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Critical Study Regarding the Evolution of Incomes and Expenses of the Romanian Healthcare System in the Context of Budgetary Decentralization

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A B S T R A C T

The healthcare system in Romania is continuously under a reform process, in order to make more efficient the medical care and to allow a wide access for the population to the healthcare services. The incomes of the healthcare system mainly come from the contribution to the social healthcare insurance, but also from other taxes, the system also benefits from subsidies from the state budget. The public healthcare expenses have a relatively low percentage from the total public expenses, being mainly oriented towards hospitals, subsidized drugs and primary medical assistance. The integration of Romania into the EU brought for the healthcare system opportunities as well as threats: the increase of the competence and quality of the medical act, the favourable context of decentralization but also the increase of the costs for medical services, the mobility of the patients and the pronounced migration of the qualified medical staff to other countries of the EU. The paper wants to analyse the incomes and expenses from the healthcare, taking into account all these aspects.

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1. Introduction

Romania has a long tradition in the management of the healthcare system – starting from the model based upon ensuring the workers, merchants and individual workers up to the one based upon the national coverage and free access to healthcare.

Until 1990, the main characteristics of the system were: the governmental financing, the centralized planning, the rigid management and the monopoly of the state upon the healthcare services. Due to the fact that the healthcare system was considered unproductive, it was therefore also underfinanced (in the time interval 1985-1989, only 2.2% from the GDP was assigned for healthcare, compared to the official European average of 5.4%), this situation was also present in the case of all the Central-European and East-European countries.

The factors that lead to the increase of the pressure for establishing a reform were: the absence of the competition and the private initiative, the underfinancing, the inefficiency, the rigid regulations and the inadequate equipment. [5]

The healthcare reforms want to reduce the role of the state by the decentralization and the privatisation of some of its functions and the strengthening of the market relations in the healthcare system. These reforms rely upon the freedom of the patient to choose and the consolidation of his sovereignty as consumer of healthcare services.

2. Decentralization as a reform of the healthcare system

After the year 1990, Romania started a reforming of the centralized system in order to create a decentralized and pluralist social healthcare system to which the citizens should contribute, on the basis of the obtained income, to the healthcare insurance funds on the basis of the solidarity principle. In the same time, there were adopted some regulations regarding the practice of the medical profession, pharmaceutical products, the financing of the hospitals, the contracting methods between the hospitals and the healthcare insurance funds, the independence of the hospitals for taking the decisions and the use of allocated funds.

Once with the appearance of the healthcare insurance system, more than 80% from the funds destined for the healthcare were supplied by the Healthcare Insurance Unique National Fund, while the Ministry of Health finances the activity of the sanitary institutions under its subordination, the health

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programmes, the infrastructure investments and high performance equipment from the State Budget, own income, external loans or by external grants.

The decentralization process of the medical services continued, by transferring the public units of local and county interest, into the administration of the local authorities with the appropriate transfer of the sanitary patrimony from the central level to the local level. Thus, the local authorities ensure the financial resources for the maintenance and management, repairs, consolidation, extension and modernisation of the public sanitary units, within the limit of the budgetary loans approved for this purpose within the local budgets. The experience gathered during the last couple of years shows an uneven involvement of the local public authorities in the management of the sanitary units, with a large variation between counties or cities.

The decentralization must be based upon the continuous evaluation of the effects of each stage of the process, in order to timely adjust the decisions that can negatively influence the access of the population to healthcare services.

The SWOT analysis of the decentralization process highlights the following strong points:

- Ensures the proximity towards the citizen and its needs, guaranteeing its free and equal access to public healthcare services;
- Ensures the accountability and the involvement of local and county public administration authorities in the development and modernization of public healthcare programs;
- Increases the regulation and planning capability of the Ministry of Health upon the objectives, activities and structures from the public healthcare field;
- Increases the control capacity of the ministry upon the public healthcare main events;
- Ensures the specializing of the personnel involved in the management of the public healthcare programs at the local level using specific training programs;
- Ensures the decisional transparency and the transparency in the allocation of the funds destined for the sanitary sector.

The weak point of the decentralization process is represented by the late implementation of the integrated IT system that would allow the best management of the available funds and a practical manner in which to store and process the data, by the interconnection between the suppliers of medical services and the institutions with attributions in ensuring the healthcare.

Even if by this decentralization we made some progress, many of the characteristics of the old system still persist and there were not created enough structures that would allow the efficient functioning of the new system:

- In theory, the main responsibility of the Ministry of Health is the one to elaborate the healthcare policies at the national level, but in practice the Ministry and the 42 Public Healthcare Directorates continue to be responsible for running the public hospitals and are deeply involved in the financing of the activities based upon advanced technology, by a large number of national programs that distracts their attention from their basic responsibility.
- The management decen-tralization towards the local authorities have relieved the Ministry by the burden of managing small sanitary units, but maintains its role of service provider, continuing to be responsible for the large hospitals and the national health programs. [4]
- The supply network of the medical services is strongly polarized by the hospitalisation assistance, Romania having an increased rate in this field. Even if the policy within the last decade was to guide the patients towards family doctors and ambulatory services, the progress so far is insignificant.

3. The healthcare public income – diagnostic and perspectives in the context of the reform

The manner in which funds are created and assigned in the healthcare systems are complex and they differ from one country to another. In all the EU countries, the governments are involved in the financing of the healthcare using a combined system: the contributions to healthcare insurances and the direct governmental financing.

In most of the European countries, the main financing source for healthcare public expenses is represented by the healthcare social insurance. From the point of view of the distributions rate, Romania is positioned among the countries with the lowest tax level – 10,7%, compared with countries like: The Check Republic (13,5%), Slovakia (14%), Slovenia (12,9%) or Bulgaria (16%). [7]

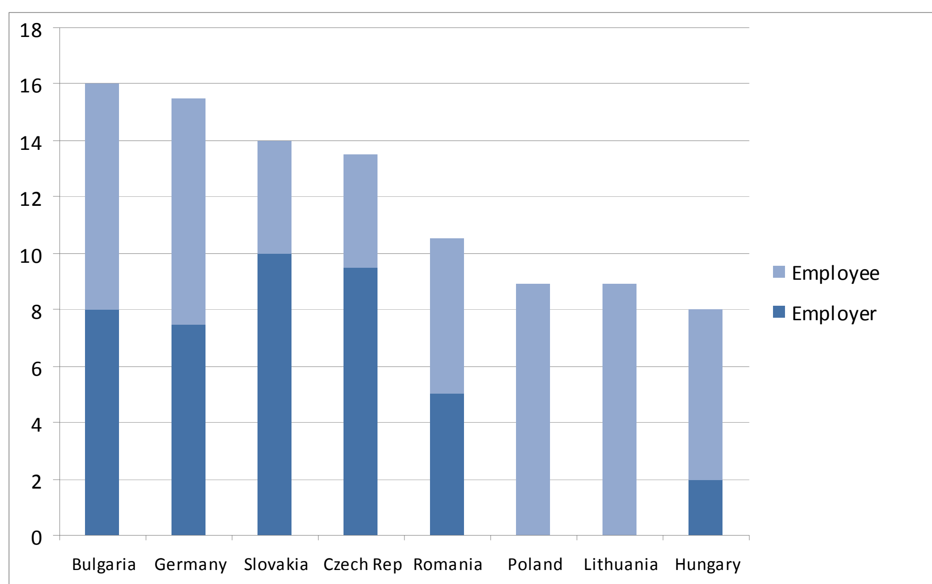

Figure 1. Tax rate for social healthcare insurances

Data unavailable for the employer rates in Poland and Lithuania,
Source: European Committee, MIND Research & Rating

The healthcare insurance system from Romania is managed by the National House for Health Insurance (CNAS), with 42 county houses responsible for contracting services from the providers of medical services. [2]

Initially, they received the contributions from the employers and employees to health insurance, after which in 2004 the responsibility moved to the central level to the Ministry of Finance, the county homes remaining to collect only the contributions from self-employed persons. Out of the total population of Romania, about 11 million do not pay these contributions, either because of exemptions in the law (retired, unemployed, prisoners, soldiers, students, persons on sick leave or maternity leave) or because of undeclared work.

Since 2010, the payment of the contribution expanded to an additional 3.5 million people, including pensioners with income above a certain threshold.

Currently, the local councils help fund hospitals that they manage.

In addition to social healthcare insurance, the public healthcare system also benefits from revenues from the excise duty on tobacco and alcoholic beverages (the vice tax) and the income tax for manufacturers, importers and retailers from selling drugs for which payment is supported wholly or partially by the FNUASS (the clawback tax). In the year 2011, the vice tax generated revenues for the budget of the Ministry of Health of 1.2 billion lei and the clawback tax generated revenues of 0.24 billion lei. [7]

In Romania, out of the total resources allocated to healthcare, 80% are public (of which 85% are managed by FNUASS) and 20% private (mostly from direct payments for medical services). The main public health system revenues are health insurance contributions paid by employers, employees, retirees and authorized individuals, which in 2011 reached 15 billion lei, or 2.6% of GDP. The system also receives subsidies from the state budget (in the time interval 2010-2011, these were essential for covering the deficit of FNUASS, totalling 6.5 billion lei or 15% of total revenues of the healthcare system). [7]

The revenues of FNUASS reached 18 billion lei in 2011, 50% higher than in 2007. In 2009, they decreased by 7%, in the same time with the removal of restrictions on the consumption of subsidized drugs, so with a higher need for spending, but with the help of subsidies from the state budget, in the time interval 2010-2011, the revenues of the system have re-entered on an upward trend. [8]

In the last five years, FNUASS benefited from resources totalling 3% of GDP. For the time interval 2012-2014, the fiscal-budgetary strategy estimates a 2.8% decrease of these, even if nominally the resources will approach the sum of 20 billion lei.

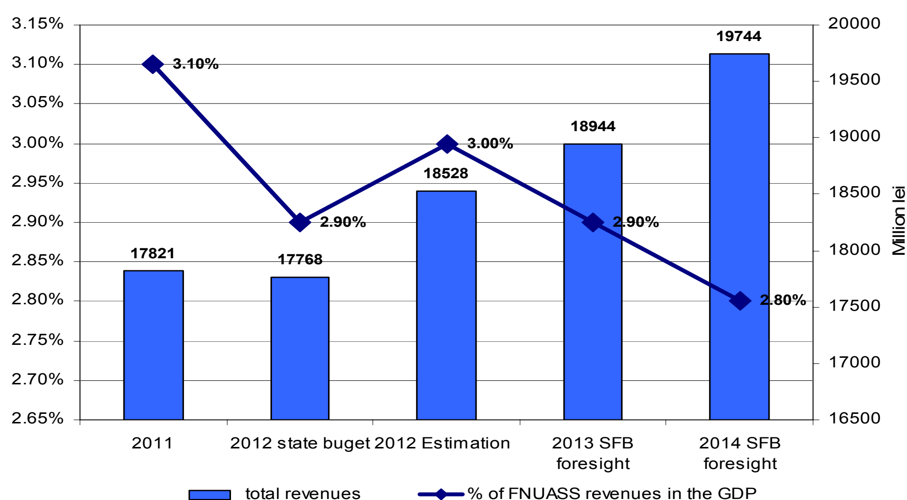

Figure 2. The estimated evolution of the total revenues of FNUASS, in accordance with the fiscal-budgetary strategy 2012 – 2014
Source: MFP, MIND Research & Rating

The imbalances produced in 2009 by the economic crisis, the decline of the contribution share, the elimination of the expenditure ceilings for compensated drug, the supplementation of their list and currently affect the financial situation of FNUASS affect by the rampant accumulation of debt and failure to meet due dates. The debts to the suppliers of drugs account for 85% of the total debt, a result of long periods of settlement. The fund fails to pay simultaneously the outstanding debts and the current ones, their quantum reaching approximately 6 billion lei in 2011, double compared to 2009. [7]

In order to provide quality health services, the health system needs more resources. Currently we are in a situation where 6.8 million taxpayers finance the costs for 19 million policyholders, under aggravating conditions where the population is aging and the trend is to keep the pace with the EU spending level. Improving the quality and the access to health services requires encouraging the competition between the contracted suppliers, the diversification of services, the use of advanced equipment, the investment in real estate and higher salaries for medical staff. The additional revenues needed to achieve these goals are identified especially in the health insurance contributions, which are the most reliable sources. [1] Also, the private health insurances are necessary for additional revenue intake in the system and also considerations such as: covering services outside the basic package, determining the public and private providers to meet quality standards, lowering the tariffs for the medical services. Currently, the ratio of the private healthcare system is below the European average (about 1/5 of the total), which is composed mostly of direct payments. A measure with major consequences in the quality and use of resources is the privatization of hospitals. Currently, there are approximately 350 public hospitals, of which about 250 are subordinated to the local administration and the rest to the Ministry of Health. With decentralization process, one of the main directions pursued is the transformation of hospitals into business companies or foundations.

The reform package of the basic health services is another direction in the evolution of the health system in Romania, in the sense that it should include only the essential services that can be funded from revenues of FNUASS. The basic package conditions also other reforms in the system: voluntary health insurance, the efficiency of the national health programs, the development of the primary care, the reviewing of the pricing systems, etc.

4. The health public expenses in Romania and the EU

The level of health spending represents a key factor in the analysis of the development level of an economy. The countries with advanced economies allocate large resources to finance the health sector as a solution for a sustainable development. [7]

An interesting aspect is the analysis of health expenditure at the level of the EU countries in terms of their sources of funding.

The funding of the health expenditure is mainly performed by the public sector (in Romania, 79% in 2009) and additionally by the private sector. In the European countries, the private sector has a financing share of 27%, which makes the increase of the funding of health expenditure from private sources appears as a viable solution to solve the structural problems of the Romanian system.

In the Nordic countries and Spain, the health sector is mainly financed from taxes and duties from the local budget, and in other European countries, as Romania, the main source are the social health insurances. In Romania, this source has a higher share than in other countries, given the deficit of the social security

revenues and of the public spending on health, requiring the intervention of the state budget in a larger proportion.

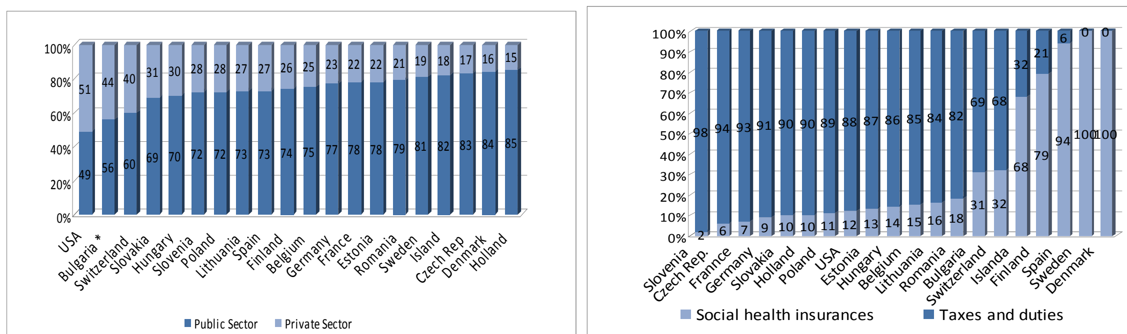

Figure 3. The structure of health expenditure according to the funding source - international comparisons (2012)

Source: Eurostat, MIND Research & Rating

Relative to the GDP, the public spending on health in Romania are low, their share in the total public expenditure maintaining steady in recent years, to about 11%. This percentage indicates us the low level of the resources for health that the public sector can afford in the current fiscal and budgetary framework.

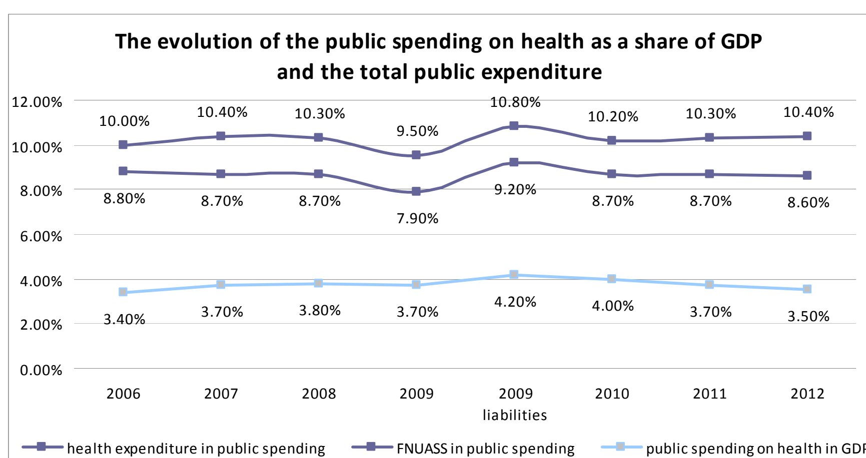

Figure 4. The share of the public expenditure on health in GDP and BGC

Source: CNAS, MIND Research & Rating

Out of more than 21 billion lei public spending on health in 2011, nearly 18 billion were made FNUASS in the health insurance system, 2.6 billion lei made by the Ministry of Health and 720 million lei made by the local administration.

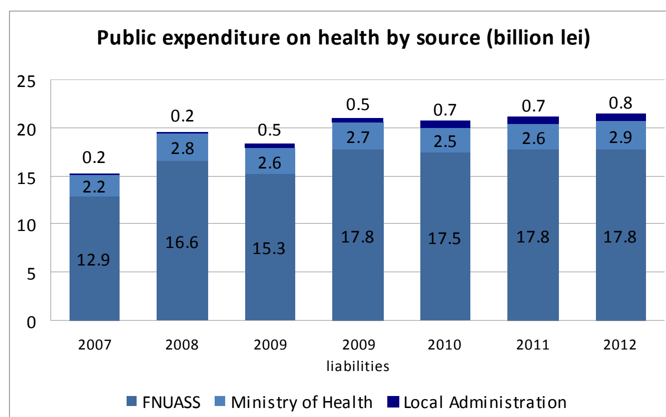

Figure 5. The structure of the public expenditure on health (2007 - 2012)

Source: CNAS, MIND Research & Rating

The Ministry of Health allocates amounts especially for national health programs, medical assistance in the emergency units, paying the salaries for medical residents and doctors from school medical facilities, for the functioning of social-medical facilities, for equipment and investments in the public health units. [8]

The local administration currently owning over 250 hospitals allocate their funds for expenditures on goods and services, purchase of equipment and investments.

Analysing their structure, the expenses of FNUASS are as follows:

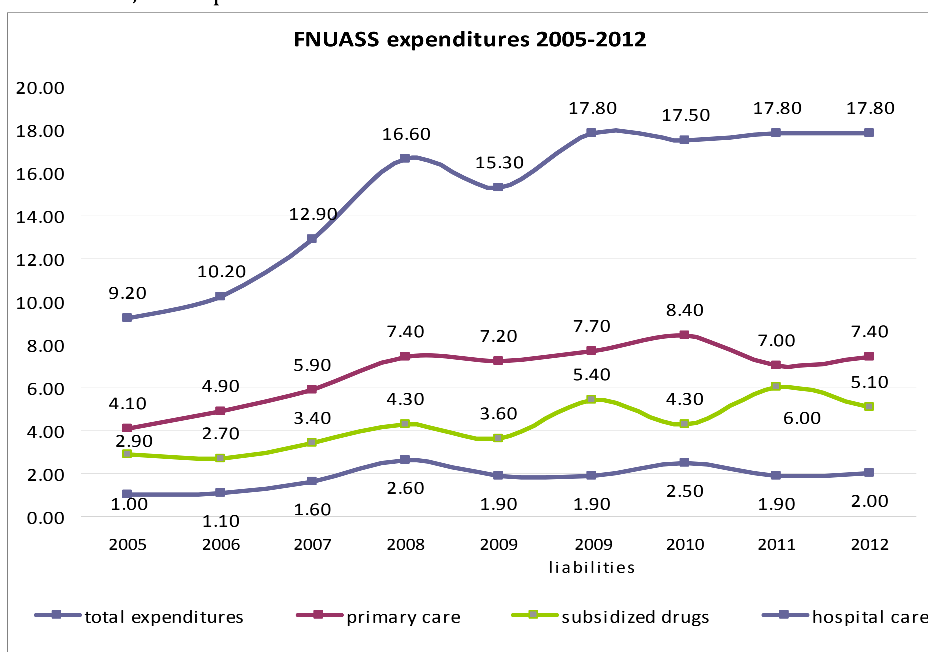

Figure 6. The trends of the main expenditure types of FNUASS

Source: CNAS, MIND Research & Rating

The largest expenditures of FNUASS are the ones with the hospitals (about 45%, a higher percentage than in Western countries). For the year 2011 we notice their decrease by about 20%, due to the dissolution of more than 150 hospitals and the reduction of the number of beds and admissions.

The next chapter in the structure of the expenditures of FNUASS is the one of the compensated drugs (about 27%, percentage comparable to other Central and Eastern European countries).

The removal of the limit for compensated drugs by the pharmacies, in 2008, led to the increase of the consumption (5.4 billion lei in 2009, compared with 4.2 billion lei in 2008), reflecting the real demand for drugs. This growth, combined with the declining of the revenue and the exchange rate leu/euro, led to the accumulation of large due payments in 2009-2010 (situation resolved by the subsidy of FNUASS from the state budget in 2010-2011).

After increasing the periods of maturity from the two budget years, the resources were primarily used to pay for consumption of drugs from prior periods, which resulted in the fact that the payments no longer reflect the current consumption of drugs, creating a gap of almost a year. Therefore, although payments in 2011 reached 6 billion lei, they were higher than the annual consumption, including arrears (in fact, in 2010-2011, the consumption of subsidized drugs remained relatively constant at 5.7 – 5.9 billion lei).[7]

In terms of drug consumption per capita (in Euro), Romania has the lowest value in the EU, 40% lower than in countries such as Poland, Lithuania or Estonia (156 euros compared to 235-255 euros in 2009).

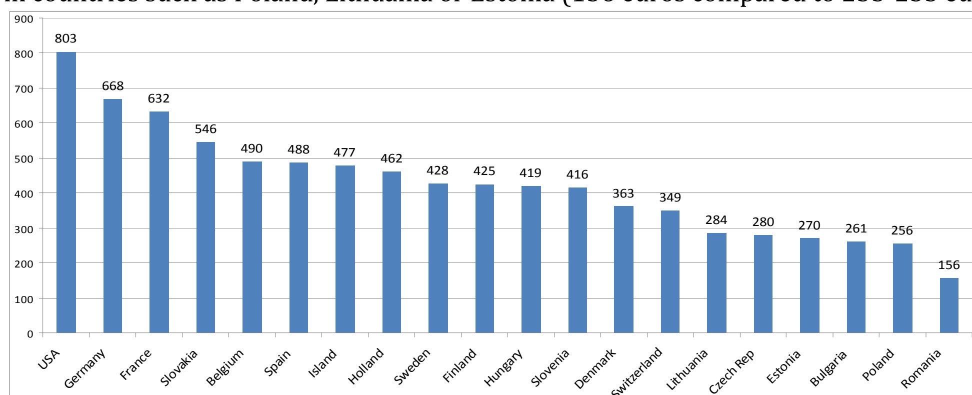

Figure 7. The consumption of drugs, PPS per capita (2012)

Source: Eurostat, MIND Research & Rating

CNAS expenses with medication have steadily increased over the years. The reduction of the drug price would be achieved by increasing the competition in the market, and the control of the reimbursed drugs volume could be improved by reanalysing the list of medicines based on their effectiveness, reformulation of the co-payment methods for prescription drugs and the introduction of measures to monitor and control the drug prescription manner. [3]

The next place as percentage from the total expenditures of FNUASS belongs to the primary medical care – 12.4%, far below the European average, as a result of unbalanced development of the health system during the last decades, when the focus has been on the assistance in hospitals. [7] Although currently the services and providers infrastructure is missing, that would enable the effective use of higher amounts in the field, an important step towards moving the centre of gravity from hospital to primary care was made in 2011, when 50 % of total disbursements received from FNUASS represented the services provided by family doctors.

5. The salaries of medical staff and the migration trend

According to statistics, in 2011, in Romania there were 221 physicians per 100,000 inhabitants, a relatively low average compared to the EU average of 324 physicians, an unfavourable situation that is also registered on the staff with secondary education (nurses). [6]

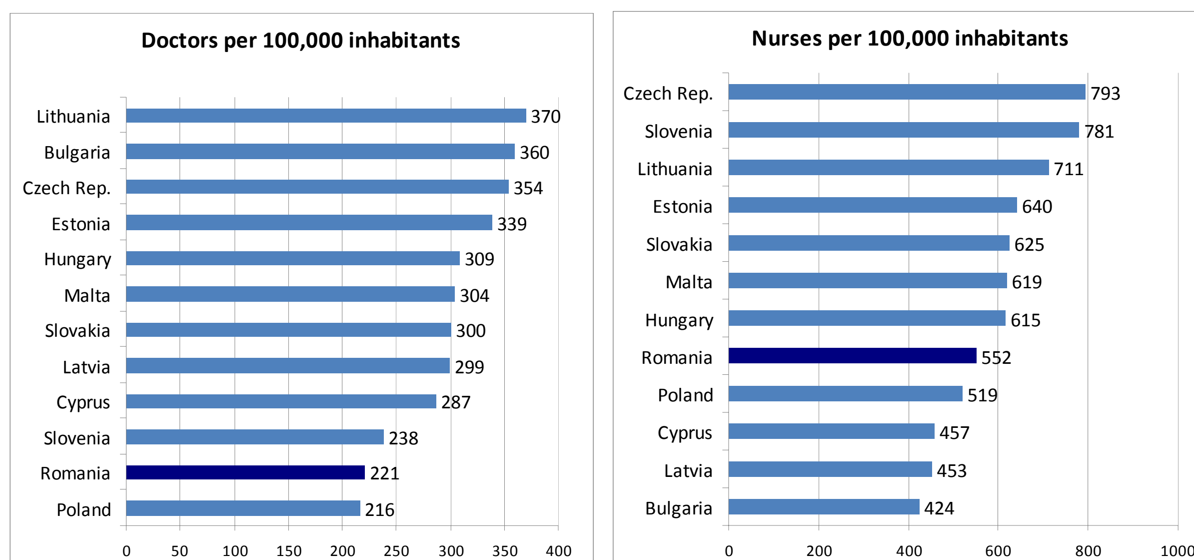

Figure 8. The number of doctors and nurses in the EU member states-12, 2011

Source: European Health for All Database. http://data.euro.who.int/hfadb/

In the EU, Romania is comparable only with Poland, which has the same number of doctors, but a somewhat higher level of health expenditure per capita. Regarding the availability Romanian doctors, they mainly practice their profession in urban areas, while rural areas are abandoned. The average income of medical personnel has declined significantly in recent years compared to other budgetary categories.

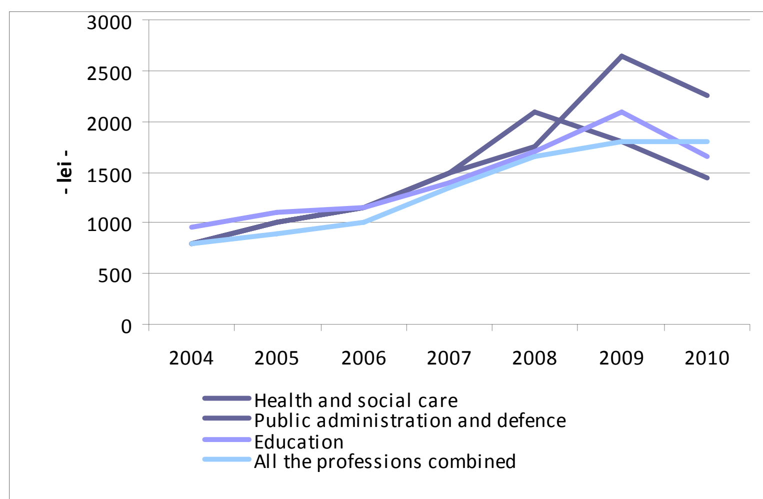

Figure 9. Average income for the budgetary categories in Romania

Source: National Institute of Statistics

In order to analyse the income of doctors, we use two indicators: the adjustment of the income at purchasing power and the comparison between the average income of physicians and the average income in the economy, on a sample of countries (Table 1). The result of the analysis shows that Romanian doctors are paid less than the doctors from other states. Moreover, the Romanian physician receives, on average, the equivalent level of income per capita, while in other countries, a doctor earns, on average, 1.6 times more than the level of income per capita.

Table 1. The average income of doctors worldwide

Country	Monthly USD (2005) adjusted according to the purchasing power	As part from GDP per capita
USA	8,189	2.31
Taiwan	5,388	2.56
Great Britain	5,210	1.91
Japan	4,594	1.82
Australia	4,164	1.53
Singapore	3,843	1.02
France	3,620	1.46
Finland	3,177	1.24
Italy	3,051	1.30
Portugal	2,936	1.12
Czech Republic	2,371	0.87
Romania	1,984	1.07

Source: Ministry of Labour from USA, National Statistics, China, Unemployment Department from Great Britain, Japanese Statistic Directory, Australian Bureau of Statistics, Institute National de la Statistique et des Études Économiques, Finland Statistics, Instituto Nazionale di Statistica, Instituto Nacional de Statistica, Czech Statistics Office, National Institute of Statistics from Romania.

The salary level from the Romanian hospitals decreased in 2010 due to the implementation of the law of 25% reduction in the wages from the public sector, then gradually returning to the original amount.

A consequence of the low level of pay of medical personnel is the migration of doctors and nurses to EU countries, where they are much better paid (Germany, Scandinavian Countries, France, England, Italy). The studies show that this phenomenon can go on for another 15 to 20 years , creating a difficult situation in the health system in Romania, and amid all aging medical staff remained in the system (half of the doctors currently working in Romania have more than 45 years, increasing the retirement rate).

The migration phenomenon remains a major concern of policy makers in the sense of adopting healthcare staff revenue growth. In this regard, we must mention the legislative proposal regarding the co-payment, which is supposed to generate about 750 million lei for the health system, out of which 160 million lei through family medicine services, 205 million lei in outpatient assistance through specialized services, 324 million lei from assistance in hospitals, and the rest from medical investigation tests. There are also sources that are expected to increase by default also the revenues of doctors. It is estimated that if all co-payments collected at primary care physicians would remain at the family doctors (currently there are 11,000 family doctors in Romania), each doctor would record an additional annual income of 14,500 lei on average, representing an increase in the average income of 15%. [7] In the case of the hospitals where the calculation is different, according to the types of medical interventions, and not all co-payments come back to the doctor, obtaining an estimate requires more detailed data.

6. The demographic perspective and its implications

We cannot discuss the situation of the health system without also addressing the demographic problem. It is a fact that the population of Romania declines and ages, a serious aspect, even if this aspect is also present in other European countries.

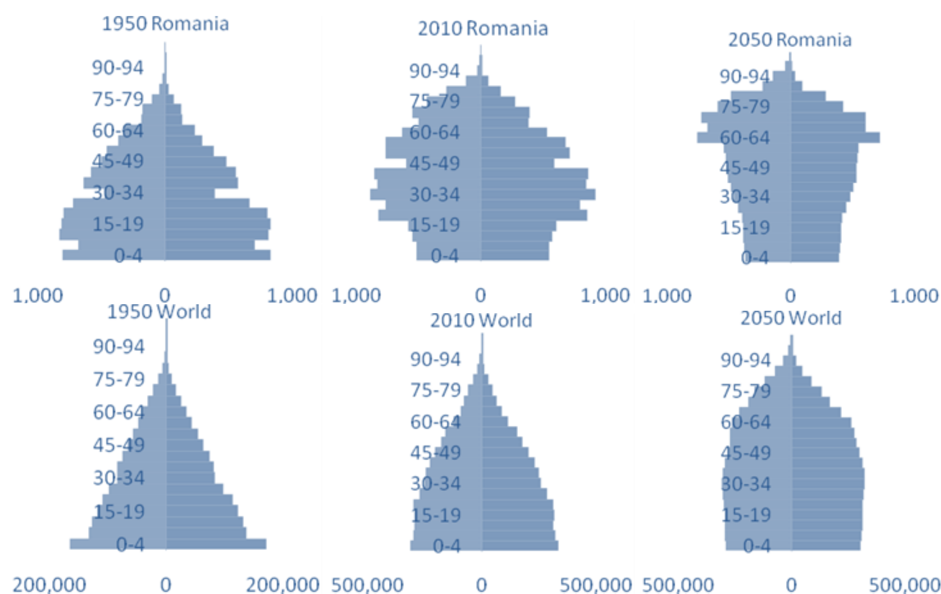

Figure 10. The age structure of the population in Romania and worldwide – thousands of persons
Source: Population Section of the Department of Economic and Social Affairs of the United Nations Secretariat, The worldwide population estimate: revised in 2008, http://esa.un.org/unpp, December 20th 2010

The rapidity with which the Romanian population is aging is the combined result of a decreased birth and the death rate. If in the past was formed, in statistical terms, the so-called "*age pyramid*", this is no longer true, and by 2050 it is expected that the age groups would be uniform, having the same size.

Romania has emphasized the transition compared to the world. Since 1950, the youngest age group were not the greatest, and now the population is made up mostly of adults aged between 20 and 60 years. By 2050, it is estimated that the largest segment of the population will be the elderly (over 60 years), and the population will have a distribution of "inverted pyramid". [5]

The population of Romania is constantly decreasing since 1990, now reaching 21 million inhabitants, compared to the peak recorded at 23 million. The forecast for 2050 indicates a population of 17 million inhabitants, going back to the level of the year 1950.

A positive aspect in the field of demography is the one that over the last three decades, the life expectancy in Romania increased to 69.9 years for men and 77.5 years for women. The probability of death by the age of 5 dropped to 12 deaths per 1,000 live births and maternal mortality to 21.1 maternal deaths per 100,000 live births. However, the life expectancy in Romania lags behind European one, of 76.5 years for men and 82.6 years for women. [6]

The CNAS report mentions some successes obtained in cardiac interventions, but cardiovascular disease remains the leading cause of death in Romania, followed by cervical cancer. Related to this topic, Romania recorded an increase in mortality, while in most European countries it falls, being a proof of poor results that Romania holds in preventive medicine.

Given the demographic situation, it is necessary to facilitate the access to all categories of the population to health care, the continuing of the reform to improve the quality of life and its proximity to the health and demographic indicators from civilized countries, while decreasing the pathology specific to underdeveloped countries, the rehabilitation of the infrastructure of health services and increasing the capacity and quality of the emergency medical system in each region.

7. Conclusions

Health represents a major social impact field, influencing the lifespan of the population and the future of the nation. The health systems are intensive resource consumers, in recent decades recording a continued increase in demand due to an aging population and also more efficient drug discovery and advanced technologies, but expensive, due to the increase in the number of people receiving healthcare.

The health system in Romania, although reformed, records slow progress in relation to EU countries. Being under the sign of budget decentralization, the medical system receives insufficient income and the public health expenditures are inadequately funded, while the population is in a continuous process of aging and declining.

The low paid medical personnel migrate to countries where work and profession are recognized and the material basis from the hospitals is modernizing at a too slow pace for the needs of the population. Increasing the efficiency of the health system involves attracting new sources for health, especially the health insurance contribution, the allocation of sufficient resources for health prevention and maintenance

programs, the increase of the quality of healthcare and adequate remuneration of young doctors, improving the basic health services package and changing the mentality of the patient towards voluntary health insurance, the primary and outpatient medical treatment at the expense of the hospital medical treatment. These are changes that take time but especially will and good intentions.

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