STUDY ON THE PLACE OF ROMANIA IN THE HEALTH SYSTEM OF THE EUROPEAN UNION

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Abstract: *This study aims to present the concept of public health and the place of Romania in the health system of the European Union. The concept of public health grew rapidly throughout the European Union from a strict approach to health conditions in a comprehensive approach to the health of the population, living standards and a more healthy life, even amid economic crisis that affected the whole of Europe.*

Policy makers have made considerable efforts to ensure access to high quality medical assistance facing challenges rarely encountered in other parts of the world, such as aging population, the use of more effective drugs and some more advanced technology.

In order to position Romania in the EU context, we used a comparative analysis, using a number of indicators, such as total health expenditures in GDP and per capita, and life expectancy at birth, number of hospital beds and number of doctors100, 000.The result in most indicators showed that Romania is in an inferior position, except the indicator number of hospital beds. However, in this case we must take into account that we had data published by the World Bank in 2010, and the following year they abolished a total of 67public sector hospitals.

These conclusions are all the more disappointing, because throughout Europe during the crisis was drastically reduced the budget spending on health, which affected both the public and private health. In this regard wages were reduced, they stopped hiring in the public sector, and healthcare staff migrated in search of higher incomes and better working conditions.

Successful experiences of the EU members countries have shown that some types of social policy and investment strategy in education in general and education for prevention and sanitary behavior in particular, lead to a long term positive impact on population health.

Keywords *: health care, the budget, doctors, life expectancy, hospital beds.*

Codes JEL*: F52, H51, I18*

1. Introduction

Ensuring access to adequate health care is a fundamental policy objective in all Member States of the European Union, and in this respect, in the last 30 years, health system resources, experienced steady growth. Increasingly, there are concerns in many European countries about the lack of doctors and nurses, although recent cuts in public health expenditure in some countries at least temporarily reduced the demand.

By 2009, health spending in GDP in European countries grew at a faster pace than the growth rate of economic growth. Following the financial and economic crisis in 2008, several European countries were forced to cut health spending. This has had a devastating impact on the fundamental objectives of health systems- putting

additional pressure on many European countries health system. Public health spending cuts were made through a series of measures which included: reducing wages and / or employment levels, increasing direct payments made by the population for certain services and pharmaceuticals, and the imposition of hard budget constraints on hospitals. Also, mergers between hospitals were made by the officials by stopping the ones declared inefficient or by accelerating the change from inpatient care to outpatient care.
Starting from these considerations we attempt to make a comparative study of EU countries and Romania, considering a selection of new indicators considered relevant to characterize the health system of a country.

2. State of knowledge

"Health is a characteristic of an inalienable good and it resembles in a small extent with other forms of human capital such as education, professional skills and sports performance. It is subject to important and unpredictable risks which confirm that health is entirely different from all other goods that people insured against theft or hazard and that is why sickness insurance is more complex than any other type of insurance. "(Constantin and Ganescu. 2009.51)
"Having good health is an essential element to quality of life, element indicated by people" (Delhey 2004:6). Bogdan Voicu (2005.27) and Cosmina Elena Pop (2010:7) consider human capital as consisting of two components: "educational capital (skills acquired by individuals in training school but also outside it) and biological capital (physical abilities of individuals, synthesized, most often in health). “After joining the EU, the state of population health and health services in other Member States has become a reference point for our country. Health reforms are initiated by three major factors: poor health of the population, dissatisfaction of actors in the system and reduced performance of the system, as shown in international statistics.” (Vladescu, Astărăstoae and Scintee 2010:8)
In view of better determining the health state "Indicators meet the need for deeper understanding of phenomena and interrelations between them, which otherwise escapes understanding. They sum and associate data of monitoring and surveillance systems so that they can provide answers to questions relevant to the planning and management of health problems. "(Dragoi 2008:3) Among these indicators, a priority is given to lifespan. This "rose in the EU, so did the share of the aged population (the main consumer of services in the total population).
All these fiscal pressures make the developed countries to provide new sources of financing, the most efficient management of existing resources or alternative ways of organizing services (a mix of private and public) "(Cristina Tomescu 2009:5).
Another indicator for the health state is the number of physicians and the distribution thereof. In most countries, the number of specialists is higher than the generalists "This can be explained by a lower interest in the traditional practice of generalist medicine (family doctors), given the workload and the constraints attached to it. In addition, in many countries, the pay gap between generalists and specialists is quite high (Fujisawa and Lafortune 2008:27). "
"Migration of Romanian doctors is a current component of the more general phenomenon of labor migration from Romania having relevant socio-economic effects on public health. The level of remuneration of medical personnel in Romania can be considered a "push" factor of migration, valid not only for physicians but also for other medical staff.

Job satisfaction of physicians, in terms of income earned, is dependent on the level of economic development of the country" (Dornescu and Manea, 2013:134).
In conclusion, Phillips (2006:16) believes that "a society can be differentiated by another in terms of quality of life in that society if people live longer, healthier and fullest life than in another community."

3. **Research Methodology**

This paper combines qualitative and quantitative research, using specific methods, document analysis and content analysis. To achieve the objectives we used a series of bibliographical sources which consist of books, accounting rules, tax and legal studies and articles published in various national and international organizations in the field. Thus, we collected data from the World Bank, the National Institute of Statistics and Eurostat in order to make a comparative analysis, focus group type, in terms of health care, the EU-Romania, in 2010.
Thus, we used these variables, considered by us to be illustrative of a state health system dynamics:
-total health-spending in GDP
-Health expenditures per capita
-Life expectancy at birth
-number of hospital beds per 100,000 inhabitants
-number of doctors per 100,000 inhabitants

4 Results of data analysis

System by which funds are generated and allocated in European health care system is very complex and varies from country to country. In most EU countries it is used a system consisting of government funding of health and social security contributions, resources continuously increasing in most Member States in the last 3 decades.
Some of the most important factors behind this growth were aging of population, increasing the number of persons receiving medical assistance, and the discovery of more effective drugs and advanced technologies.
In this respect, we prepared a table of health system indicators with data recorded in the year 2010.
Table 1. Indicators of the health system

Country	Health expenditure in PIB (%)	Life expectancy (years)			No of hospital beds for 100.000 inhabitants	No of doctors for 100.000 inhabitants
		Women	Men	Average		
UE-27	10,3	82,9	77	79,95	538,2	340
Belgium	10,5	83	77,6	80,3	644	292
Bulgaria	7,2*	77,4	70,3	73,85	661,6*	371,1
Rep. Czech	7,5	80,9	74,5	77,7	701	358
Demnark	11,1	81,4	77,2	79,3	349,8	350
Germany	11,6	83	78	80,5	824,8	373,1
Estonia	6,3	80,8	70,6	75,7	533,1	323,5
Ireland	9,2	83,2	78,7	80,95	313,9	310
Greece	10,2	82,8	78,4	80,6	484,8*	610
Spain	9,6	85,3	79,1	82,2	315,7	377,9
France	11,6	85,3	78,2	81,75	642,4	330
Italy	9,3	85	79,8	82,4	352,5	370
Cyprus	7,4	83,9	79,2	81,55	368	310,7
Latvia	6,8*	78,4	68,6	73,5	532,4	291,1
Lithuania	7	78,9	68	73,45	675,1	372
Luxembourg	7,9*	83,5	77,9	80,7	536,7	277,3
Hungary	7,8	78,6	70,7	74,65	718,2	286,9
Malta	8,6	83,6	79,2	81,4	450,5	307,5
Netherlands	12	83	78,9	80,95	465,7*	290
Austria	11	83	77,9	80,45	762,9	478
Poland	7	80,7	72,1	76,4	658,5	217,9
Portugal	10,7	82,8	76,7	79,75	334,7	380
Romania	6	77,6	70,1	73,85	628,5	236,9
Slovenia	9	83,1	76,4	79,75	457,2	243
Slovakia	9	79,3	71,7	75,5	641,8	330
Finland	8,9	83,5	76,9	80,2	584,7	330
Sweden	9,6	83,6	79,6	81,6	272,6	380
Unit. Kingdom	9,6	82,6	78,7	80,65	295,5	271,2

* 2010 data were not available we used 2009 data
Provided by authors, source Eurostat, World Bank

Total expenditure on health

These include the provision of health services (preventive and curative) and emergency medical aid, family planning, nutrition.

Health insurance contributions are made on their income and their pay is split between employer and employee, there are still relevant differences between EU countries in terms of uniformity and variability of rate, distribution between employer and employee, the existence of an upper limit to the contribution existence of other types of contributions outside of the salary. In countries like Germany, Austria, Holland contributions have upper limits.

In France, in order to develop the base of funding, the amount for the employee was replaced by a general social contribution which is not based on wages. In most EU countries, the distribution between employee and employer is in favor of the employees, employers paying between 70-90% of the contribution. However, in countries like Romania, Austria and Belgium, the distribution of employee / employer is almost equal. Private insurance system is a health supplement that provides additional coverage for services not covered partially or fully by the social ones. Percentage of GDP (Table 1) allocated to Health recorded variations from country to country. Calculated as a percentage of GDP, total health expenditure is, in Romania, 6%, the lowest percentage allocated to the health of the countries with available data. Within the EU, health spending varies from 7.2% in Bulgaria and 12% Netherlands.

Romania has allocated total health expenditure in the period 2005-2010, 44% lower than the EU average, but the situation is even more critical in terms of actual

expenditure on health per capita, which stood at a value of 19.56% compared to the EU. Analyzing this indicator it was observed that Romania spends the lowest amount per capita in EU countries.

Life expectancy at birth

Indicator of the health of the population, "opposite" of mortality, life expectancy targets the average life of an individual

Life expectancy at birth, also called disability-free life expectancy is an indicator that reflects the state of good health, combining information on mortality and morbidity in the population. It shows the number of years that a newborn can live them, respecting the same lifestyle up to death. . It (Table 1) increased in the EU, so did the share of aging population in the total of population. Along the Baltic countries, Bulgaria and Romania are among the countries with the lowest life expectancy among EU countries.

Romania with a hope of only 77.6 years for women and 70.1 years in men is on the last place in the EU, compared to the EU average 79.95 years. Women in Romania live 8.2 years less than those in France, considered the oldest women in Europe. At the level of the entire population, in Spain, France and Italy the hope is noticeably higher than the EU average. Although the general trend is increasing, in 2010, life expectancy in the EU has decreased compared to 2009, due, undeniably to global economic crisis. Inequalities between women and men in terms of life expectancy at birth are very different across countries, being more pronounced in the Baltic countries (over 10 years) and in South-Eastern and Central Europe (between 6-9 years).

Number of hospital beds per 100,000 inhabitants

Number of hospital beds (Table 1) is an indicator affected by the state of health of the population, the average days of hospitalization, rate of hospitalization, treatment complexity, technical resources and outpatient treatment.

Romania has the highest rate of hospitalization in the EU, 215.13 admissions per thousand inhabitants, while the Netherlands recorded the lowest rate of hospitalization, with 109.3, followed by England - with 128.7, and France - 171.5.

In 2010, the EU, the average number of beds was 538.2, with 101.9 fewer than in 2000. This indicator varies from state to state, from 272.6 in Sweden, to 824.8 in Germany. In the period 2000 - 2010 the number of hospital beds has decreased, in each Member State, except Greece. The largest decreases were registered in Ireland, Finland, France, Slovakia and Romania. These reductions may reflect, among other things, economic constraints, increasing efficiency through the use of technical resources (e.g. imaging equipment), and a general shift from inpatient to outpatient operations and shorter periods in hospital after an operation.

In Romania in 2011, as a result of structural changes in the health care system, by stopping funding for a total of 67 hospitals in the public sector, the number of beds decreased with 3503. The public and private units for 2012 were approved with less than 2862 beds in 2011, although five hospitals were reopened. This is due to rehiring specialist doctors, complexity of medical services offered, addressing, trying accessible hospital services for the insured and balanced functioning of all hospitals.

Number of physicians per 100,000 inhabitants

Many EU countries are concerned with the lack of current and future physicians, especially some doctors in respective categories. In almost all EU countries, the balance between general practitioners and medical specialists changed, increasing the number of specialists.

Slow or negative growth in the number of general practitioners raised concerns in the European Union countries in access to primary care for the population.
In 2010, Greece had by far the highest number of doctors per capita, 610, almost twice the EU average of 340 (Table 1). Number of doctors was also relatively high in Austria, Norway, Portugal, Sweden, and Spain. The lowest number of doctors is found in Slovenia, followed by Romania and Poland.
The problem of Romanian doctors' migration is that some doctors are renowned specialists and prestigious academics and their departure means the loss of super-qualified professionals and mentors of future generations of physicians.
The level of remuneration of medical personnel in Romania can be considered a "push" factor of migration, valid not only for physicians but also for other medical staff. Job satisfaction of physicians in terms of income earned is dependent on the economic development of the country and can be determined by comparing individual physicians' gross income to average wages in total economy. Level - already very low – of the remuneration of medical personnel was affected by the economic crisis austerity measures taken by the Government.

5. Conclusion

Health is an area of major social impact, which may provide evidence for the adoption of policies, it representing fundamental value both for individuals and for society. The health system has been for a long time in a state of prolonged crisis and public health issues and challenges of the Romanian medical system are long-term problems whose consequences will be felt in the future.
Low living standard of the population and lower health system resources are the prime causes of health of the population of Romania. Although, in the period 2003-2010, Romania grew significantly by 140.6% total health expenditure per capita, though we are in last place in Europe in the year 2010 with only 353.4 euro / capita, being surpassed by all members of the communist camp about 2-3 times. The economic crisis that hit the entire European Union, health spending in some countries was reduced by cutting public spending (France, Sweden, Finland, Germany). Reducing salaries, stopping hiring in budget inflexibility, unemployment are just a few factors that affected population and standard of living leaving its mark on both public health system, and especially private, throughout Europe.
Both objective indicators and subjective ones place Romania among the EU countries with poor health status. The data indicate health as a key area requiring intervention by social policies and the lack of an effective investment in reducing urban-rural disparities in the provision of public services and reduced financial involvement in initiating effective programs for public health / prevention are important points that emphasize differences.
Financial disparities between the rich and poor investment explains deficiencies in poor areas. There was no effective policy to attract, by financial incentives serious medical personnel in rural areas. Improving the health system in Romania is related to the economic development of the country, and therefore a long-term problem. In this context, we must consider a range of policies to target by high financial involvement the main weaknesses of health in Romania: better care of mother and newborn, investing in children and in education for prevention, primary care in rural area.
All these measures will impact life expectancy (73.85 years) and therefore the proximity to the European average (79.95), knowing that for this indicator we stand

in last place in Europe. First on the list of causes of death in Europe is due to cardiovascular disease (heart attack and stroke), followed by oncologic diseases, suicides and traffic accidents.
Economic development is another important factor that led over the past six decades to a dramatic increase in life expectancy and quality of life in developed countries.
Developments in medical equipment and drugs, healthy eating, providing sanitation, public information on prevention / treatment, were also an important factor that helped this growth. Women live longer mainly because they are more attentive to symptoms and go to the doctor more often, counting more on prevention and are less involved in highly dangerous work.
In the period 2007-2012, in Romania there have left to work in other countries 12,214 physicians and specialty exam was passed only by 6,200 aspirants. Therefore, in Belgium, of all the doctors entering the workforce each year, one in eight is Romanian. This is due to several factors, such as higher wage, working conditions, technical equipment.
Resource allocation in the system should be redesigned in the sense of investing more in rural primary care. Also other dimensions of the system should be reconsidered in order to increase quality of care and public access to it. In this sense, the destruction of hospitals in 2011, has reduced the number of beds, where Romania was ranked 10th in Europe, well above the EU average and hence the number of physicians, where Romania is a disgraceful place 26. The measure, potentially beneficial in the global level, but only erratically enforced deepen the crisis in the system, a large number of doctors and nurses migrating to other countries where the income is over 3 times higher and working conditions are better.
Economic development will solve many of the problems that Romania is facing, bringing improved health and quality of health services offered. Successful experiences of countries member EU have demonstrated that some types of social policy as well as a strategy for investment in education in general and education for prevention in particular, lead to long-term positive impact on population health.

6. Bibliography

Cayotte, E. and H. Buchow. Who Dies of What in Europe Before the Age of 65, Eurostat Statistics in Focus 67/2009, European Commission, Luxembourg 2009
Devaux, M. şi M. de Looper. Income-related Inequalities in Health Service Utilisation in 19 OECD Countries, OECD Health Working Papers, No. 58, OECD Publishing, Paris 2012
Dragoi M. Main indicators of health and their economic implications Economic Journal year XI, no.28(2008)
Fujisawa, R. şi G. Lafortune. The Remuneration of General Practitioners and Specialists in 14 OECD Countries: What are the Factors Explaining Variations across Countries, OECD Health Working Papers, No. 41, OECD Publishing, December, 2008;
Manea T si Dornescu V. Romanian doctors migration: demographic and socio-economic dimensions of social
The social economy magazine
Vol. III ,1(2013)
Phillips, D., Quality of Life. Concept, policy and practice, New York, Routledge, 2006;

Pop C. The health system: concept and importance. Collection of working papers in Economic sciences section 4 Bucharest, 2009;
Rebeleanu A. News and importance of the social economy to ensure equity of access to health services Journal of Social Economics Vol. III , 1(2013)
Roman M. si Voicu C. Some socio-economic effects of labor migration on countries of emigration. The case of Romania. Theoretical and Applied Economics, vol. XVII,7(2010): 50-65.
Rosano, A. and others. The Relationship Between Avoidable Hospitalisation and Accessibility to Primary Care: A Systematic Review, European Journal of Public Health, in press (2012).
Thomas, S. şi S. Burke. Coping with Austerity in the Irish Health System, Eurohealth, Vol. 18 , 1(2012) :7-9.
Vladescu C, Astarastoae V şi Scîntee SG. A health system focused on the needs of citizens. Romania. Analysis of the situation (I). Romanian Journal of Bioethics 2010;8(2):7-1;
Vladescu C şi Astarastoae V. Politics of health reform in Romania Romanian Journal of Bioethics Vol. 10, Nr. 1, Ianuarie - Martie 2012;
Voicu, B. Shortages of Post-Modern Pseudo-Romanian. Volume II: Resources, Iasi, Editor: Expert Projects, 2005.

Web sites:

World Bank.“Romania's . resources 2011.”
Accessed March 18, 2013.
http://siteresources.worldbank.org/
INTPROSPECTS/Resources/
334934-1199807908806/
Romania.pdf.
Euro stat. “The public health system 2013.”
Accessed March 16, 2013.
http://epp.eurostat.ec.europa.eu/
portal/page/portal/health/public_
health
National Institute of Statistics, 2010, “Romanian Statistical Yearbook, 2009.”
Accessed March 16, 2013.
http://www.insse.ro/cms/rw/pages/
index.ro.do.
National Institute of Statistics. “ System of Health Accounts (SCS) in Romania 2003-2010”
Accessed March 10, 2013.
http://www.insse.ro/cms/rw/pages/
Sistemul%20Conturilor%20de%20Sanatate%20in%20Romania.ro.do.