from public resources in the Czech Republic is around 25% higher in comparison with the mean of the EU countries and around 11% higher in contrast with the average of the candidate states.

The mortality indicators of children under 5 years have long been more favorable in the Czech Republic compared to the average of the EU countries, but they are substantially worse in the mortality of teenagers and adults. The life expectancy of male newborns in the Czech republic is approximately 5 years shorter in comparison with the average figures in the EU countries, but more than 5 years longer than the candidate states.

CONCLUSIONS

A comparison of the data from the CR and the EU countries clearly shows that the Czech health care system is achieving relatively good results, not only in the

mortality of children under 5 years but also in terms of the overall health system performance.

The differences between per capita expenditures on health care in the average of the fifteen EU countries and the Czech Republic are relatively high. It could be suggested that a 10 per cent increase in health care resources would possibly shift the level of health status of Czech population towards the indicators of the EU countries. Nevertheless, it should be admitted that the main challenges of health status improvement of the Czech population are related to the enhancement of the total social-economic conditions and a substantial life styles changes.

At present, the most frequent risk factors of the Czech population are as follows:

- very high number of smokers especially among young people,
- very high mortality due to external causes,
- poor diet.

These important determinants of health status cannot be changed immediately. Improvement of health status in the Czech population will be a long-term objective.

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