FUNDING NEEDS TO IMPROVE THE HEALTH INDICATORS IN ROMANIA

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Abstract:

In the context of the global strategy for health and welfare, a major objective from the point of view of social interest and national security is the public health. A real improvement of the health status requires monitoring and comparing health indicators. Without claiming an exhaustive approach, we believe that the data and information presented in this article may constitute a new warning regarding the status of health in Romania, worthy of consideration both by decision makers in the health field and the entire population, so that, health financing to be top priority.

Keywords: *health indicators, health financing, improving public health*

JEL classification: ***H00, H51, I18***

1. Introduction

Definition of Public Health developed by the World Health Organization has allowed change thinking concerning health, beyond the presence or absence of disease or infirmity, being included the dimensions of welfare, from the mental and social perspective (Mann, 2011).

Public health, both at the national and global level, designed as a concept, as a target or as a link between research and practice is often considered fashionable, the aim being a world of healthy people (Koplan & all, 2009). In this regard, is identified the public health mission, respectively

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every nation must act to ensure the necessary conditions for its citizens to be in good health, through: improving health outcomes for people; improving biological processes; increasing the quality of public health services; promote equity and efficiency of public health services; assessment of the risks in the delivery of health services; using new and effective methods for prevention, diagnosis and treatment of diseases; creation of quality and professional structures regarding health care systems; design and implementation the methods and techniques intended to ensure change of human and organizational behavior as against the importance of improving public and personal health status; development of some educational programs for awareness the need for public and personal health (The Institute for Medicine and Public Health at Vanderbilt, 2016).

Improving public health must not be left solely to public policy makers, but also the whole community must participate in achieving the public health goals through an organized effort, by taking into consideration all factors that influence the health status of population, namely: endogenous factors - gender, age, race, biological characteristics, heredity, demographic characteristics; environmental factors - physical environment, geo-climatic factors, chemical and biological characteristics, the threshold of poverty, working conditions, living conditions, education level; behavioral factors - lifestyle, attitudes, habits; health services – preventive services, curative services, repairers services (Zanoschi, 2003).

Based on these considerations and the fact that major dysfunction of the health system have direct repercussions on the health of population, we consider that monitoring and comparing health indicators represents for Romania an object of social interest and national security.

Thus, in this article we will analyze some of the health indicators from Romania, to shoot again a warning signal about the risks arising from this health status, both now as well as in the future. To the extent that the underfunding of the health system persists and the efficiency, effectiveness and equity regarding the formation and use of financial resources in health is not the key elements of the system, Romania will have a health system sick and the basic principles of sustainable health will be fully unfulfilled.

2. The structure of health indicators

Obtaining a relevant situations at national, EU and global level concerning health involves the identification of standard indicators.

According to the World Health Organization, the 100 standard indicators concerning health evaluation are grouped into 4 categories (World Health Organization, 2015), namely: (i) the health status - mortality by age and sex, mortality by cause, fertility, morbidity; (ii) the risk factors - nutrition, infections, environmental risk factors, non-communicable diseases; (iii) coverage of services - reproductive services, services for babies, services for children and teenagers, immunization services, services in case of HIV, services for cases of tuberculosis and malaria, services for neglected tropical diseases, screening and preventive care services, mental health services; (iv) health systems - quality and safety of health care, access to healthcare systems, medical staff, health information system, health financing, health security.

At EU level, 88 basic indicators of health are grouped into 5 categories (European Commission, 2016a), respectively: (i) demographic and socio-economic situation – population, birth rate, fertility level of education, occupancy, employment rate, unemployment, the poverty line, income inequality; (ii) the health status - life expectancy, health expectancy, psychological well being, mortality, causes of death, communicable diseases situation in HIV, cancer, diabetes, dementia, depression, heart attack, vascular accident, asthma, pulmonary diseases, accidents, suicides, activity limitations, functional limitations, stress; (iii) health determinants - body mass index, tension, blood sugar, smokers situation, alcohol consumption, drug use, consumption of fruits and vegetables, physical activity, risks related to work, social support; (iv) health services - the rate of vaccination, cancer screening, situation of health units, medical personnel situation, medical technologies, cases solved, the average hospitalization period, survival rate, mobility of professionals, patient mobility, healthcare expenditures as a percentage of GDP, healthcare expenditures by purchasing power, access to health services, infection cancer and diabetes control; (v) health promotion - smoking and environment policy, policy on healthy eating and healthy lifestyles, health programs in the workplace and educational establishments.

Combining public statistics, patient polls among and independent research can be achieved a quantification of health systems performance, evaluation particularly useful both for competent institutions in the medical field and for patients. In this regard, since 2005 it is used Euro Health Consumer Index (EHCI), a real benchmark in medical monitoring systems (Health Consumer Powerhouse Ltd, 2014). EHCI 2014 includes 48 indicators

grouped into six categories, namely: 12 indicators for patient rights and information; 6 indicators for accessibility/waiting time for treatment; 8 indicators for outcomes; 8 indicators for range and reach of services; 7 indicators for prevention; 7 indicators for pharmaceuticals.

Since the economy of the paper does not allow us to analyze all health indicators, we present only some of them, to identify the level which was registered in Romania compared with the situation in other EU member states and shoot again a warning signal on health status from Romania.

3. The actual level of the health indicators in Romania

According to the structure of basic health indicators at EU level, the first reasons for concern for Romania occur due to the level and evolution of demographic and socio-economic aspects.

On the basis of estimates made in 2015 by The World Factbook for 224 countries, with a birth rate (crude birth rate) of 9.14 births/1,000 population, Romania is ranked at the 208 position and with a total fertility rate of 1.33 children born/woman, Romania is ranked at the 215 position (The World Factbook, 2016a).

The population decline in the developed world has led to a series of studies and research aimed at providing solutions for preventing aging and negative implications on the labor market, the health and pension systems. Spectrum aging is so serious that Germany has created an expression that describes this phenomenon, respectively the society which contract (Scrumph-Gessellschaft). Since most of the models indicate the continuation of aging population in the EU, decision makers concerning demographic policy from Romania must address seriously the five directions adopted by the European Commission (Commission Communication, 2006), namely: creating better conditions for families, and improving the reconciliation of family life with the professional life, in order to promote demographic renewal; creating new jobs, increasing the quality of working life and prolonging working lives, in order to promote the employment; increasing investment in education and research, in order to improve productivity and economic performance; ensuring sustainable public finances in order to guarantee the social security services; appropriate management of illegal migration and integration policies for migrants.

Since education is a factor with strong influences on social and economic phenomena (Gayle, Connelly and Lambert, 2015) a cause for concern regarding the health status in Romania is given by the percentage of

population by level of education and age groups. According to International Standard Classification of Education, the three main levels of education are: low, levels 0-2 (less than primary, primary and lower secondary education); medium, levels 3-4 (upper secondary and post-secondary non-tertiary education); high, levels 5-8 (tertiary education). In Romania, in 2014, more than half of the population aged between 25 and 54 years (58.2%) and almost half of the population aged between 55 and 74 years (44.1%) record a medium level education. If these percentages are not so alarming, we must be concerned that Romania occupies the last position in EU member states regarding the share of population with a high level of education, respectively 18.3% for the age group 25-54 years and only 7.7% for the age group 55-74 years (Eurostat, 2016a).

With a level of employment rate for population at working age (20-64 years) by 65.7% in 2014, Romania was under the national target set in the Europe 2020 strategy with 4.3 percentage points. Regarding the unemployment rate, is noted a positive trend of this indicator which recorded in 2014 level of 6.8%, decrease compared to 2013 by 0.3 percentage points (National Institute of Statistics, 2015).

According to Eurostat, in 2014, a very high percentage of the total Romanian population was exposed to poverty and social exclusion, respectively 40.2% (Eurostat, 2014). Low standard of living in Romania is also confirmed by inequality of income distribution. Thus, in the year 2014, the ratio of total income received by the 20% of the population with the highest income to that received by the 20% of the population with the lowest income it was in Romania by 7.2 to 1 (Eurostat, 2016b).

The synthesis of basic indicators of health in terms of demographic and socio-economic aspects presented in Table 1 shows in many situations an unflattering position occupied by Romania among EU member states.

Table 1: Basic indicators of health - demographic and socio-economic situation

Indicators	Romania		The best level in EU		The worst level in EU		EU average
	Value	EU Rank	EU countries	Value	EU countries	Value	
Birth rate - births/1,000 population (2014)	9.14	23	Ireland	14.84	Greece	8.66	10.24
			France	12.38	Germany	8.47	
			United Kingdom	12.17	Slovenia	8.42	

Fertility rate - children born/woman (2014)	1.32	27	France	2.08	Lithuania	1.29	1.55
			Ireland	2.00	Romania	1.32	
			United Kingdom	1.90	Slovenia	1.33	
Level of education - Low age groups 25-54 years - % of population (2014)	23.50	23	Czech Republic	5.10	Malta	51.80	18.81
			Lithuania	6.90	Portugal	50.40	
			Slovakia	7.10	Spain	38.70	
Level of education Medium age groups 25-54 years - % of population (2014)	58.20	7	Czech Republic	71.40	Spain	23.10	48.02
			Slovakia	70.60	Portugal	25.10	
			Croatia	63.70	Malta	25.20	
Level of education - High age groups 25-54 years - % of population (2014)	18.30	28	Luxembourg	49.40	Romania	18.30	33.17
			Ireland	45.10	Italy	18.30	
			Finland	44.50	Slovakia	22.30	
Unemployment rate - seasonally adjusted (December 2015)	6.70	11	Czech Republic	4.50	Greece	24.50	9.34
			Germany	4.50	Spain	20.80	
			Malta	5.10	Croatia	16.50	
People at risk of poverty or social exclusion - % of total population (2014)	40.20	28	Austria	19.20	Romania	40.20	24.90
			Czech Republic	14.80	Bulgaria	40.10	
			Netherlands	16.50	Greece	36.00	
The income quintile share ratio - S80/S20 ratio (2014)	7.2	28	Czech Republic	3.50	Romania	7.20	5.00
			Finland	3.60	Bulgaria	6.80	
			Slovenia	3.70	Spain	6.80	

(Source: author processing based on data published in http://www.indexmundi.com, http://ec.europa.eu/eurostat/, http://www.statista.com)

A low level of education has negative repercussions on the employment rate of population at working age and also on unemployment rate. Even if in recent years Romania has made progress regarding the employment, there are critical situations regarding: the situation of young people and women which does not follow a educational or training program and which are not professional employed; the phenomena related to social exclusion; the participation in lifelong learning; the use of temporary contracts for work; the awareness of young people about educational or training

programs opportunities; the reforms for social assistance schemes; Roma minority integration in professional life (European Commission, 2015).

In order to improve the indicator for the share of the Romanian population exposed to poverty and social exclusion, in February 2016 the Romanian Government launched for public debate The integrated package to combat poverty, a document with 47 measures and of which objectives are correlated with those in the Europe 2020 strategy, respectively increasing until 2020 the employment rate of the population aged between 20 and 64 years to 70% and reduction of at least 580,000 people of those at risk of poverty and exclusion (Government of Romania, 2016).

Healthy life expectancy is a useful structural indicator both for health status monitoring and progress in healthcare, and for monitoring the older occupancy rate (European Commission, 2016b). In the last 40 years, life expectancy in Romania increased significantly, but differentiated by age group, the most significant progress being recorded at younger ages. According to estimates for 2015 by The World Factbook for 224 countries, with a life expectancy at birth by 74.92 years, Romania occupies the 109 position (The World Factbook, 2016b). From the perspective of health expectancy, Romania is among the EU member states with the lowest values, recording in 2013 value of 58.6 for healthy life years at birth - men and value of 57.9 for healthy life years at birth - women (European Commission, 2016b).

Along with factors strictly related to health care, the environment in which people live, lifestyle, individual behavior, access to health care are factors that put their mark on mortality in Romania, which according to the 2015 estimations was 11.9 deaths per thousand inhabitants, while the EU average was 10.42 deaths per thousand inhabitants (The World Factbook, 2016c).

According to statistics regarding the causes of death for the EU 28 available for the reference period 2012, circulatory diseases and cancer are the main causes of deaths in the EU. Most standardized death rates in the EU have been decreasing between 2004 and 2012, large decreases being registered for deaths from ischemic heart disease, with 28.5% in males and 30.4% in females and deaths from transport accidents, with 40.8% in males and 43.8% in females. For Romania are worrying the values recorded in the year 2012 for standardized rate of deaths from circulatory disease at 1039.2 deaths per 100,000 inhabitants, which has been of 2.64 times higher than the average UE28, as well as the values for standardized rate of deaths caused by transport

accidents at 12.8 deaths per 100,000 inhabitants, which has been of 2.03 times higher than the average UE28 (Eurostat, 2016c).

The data presented in the Table 2 shows again unflattering positions occupied by Romania among EU Member States and significant differences from the EU28 average.

Table 2: Basic indicators of health - the health status

Indicators	Romania		The best level in EU		The worst level in EU		EU 28
	Value	EU Rank	EU countries	Value	EU countries	Value	
Life expectancy at birth – toal, ani (2015)	74.92	25	Luxembourg	82.17	Latvia	74.23	78.96
			Italy	82.12	Bulgaria	74.39	
			Sweden	81.98	Lithuania	74.69	
Healthy Life Years at birth – Men (2013)	58.6	20	Malta	71.6	Latvia	51.7	61.4
			Sweden	66.9	Estonia	53.9	
			Ireland	65.8	Slovakia	54.5	
Healthy Life Years at birth – Women (2013)	57.9	22	Malta	72.7	Latvia	54.2	61.5
			Ireland	68.0	Slovakia	54.3	
			Bulgaria	66.6	Germany	57.0	
Death rate (2015)	11.9	22	Ireland	6.48	Bulgaria	14.44	10.42
			Cyprus	6.62	Latvia	14.31	
			Luxembourg	7.24	Lithuania	14.27	
Causes of death - circulatory disease, per 100000 inhabitants (2012)	1,039.2	27	France	223.0	Bulgaria	1,168.0	393.6
			Spain	271.0	Romania	1,039.2	
			United Kingdom	284.6	Latvia	920.7	
Causes of death – transport accidents, per 100000 inhabitants (2012)	12.8	27	United Kingdom	2.8	Lithuania	12.9	6.3
			Malta	3.1	Romania	12.8	
			Sweden	3.4	Poland	11.3	

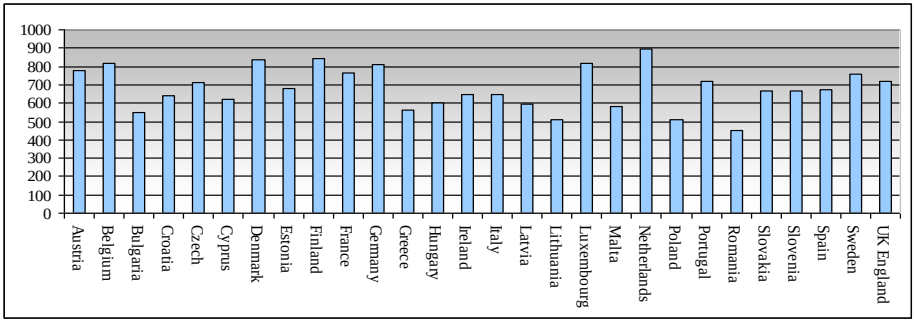
(Source: author processing based on data published in https://www.cia.gov/library/publications/the-world-factbook/, http://ec.europa.eu/health/indicators/, http://ec.europa.eu/eurostat/

Although in Romania are regulated and operates national health programs oriented towards the main areas of intervention of public health care, we consider it necessary a comprehensive analysis regarding the need for these programs, especially the programs with a direct impact on vulnerable

groups and regarding the need for financial resources, so as to be visible the efficiency, effectiveness and equity of these programs.

According to the situation of 2014 Index of the European Healthcare Systems, when the monitoring covered 36 national health systems in Europe, Romania occupies an unflattering place 35, obtaining 453 points out of a total by 1,000 points, exceeding only Bosnia and Herzegovina who obtained 420 points and at a very big distance from the Netherlands, Switzerland, Norway, Finland, Denmark, Belgium, Iceland, Luxembourg and Germany, countries that have obtained over 800 points (Health Consumer Powerhouse Ltd, 2014).

Figure 1: Euro Health Consumer Index 2014 for EU member states



(Source: Health Consumer Powerhouse Ltd.)

As shown in Figure 2, EHCI 2014 indicated for Romania good status just for 6 indicators (12.5%), intermediary status for 9 indicators (18.75%) and for the remaining indicators not so good status (68.75%).

Figure 2: Euro Health Consumer Index 2014 for Romania

1. Patient rights and information	1.1 Healthcare law based on Patients' Rights; 1.12 E-prescriptions
	1.2 Patient organisation involvement; 1.4 Right to second opinion; 1.5 Access to own medical
	1.3 No-fault malpractice insurance; 1.7 Web or 24/7 telephone HC info; 1.8 Cross-border care seeking freely allowed; 1.9 Provider catalogue with quality ranking; 1.10 EPR penetration; 1.11 On-line booking of appointments?
2.	2.3 Major elective surgery <90 days; 2.6 A&E waiting times

Accessibility/Waiting time for treatment	2.1 Family doctor same day access; 2.2 Direct access to specialist; 2.4 Cancer therapy < 21 days; 2.5 CT scan < 7days
3. Outcomes	3.1 Decrease of CVD deaths; 3.2 Decrease of stroke deaths; 3.3 Infant deaths; 3.4 Cancer survival; 3.5 Preventable Years of Life Lost; 3.6 MRSA infections; 3.7 Abortion rates; 3.8 Depression
4. Range and reach of services	4.1 Equity of healthcare systems; 4.7 % of dialysis done outside of clinic
	4.2 Cataract operations per 100 000 age 65+; 4.3 Kidney transplants per million pop.; 4.4 Dental care included in public healthcare?; 4.5 Informal payments to doctors; 4.6 Long term care for the elderly; 4.8 Caesarean sections
5. Prevention	5.1 Infant 8-disease vaccination; 5.6 HPV vaccination
	5.4 Alcohol
	5.2 Blood pressure; 5.3 Smoking Prevention; 5.5 Physical activity; 5.7 Traffic deaths
6. Pharmaceuticals	6.2 Layman-adapted pharmacopoeia?; 6.7 Antibiotics/capita
	6.1 Rx subsidy; 6.3 Novel cancer drugs deployment rate; 6.4 Access to new drugs (time to subsidy); 6.5 Arthritis drugs; 6.6 Metformin use

Legend:	good	intermediary	not so good

(Source: Health Consumer Powerhouse Ltd.)

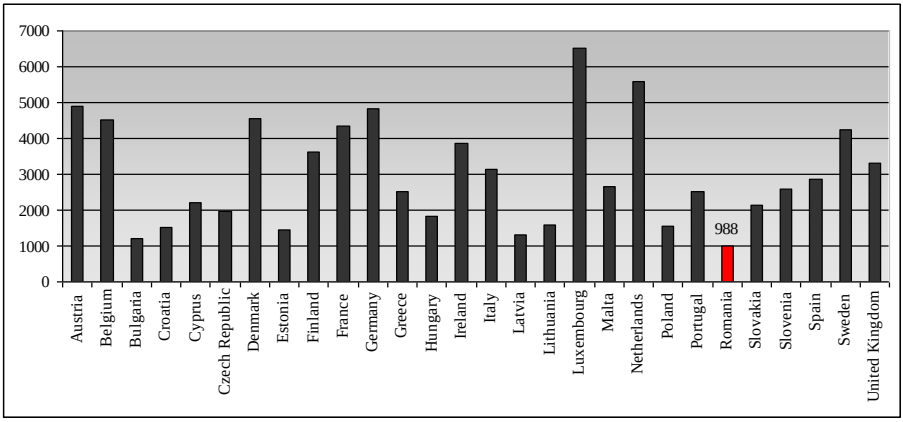
Since the level of indicators from Index of the European Healthcare Systems indicates the performance for health system, each EU Member State through national health programs aims to improve these indicators. If in the 2007 edition of the EHCI only Austria has obtained more than 800 points from the total of 1,000 points, respectively 806 points, in the 2015 edition of the EHCI is noted 9 EU member states with a higher score of 800 points. Compared to 2014, 2015 EHCI present progress made by Romania for patient rights and information, accessibility/waiting time for treatment and outcomes, being achieved a total score of 527 points (Health Consumer Powerhouse Ltd, 2015). In this context, we can say that the matrix index represents a real challenge for Romania to improve the medical system.

4. Reconsidering health financing - solution to improving the health status in Romania

Health along with primary education is the fourth pillar of competitiveness, defined as a set of institutions, policies and factors that determine the level of prosperity that each country can achieve (World Economic Forum, 2016).

Since the health as a whole must be seen as an investment and not a cost, reconsidering health financing system should be done intelligently. Although health systems are large consumers of financial resources, as a precondition for sustainable development in the long term, it is observed that in countries with advanced economies are allocated significant resources for financing the health sector. According to data from the World Health Organization, in 2013 Romania was the EU country with the lowest value for total expenditure on health per capita and total expenditure on health as % of GDP (World Health Organization, 2016).

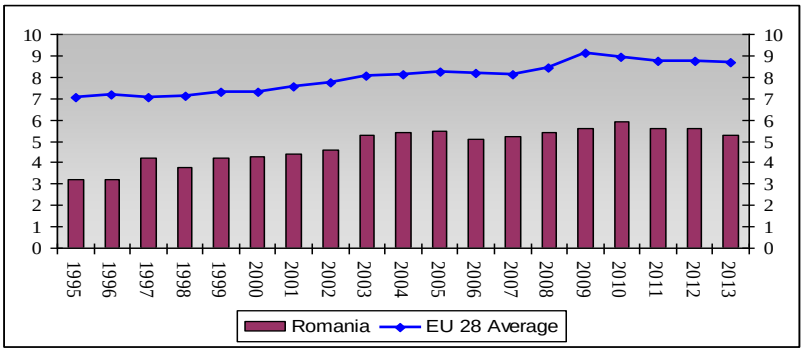
Figure 3: Total expenditure on health per capita (Intl $, 2013)



(Source: WHO, Global Health Observatory)

For Romania, the underfunding continues to be a chronic disease of the health system, even though in recent years have increased resources allocated to health. As shown in Figure 4 the level for total expenditure on health as% of GDP recorded by Romania for the period 1995-2015 was much below the EU average.

Figure 4: Total expenditure on health as % of GDP



(Source: WHO, Global Health Observatory)

To overcome the situation of EU member state with the lowest health status, Romania should reconsider health financing not only in terms of the volume of financial resources allocated to health, but should also take into account all factors with influence over the health. So, in our opinion, for an adequate health funding in Romania must be considered the following:

- establishing national health policy objectives in full accordance with the EU's main objectives in this area;
- analysis of the current social and economic conditions and choosing the method of financing based on their dynamics and influencing factors;
- combining the method of financing with the manner of organization of the entire health system;
- a proper combination of the modalities for financing health systems (financing from state budget, financing through social health insurance, financing through private health insurance, financing through direct payments, community financing) taking into account, on the one hand, the advantages and disadvantages to each method, and on the other hand, the ability to raise additional funds;

- ensuring equity in financing, so that, health services be primarily distributed according to the needs regarding the healthcare and not with beneficiary's capacity to pay;
- ensuring maximum efficiency in the collection and use of financial resources for health, having regard to their limited character
- treating the health financing arrangements fully consistent with the system for providing health care and payment mechanisms, for ensuring the quality of health services;
- proper motivation of medical personnel in order to increase its performance, and therefore to increase the quality of health services;
- obtaining additional resources for the health system by involving the private sector in social and voluntary health insurance;
- ensuring appropriate infrastructure necessary for the provision of quality health services and improving access to healthcare
- establishing clear responsibilities of financing for every action or health program:
- establishing clear objectives for improve the health status and prioritization of actions to be taken to achieve these objectives;
- promoting information and education for all citizens for health;
- ensuring high standards of security for all resources mobilized and used in health (human resources, material resources, financial resources and information resources);
- raising the level of accountability and transparency for all institutions involved in the management of health resources.

5. Conclusions

Health being regarded as a fundamental resource for human welfare and a supporting factor for economic and social development, a good organization and functioning of the health system is the fundamental condition for maintaining and improving the health status of population. In this regard, the proper functioning of the health system depends mainly on ensuring adequate funding.

Whereas health financing policy is particularly important to improve indicators for health status evaluation in Romania, the Ministry of Health must present clear and well defined objectives, while strategies and operational plans must pursue financial allocation based on population needs, public priorities and efficiency.

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