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## Aspects of the Economic Crisis in the Romanian Health System

Florin Dan Pușcaci<sup>1</sup>, Rose-Marie Pușcaci<sup>2</sup>

**Abstract:** This paper represents a continuation of a previous contributions to the presentation of some of the most significant confrontations of the Romanian post-decade society, such as the demographic crisis, the situation of the road infrastructure and the education system. Unfortunately, it is also manifested in the health system, both through a sub-financing system, that is reflected in the material situation of the hospital units and in the salary level of the medical staff, thus generating an exodus towards the developed countries, as well as by a lack of coherence in health policies in the sense of prevention. As a direct consequence of these states of things, a series of diseases that before 1989 seemed to be eradicated, or at least kept under control, today are acutely manifested, placing Romania on the last place in the European Union and even more after some countries with a more modest economic development. Besides, throughout the article we propose a comparative approach with the European Union countries. The issue of the Romanian health system is also detailed in the territorial profile, as there are great differences between the counties of the country, regarding the number of doctors and the number of hospitals reported at the number of inhabitants. In order to accomplish this, we use in a balanced way the qualitative and quantitative aspects and the graphic method is a summary of the surprised aspects. Through our modest contribution, we want to sensitize potential readers to the difficulties, but especially to the magnitude of the crisis in this area of greatest importance that Romanian society is facing.

**Keywords:** public spending; health expenditure on GDP; EU countries; efficiency

**JEL Classification:** H4; H51; I1; I12

*Motto: "Health is a treasure that few know to value, although almost everyone is born with it"*

*Hipocrate*

### 1. Introduction

The health system is defined in the World Health Report as "all activities whose main purpose is to promote, restore or maintain health".

The health system is a nation's health insurance and because of its importance, it can also assess the level of economic and social development of the countries themselves. The American poet and essayist Ralph Waldo Emerson is right to consider that "the first wealth of man is health". The approach of this sector of greatest importance in Romania is a natural continuation after a series of

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<sup>1</sup> Professor, PhD, Danubius University of Galati, Romania, Address: 3 Galati Blvd., Galati 800654, Romania, Tel.: +40372361102, Corresponding author: fdpuscaci@univ-danubius.ro.

<sup>2</sup> Senior Lecturer, PhD, Danubius University of Galati, Romania, Address: 3 Galati Blvd., Galati 800654, Romania, Tel.: +40372361102, E-mail: rosemarie.puscaci@univ-danubius.ro.

others in which we analyzed the demographic aspects, the situation of the road infrastructure, the education system, which all represent segments of the crisis that the Romanian society faces after December 1989. They can be considered political errors, although all governments considered them priorities, but in fact they were not realized. We can only notice the vision and the just evaluation that Mihai Eminescu's genius realizes when he states that: "The politician's mistakes are murders, because they suffer millions of innocent people behind them, prevent the development of a whole country and prevent, for decades, its future."

## **2. Literature Review**

It is obvious that such an interesting subject presents a permanent concern, not only for the population, governments, but also for the researchers and specialists of this field. That is why, we first will take a look to some of these studies.

Milton I. Roemer (1993) provides essential tools for reforming the health system. The author describes the component elements of health systems and discusses the U.S. entrepreneurial health system - as a model, even if he also presents the German and Great Britain's system, comparing with that of Sri Lanka, which managed to provide near 100% of their populations with complete health services.

Trochim W.M. & more (2006) viewed from a systems perspective as dynamically interacting components in the growing awareness and support of systems thinking and modeling in public health, and they offer the promise that more effective public health systems will consequently emerge.

Mossialos, Allin and Figueras (2007) present a country-based reports that provide a detailed description of a health system and of policy initiatives in progress or under development.

Davies (2007) focuses on key perspectives of HP field (model specifications) health development - interaction between individual/population (health/health capacities) and environment (health opportunities) distinguish health development and intentional interventions health of individuals/populations at centre health, defined by three interacting dimensions distinguish health and health capacity.

Hakkinen and Joumard (2007) presents three main options for measuring effectiveness in the health care sector, discusses their pros and cons, including data availability and the possibility of whether these options would allow an analysis of how the institutional setting shapes spending effectiveness.

Andrei & more (2008) is revising the key issues that have to be taken into account when applying the reform process of the health care system and is analyzing some of the aspects of the reform process in the Romanian public health care system based on a survey that was conducted in 2007 among the medical doctors.

Subhashini (2012) opinion is that the national health policy should strive towards achieving the concept of "health-care for all" conceptualized by the World Health Organization (WHO) through health insurance scheme. He identifies and discusses the various gaps affecting the health care systems and to evolve strategic issues in health care in India through an exploratory survey.

Rubin & more (2018) see that "a future of health involving big data and analytics will happen; it is already happening. What they believe we're really fighting for is the soul of this future. Elaborating on what this notion means, he stated, in 2020, there's likely to be 50 times as much health data as there is today. Medical knowledge that took 50 years to double 50 years ago, will be doubling every 73 days". And under these circumstances, the authors of the study are wondering whether the power that comes

with all that will be concentrated in the hands of the few, or will it democratize health and serve the public good in the hands of the many?

### 3. Problem Statement

We consider that the Romanian health system faced at least two crises, on the one hand with the lack of a coherent policy, that refers to the whole system and on the other hand with a chronic under-financing.

We have in mind that the health system should benefit from a proper policy regarding both the medical services provided and the preventive ones, as it is said to be much easier and why not even more economical to go than to treat a certain illness, in other words an even greater pressure on the health budget. Either during this period in the Romanian society there are strong contradictions regarding the vaccination of children. Another issue regarding the lack of a sectoral policy is the status of medical staff, who are employed in the public system and also carry out activities in the private sector.

### 4. Solution Approach

Of course, the right to work is guaranteed by the Constitution, but the state sector was just a firewall in which the system was leaked to the private one. While for other areas, such as the education system, the provision of additional activities is limited, according to quality standards, the health care system is not regulated, with the medical staff oscillating between the state system and many other private medical units. It is obvious that these are not general, but significant for the Romanian health system. Besides the ethical aspect, we consider that the quality of medical services has been affected, given that a doctor reaches 10-12 hours a day.

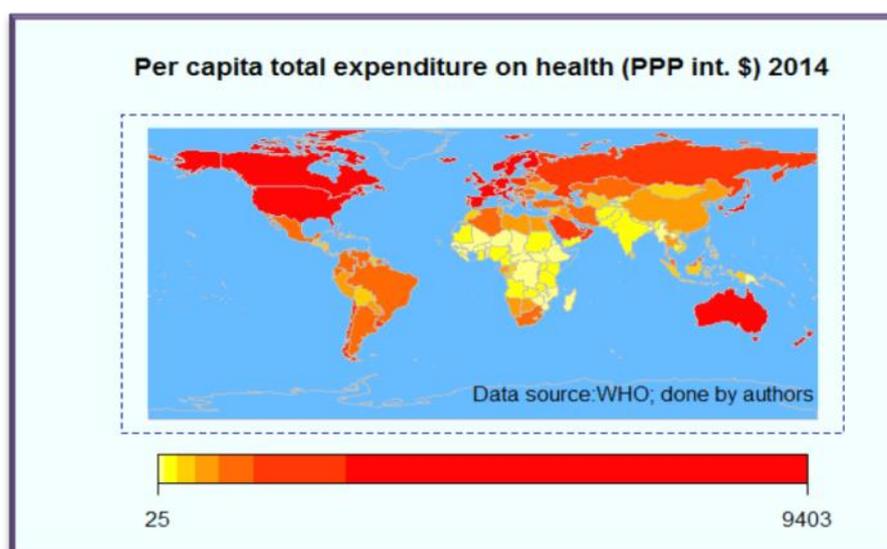


Figure 1

This situation can also be attributed to the under-funding of the medical system, reflected by the inadequate remuneration of the medical staff, who for the increase of the income was condemned to such practices.

In order to evaluate the financing of the Romanian health system, we propose the fitting of our country in an international context. The financing of the system is approached in terms of the total expenditure per inhabitant indicators with health, the share of private expenditures with health and the share of health expenditures in GDP.

Figure no. 1 shows the level of total health spending, estimated in \$ 2014 in the world. This is a core indicator of health financing systems. The indicator contributes to understand the total expenditure on health relative to the beneficiary population, expressed in Purchasing Power Parities (PPP) to facilitate international comparisons.

As it can be seen, this indicator shows a high amplitude ranging from 25\$ in the Central African Republic to 9403\$ in the US, with 1079\$ in Romania. The figure also reveals great differences between the world's regions and also between the income groups of the countries. These differences are presented in Figures number 2, 3 and 4.

Figure no. 2 shows world averages of total health expenditure. As anyone can see in Europe, the highest level of total health spending is 2.548\$, while the African continent is only 274\$. But in the interior of these geographic areas is registered with great variations. In this respect, Figure no. 3 presents the coefficients of variation of the zones. The European conglomerate being the most homogeneous in this respect. As far as Romania is concerned, as can be seen with the 1079\$ per inhabitant spent on health, we are located the world average and more than 50% of the continental average.

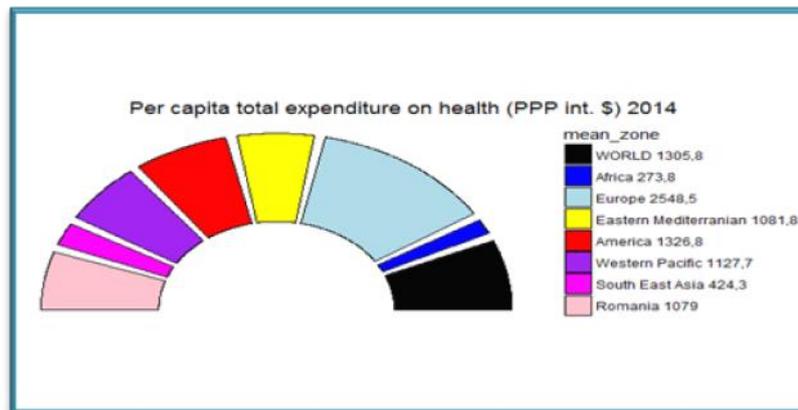


Figure 2

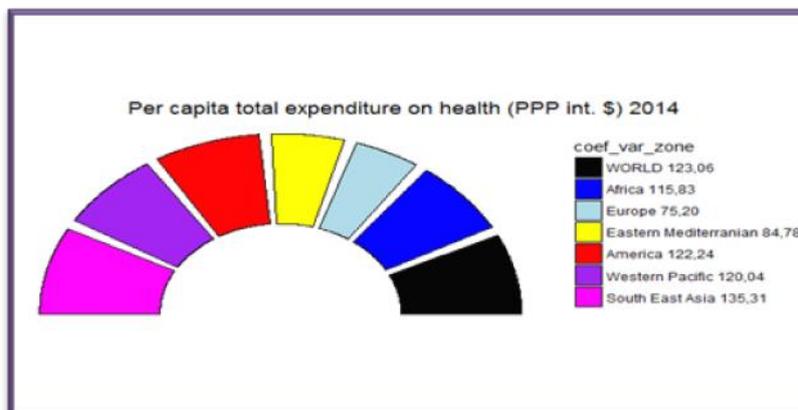


Figure 3

At the level of EU countries, Romania occupies the penultimate position, approximately three times below the Union average, as it could be seen in Figure no 4:

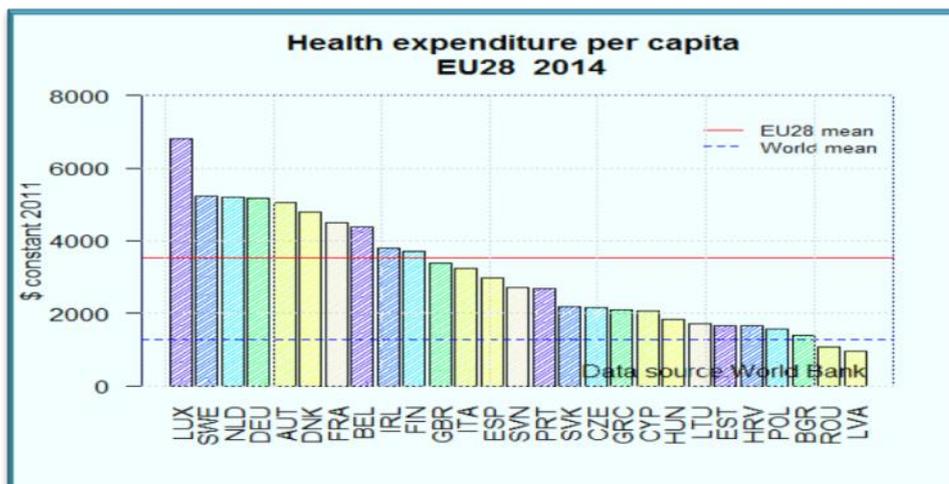


Figure 4

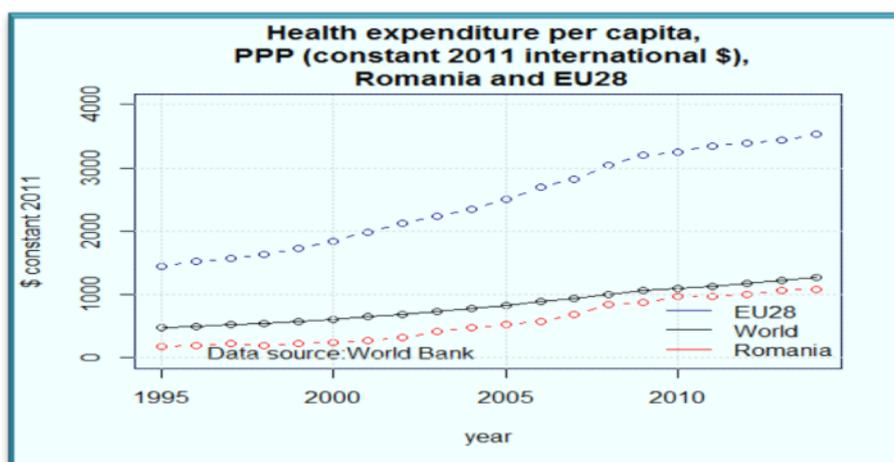


Figure 5

The chronological evolution of total per capita expenditures with health can be seen in Figure no. 5, which represents the evolution of the indicator at the world level, the EU 28 and at the level of Romania.

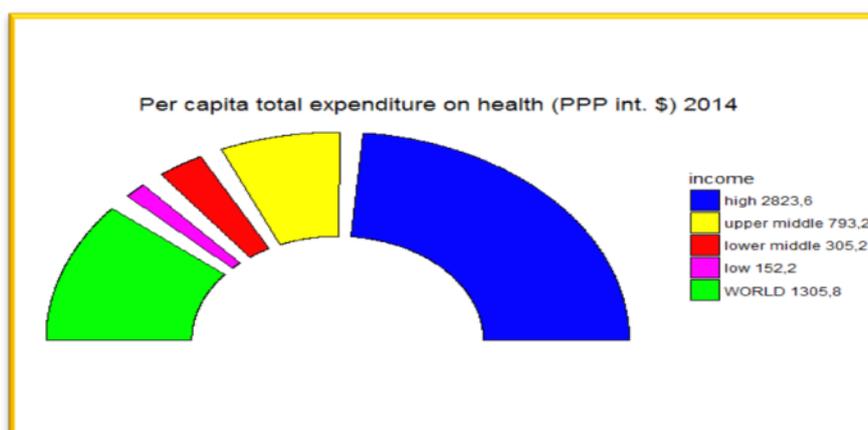
As in Romania anyone can see for the period 1995-2014 - although Romania has been on a rising trend - it has been found throughout the world under the global average. At the same time, there is a tendency to approach the world average. Note that all geographical structures recorded linear increases, whose trends are shown in Table no. 1:

**Table 1. Regressions: Health expenditure per capita ves time**

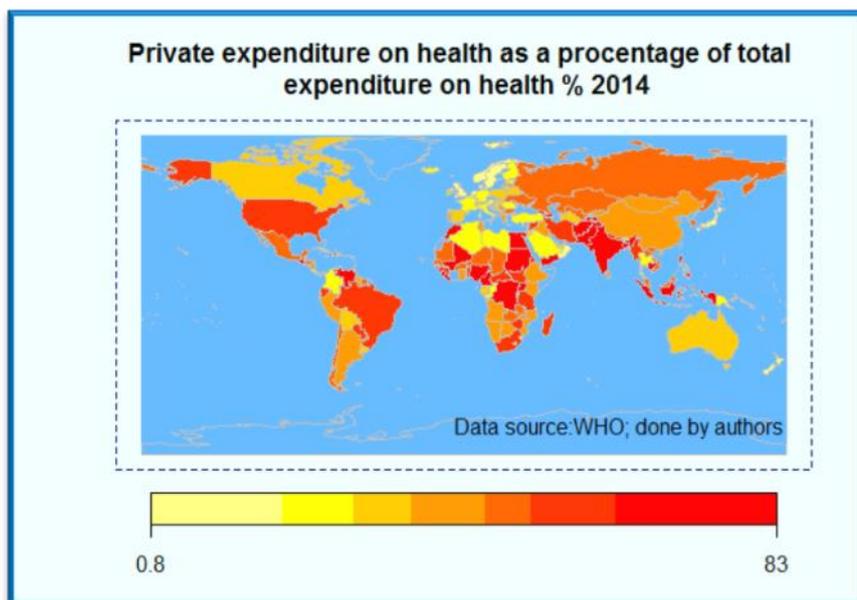
Dependent variable:			
	Romania	EU28	World
	(1)	(2)	(3)
time	55.353*** (2.972)	122.492*** (3.416)	44.201*** (1.168)
Constant	-12.294 (35.597)	1,194.501*** (40.924)	371.681*** (13.997)
Observations	20	20	20
R2	0.951	0.986	0.988
Adjusted R2	0.948	0.985	0.987
Residual Std. Error (df = 18)	76.631	88.098	30.132
F Statistic (df = 1; 18)	346.979***	1,285.606***	1,431.003***

Based on the above, it can be concluded that although Romania is on an upward trend, it is still below the global average and well below the EU average.

Figure no. 6 shows the health expenditures averaged across income-grouped countries. As you can see, the level of income has a devastating effect on the level of health spending.

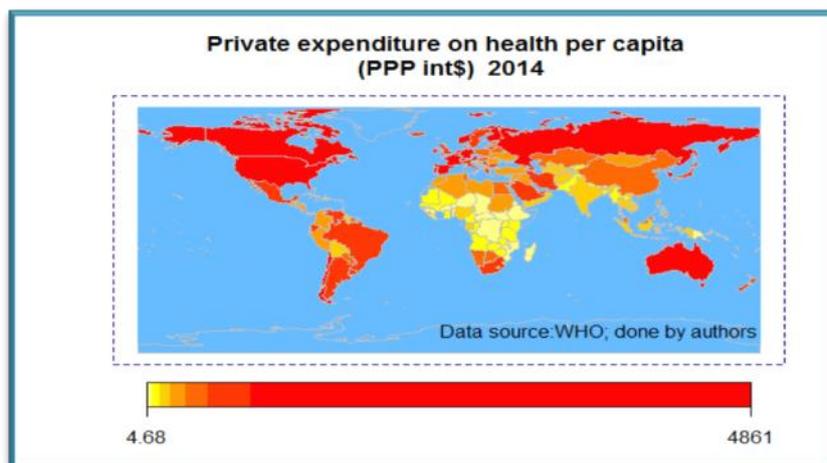
**Figure 6**

There shows the importance of assessing expenditure in the health system and the structure of these funding sources from the budget or from private sources. Figure no. 7 shows the share of private spending in total health-care spending worldwide.



**Figure 7**

As anyone can see, this percentage ranged from 0.8% to 83%.



**Figure 8**

This so heterogeneous percentage between the countries of the world in terms of private health expenditure in total expenditure in this sector is reflected in the absolute values that are presented in Figure no. 8.

In the period 1995-2014 this percentage of private spending in total health expenditure worldwide has evolved oscillating, in the sense of an increase around 2000, after which it stabilizes about 40%, see Figure no. 9.

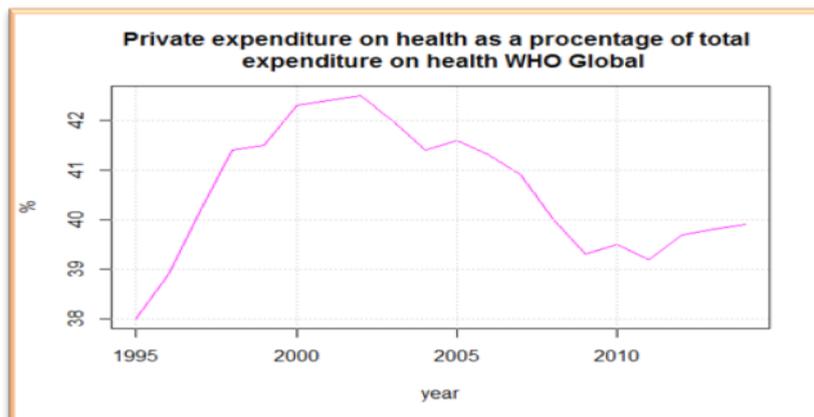


Figure 9

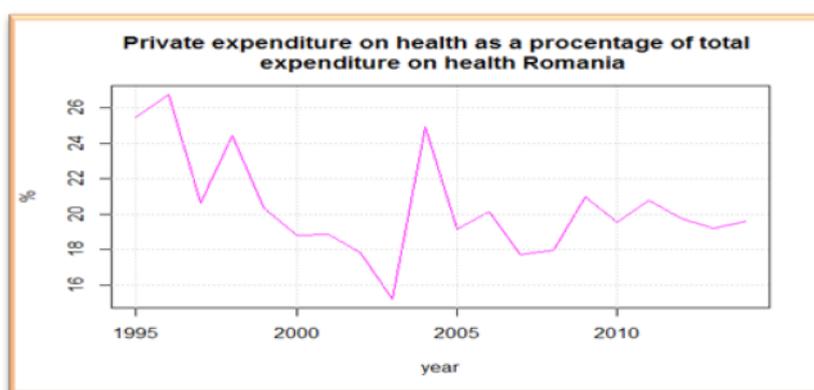


Figure 10

Romania also has an oscillating evolution, with higher amplitudes, but as you can see, this percentage is half the world average, as it could be seen in Figure no. 10.

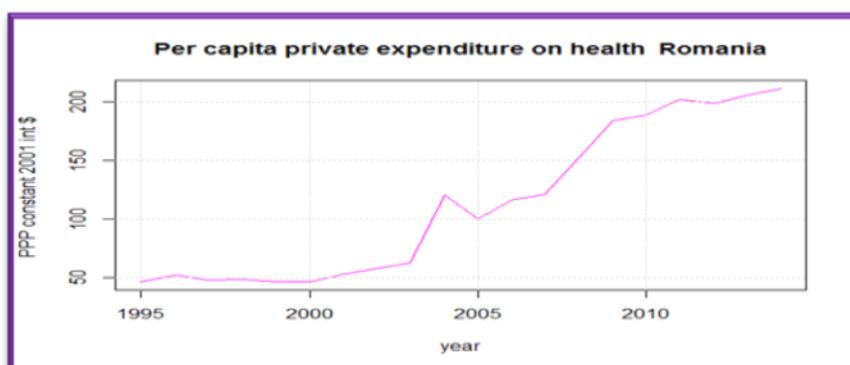


Figure 11

Although Romania has seen a fourfold increase in private health spending, it was not enough to support health care funding. This trend of private health spending growth is shown in Figure no. 11.

The total health expenditure reported per GDP is also an express indicator of the level of health financing. This indicator on a modal level registered values between 1.48% and 17.1%. Figure no. 12 shows this spread - indicator change in countries and continents.

A breakdown of the EU27 countries is also relevant, ranging from 5.5% to 12%. The lowest percentage of GDP allocated to health in the EU28 is registered by Romania, see Figure no. 13, which explains both the level of under-financing of the system and the real priority given to the health-care system. It is a fundamental element that has generated and maintained the entire crisis since 1989. This under-financing was reflected both in poor material endowment and by the salary level of medical staff.

As Romania is aware of the lack of an appropriate policy in the medical field and the under-funding of the cornice, it has generated an exodus of medical staff to other EU countries, which offered them much more attractive material and wage conditions. This phenomenon, although very well known, in the field have known their facts have not been definitively resolved. Thus, in the field of primary medicine, the average age of family doctors is around 55 years old and even higher in some areas. The National Family Doctors Association, under these conditions, warned that in the next ten years Romania risks not having any more family physicians. This aging tendency of family doctors is also due to the fact that young staff have migrated abroad. It is estimated that only between 2009-2015 14.000 doctors and over 28.000 nurses have gone abroad.

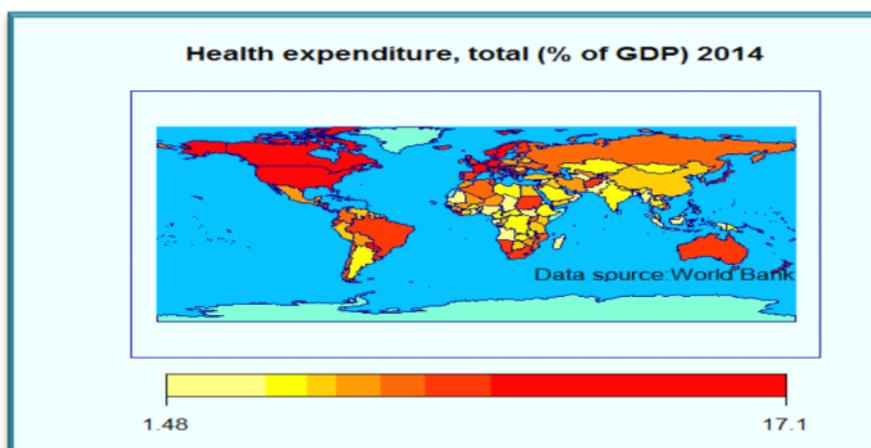


Figure 12

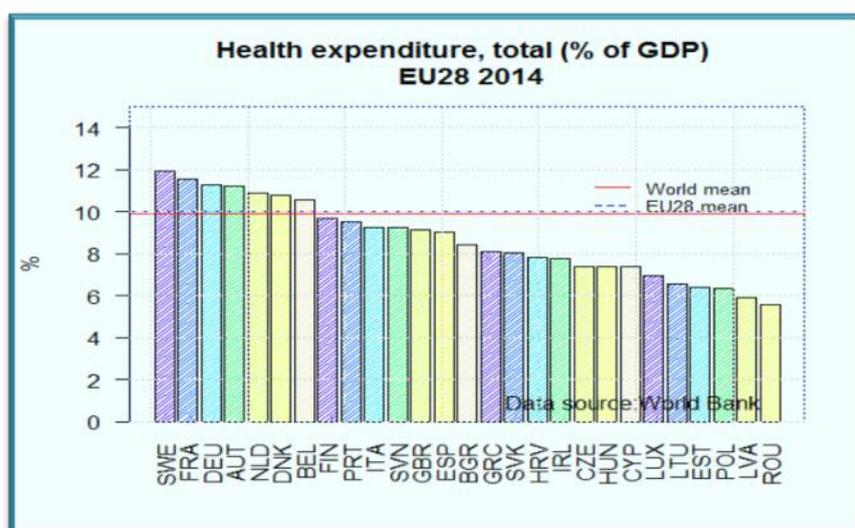


Figure 13

It may be worth mentioning that with the 5.5% of GDP allocated to health, Romania ranks behind other countries, such as Belarus, Albania, Azerbaijan etc.

## 5. Conclusion

In a desperate attempt to mitigate this exodus of the medical staff, the Romanian executive increased the salaries of medical staff, but this action proved to be hasty and unfounded, as it generated a series of inequities and for their straightening they resorted to protests and to a general strike on the system. It has come to paradoxical situations, as from a announced increase in salary actually the income of some medical staff drops. It has reached such a serious situation that a number of units to register resigns in block, like the resignations of the 40 doctors from Oradea, which could be followed by the resignations of 70 assistants from the Emergency Receiving Unit. Unfortunately, this is the expression of the lack of a coherent, ethical and professional policy that should benefit the Romanian health system.

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