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Romanian Health System on the National Statistical Data

Cezar Ionuț BICHESCU¹, Mariana CHIVU², Silvius STANCIU^{3*}

Abstract

The public health system represents a very important area for the national economy and must represent a priority for the authorities. The sector of the Romanian medical assistance services is under full development, having in view the reduction in the number of state financed hospitals and the recent increasing percentage of private investment in this area. This study advances an evaluation of the national health system from the perspective of national statistics data, under the conditions of applying successive reform attempts started in the 1990s. The research has shown an ascending evolution of the medical private services, with considerable growth in the number of hospitals and polyclinics. Family medical services, dentist clinics or technical dental offices are almost totally privatised.

Keywords: *health system, public, private, statistics, Romania.*

1. Introduction

National health systems have as main objective satisfying the population's needs in the field of health and medical services. Health needs and health demands condition the mission of national health systems. In order to fulfil their specific function, it is necessary to know appropriately the health demand and the real needs of the population, respectively to what extent the offer of medical care and the use of health services are

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satisfactory. From an economic point of view, health systems are large consumers of resources. According to the analysis carried out by the National Council of the Elderly³ in the last 30 years, a continuous increase in the level of resources needed by the health system was recorded at national level; this was mainly due to the ageing of the population, to the discovery of new, more efficient medicines and of new, more advanced, but also more expensive technologies, as well as to the increase in the number of people benefitting from medical assistance. Financing and organizing the national health sector, its infrastructure and use are important for understanding its nature, structure and individual characteristics, in the context of European health systems of EU Member states.

2. Problem Statement

An analysis of the national health system reform after changing its status is carried out by Bara, Van den Heuve and Maarse², who highlight the lack of human and material resources between 1990 and 2000. The introduction of a new reform of social insurance, and consolidating the position of family doctors represented the main progresses achieved. The negative effects of the reforms were the decrease of accessibility to health systems and larger inequity in using medical services. Patients are still paying attention to doctors and pay a large part of the costs involved in medical care. Vlădescu et al.¹⁴ perform an analysis of the Romanian health system, stating the fact that it is under a permanent transition process, and reaching the conclusion that the main problem in the Romanian medical system is the lack of vision and of coherent development projects. Jecu⁷, quoting the Report of Global Health Organisation (WHO, 2012), states that, in 2011, Romania had the lowest investment in the public and private health sectors by comparison with Bulgaria and Hungary. While Hungary reached a level of expenses equal to 1,669.3 USD/inhabitant/year, and Bulgaria 1,064 USD/inhabitant/ year, Romania spent only 901.5 USD/inhabitant/year. With a medium level of money invested by governments in the health system of 500 USD/inhabitant/year, Romania occupies one of the last positions at European level. In comparison with our country, Poland invests 900 USD annually, Hungary spends approx. 1,100 USD annually and Bulgaria spends 521 USD annually per capita in the health system. A potential solution for Romanian patients is the use of private medical insurance, which may grant access to international health care and can cover all medical major procedures, in the best European and international hospitals and clinics [8]. The absence of fiscal features and of a coherent governmental policy leads to the lowest governmental investments in the health system at European

level; this overlaps with annual losses of the system, evaluated at 1.6 billion EUR, the majority of which, according to Vincke¹³, are due to fraud (informal payments performed to the medical staff or by registering treatments which were not carried out). The negative feedback of Romanian patients related to the Romanian national health system is generalised, being highlighted also by the study carried out by Suciú et. al.¹¹, who describe an increased tendency of Romanian citizens towards private medical systems. The lack of positions, reduced salaries, difficult work conditions lead to a massive migration of the Romanian medical staff towards Western European countries, deepening the existing crisis. Radu¹⁰ appreciates that the Romanian health system is at the bottom of the efficiency list, in a European ranking including 35 countries, according to a study by Health Consumer Powerhouse, a Swedish company specialised in comparing health systems. The analysis was based on a series of 48 indicators, including the patients' right to information, access to treatment, treatment results, the penetration of medical services, prevention and access to medicines. The existence of inequities in exercising the medical act, population access to medicines, the penetration of medical services and prevention are chapters of the study where Romania occupies the last position. According to the analysis of the indexes carried out in 2005, Romania did not have any significant progress in improving the medical system. In order to avoid the dysfunctions of the Romanian medical system, Vlădescu, Astăroaie and Scântee¹⁵, quoting a report of the Presidential Committee, propose six main action areas for governmental policy, namely: financing the system, organising the system, hospital services, medicines policies, primary assistance and human resources.

3. Aims of the research

This study advances an evaluation of the national health system from the perspective of national statistics data, under the conditions of applying successive reform attempts started in the 1990s.

4. Material and methods

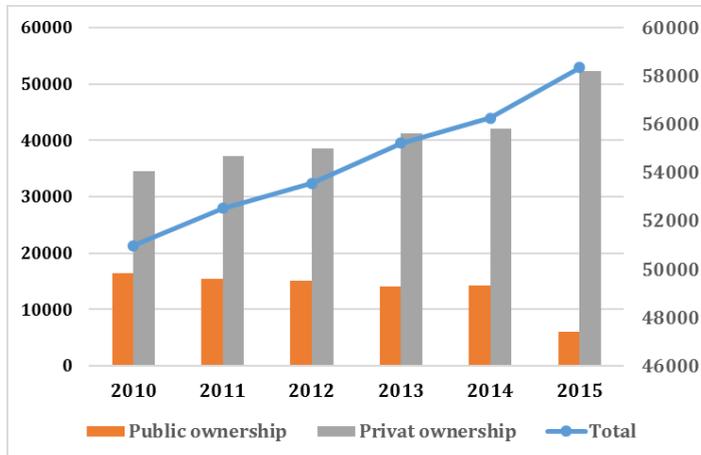
The data referring to the evolution of investments, of medical units and of the personnel employed in the national health system were extracted from the National Institute of Statistics (NIS) database [9]. The selected information was statistically processed and graphically represented. The results obtained were compared with other scientific information from the

related literature, for a better interpretation and for obtaining justified conclusions.

5. Results and discussions

Romanian medical units

The evolution of the medical units in Romania, on categories and forms of ownership, is presented in Figure 1. All the categories of medical units mentioned in the national statistics (hospitals, medical dispensaries, polyclinics, sanatoriums, centres for diagnostic and treatment, (specialised) ambulatories integrated in hospitals, prevention, family medical offices, dental offices, specialised medical offices, school medical offices, medical laboratories, pharmacies and drug stores, etc.), by types of ownership, were analysed.



Source Author, by using NIS Data [9]

Figure 1. Sanitary units, by ownerships

The data presented in figure 1 show an increase of 14.5% of the total number of units in the Romanian health system, which reached the record number of 58,346 units in 2015. This growth was supported by the private sector, where a substantial increase of over 50% was registered in the specialised units; in the analysed period, more than 18,000 new units were established. According to a study of the National Statistics Institute, quoted by Trif¹², the development of the private medical system extended 60 times between 1997 and 2016, in medical units and employed medical staff, reaching 75% out of the total. The number of doctors employed in the private sector increased starting with 1997 by 2.23% and reached 25.98% in 2014, as percentage of the total doctors employed in Romania, including

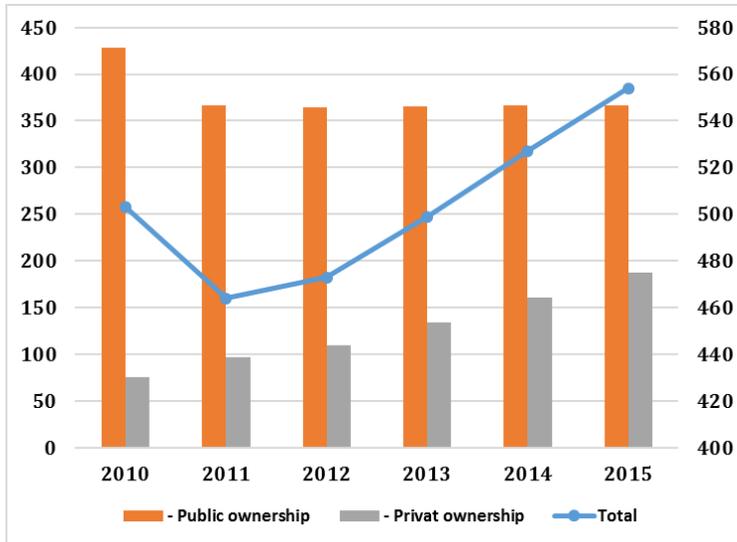
family doctors and dentists. By comparison with the private sector, the public sector has registered a significant decline over the last few years, registering a global absolute reduction of more than 10,000 units.

Hospitals represent the most important health units of public use; they are judicial persona, having an important role in ensuring the health of the population. The classification of hospitals in Romania covers 5 categories, category one representing maximum competence. Within hospitals, characterised by the number of beds (signifying the total number of patients that can be treated over a period of time), complex medical services are provided to hospitalised/ambulatory people. The functioning of hospitals involves important investments, a high number of specialised staff and a specific infrastructure, which lead to a reduced number of private units compared to the public ones. Moreover, according to the law, hospitals have the obligation to carry out medical and research education (EMC) for doctors, medical nurses and other staff members.

The evolution in the number of hospitals with public or private ownership is presented in figure 2. Although the number of private hospitals has doubled over the period analysed, their number has remained relatively reduced, representing 30% out of the total maximum value registered in 2015, in the context of reducing the public units. The increase in the number of private hospitals was spectacular between 1997-2006-2012-2015, starting with 2 private hospitals and reaching 12, then 86, respectively 187 units in 2015. Once they obtained all necessary authorisations, private hospitals managed to enter a relationship with the system of social health insurances, in full capacity or only partially, at present most of them being financed by the Single National Fund of Social Insurances (FUNASS). Practically, the private initiative speculated in favour of the patient the gap left by the local and central administration, which did not have sufficient funds for investment in public units [4].

The reform of Romanian hospitals, especially through Government Ordinance 345/2011, led to a significant decrease in the number of hospitals, which registered a reduction of 71 units in 2011. In parallel with the decrease in the number of public hospitals, based on an acute lack of medical staff and on the need of reducing the budgetary costs, the reduction of the total number of beds in public units also took place. The statement of the authorities is that Romania must reach the European norm, meaning 4.8 beds per 100,000 inhabitants. Therefore, if in 2010, there were approx. 136,341 beds in Romanian hospitals, their number decreased constantly, and in 2013 it reached 118,950. According to the law, a medical nurse should take care of up to 12 beds and a doctor of up to 15 beds. In reality, taking into consideration all the reductions taking place over the last few years, this

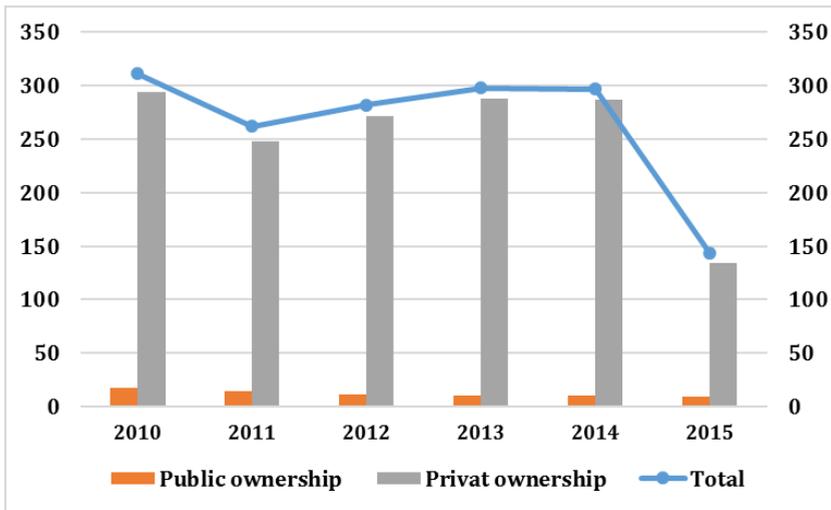
report is exceeded by far, because of the national deficit in specialised personnel. In 2015, hospitals needed 12,000 nurses and 6,000 medical sisters and stretch-bearers, the deficit rising over the last few years [5].



Source Author, by using NIS Data [9]

Figure 2. Hospitals. by category of units and ownerships

If the number of hospitals in the public system exceeds the number of hospitals in the private system, when it comes to the number of polyclinics and medical institutions providing consultations in ambulatory regime – organised territorially and on specialities, with much lower functioning costs compared to hospitals –, the private system holds the lead, with more than 90% of the total units registered at national level (figure 3). Dispensaries, medical units for prophylactic and curative general and specialised medical assistance for monitoring patients by doctors and other medical staff are not attractive to the private sector. There is only one unit of this type functioning in Romania. The same is true for mental health centres, TB sanatoriums, prevention units, socio-medical units, medical units for students, or transfusion centres, which have no private investment, which are not profitable to the Romanian business environment. The year 2015 is characterised by a reduction of 50% in the number of private polyclinics, the state sector having a relative constant evolution (figure 3).

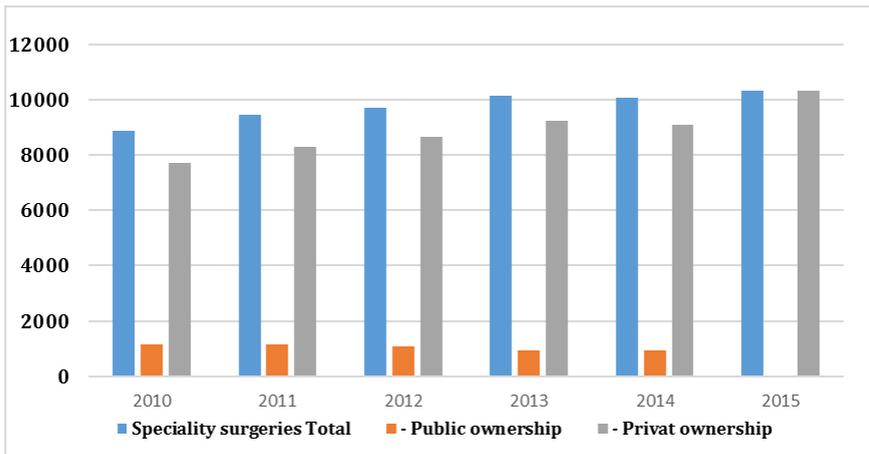


Source Author, by using NIS Data (2017)

Figure 3. Evolution in the number of polyclinics

Private investments have increased in the domains where reduced investments are imposed – family medical offices (figure 4), medical offices (figure 5), and dental laboratories (figure 6) – where the public sector was reduced to a minimum over the last few years. According to G.O. no. 124/1998 regarding the organisation and functioning of medical offices, republished, with all subsequent modifications and additions, respectively the Order of the Ministry of Health no. 153/2003 for approving methodological norms on the establishing, organising and functioning of medical offices, with all subsequent modifications and additions, primary medical assistance is ensured in Romania mainly by family doctors. The most frequent type of recent organisation is the individual medical office and the civil medical companies.

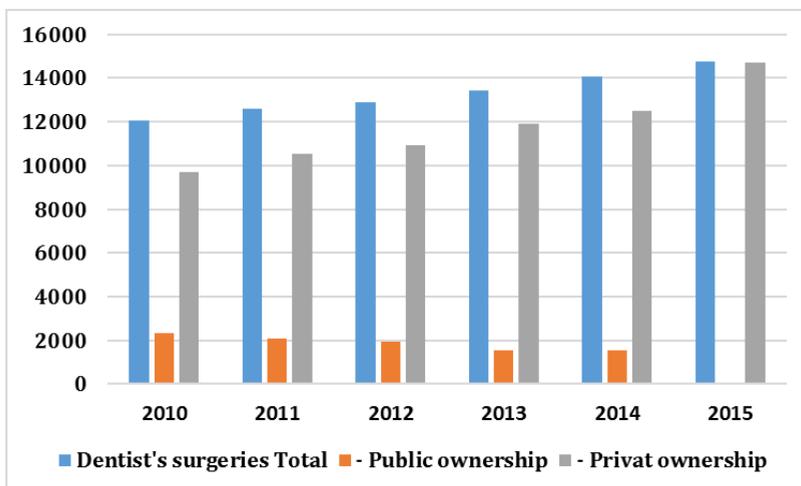
Family medical offices offer primary assistance medical services to patients ensured by the social health insurance system, registered on their own list (free of charge) or on the lists of other family medical offices for patients who are not ensured (at a charge). Family medical offices have a family doctor as holder/legal representative and provide preventive, curative, recovery and emergency medical services [6]. A family doctor may be the holder of a single office, any accredited family medical office being able to open a workspace.



Source Author, by using NIS Data [9]

Figure 4. Family medical office

According to the provisions of Art. 239 of Law no. 95/2006, dental medical services are performed by a dental medicine physician in an authorised medical office, in a state/public health unit or in a private unit established according to the legal provisions. In the field of dental medicine, in 2015, in Romania there were 31 state offices in the field of dentistry, compared to 14,732 private offices. Practically, over the analysed period, public units were reduced in number with 99%, in parallel with a doubling in numbers of the private medical offices.



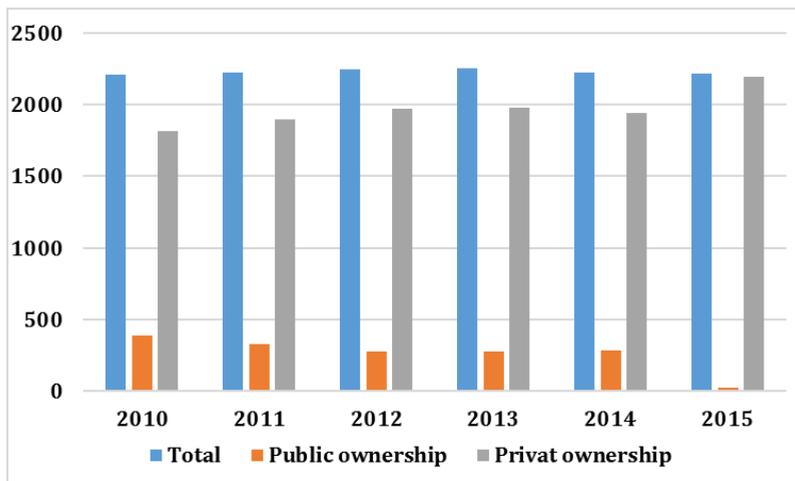
Source Author, by using NIS Data [9]

Figure 5. Dental offices

According to the data advanced by the National Statistics Institute, there were only six public offices in the North-West area of Romania, while in Bihor, Covasna, Sibiu, Bacău, Suceava, Brăila, Buzău, Vrancea, Călărași, Vâlcea and Caraș-Severin there were no state budgeted offices.

According to Andrei¹, the most affected by the closing of public offices are children, followed by people with low incomes. The increase in the number of private offices is due to the closing of public offices, to privatization, the establishment of new private dental offices, as well as to the entry into force of the Order of the Ministry of Health on restructuring the medical system.

The infrastructure of the dental medical care system in Romania is private and exists mainly due to personal entrepreneurial investments of dental doctors and technicians. The activity carried out by dental medical offices mainly addresses patients living in the same county. It may be stated therefore that there is a geographical limitation at local/regional level. According to the data supplied by NIS, the highest density of individual dental medicine offices is in Bucharest county, followed by Cluj county, which is 3 times lower. The counties which are less representative from the point of view of the number of dental medicine individual offices are Ialomița and Tulcea, with a number of 50 medical offices of this type.



Source Author, by using NIS Data [9]

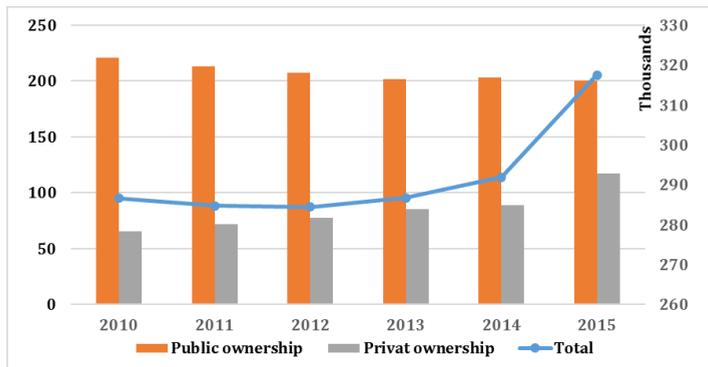
Figure 6. Dental technical laboratories

The medical assistance services market, represented by dental medicine offices, is complemented by the dental prosthesis market. Dental prosthesis activities are achieved by natural persons, owners of an official qualification title of Dental Technician given by Law no. 96/2007 on

exercising the profession of Dental Technician, as well as on establishing, organising and functioning of the Order of Dental Technicians in Romania, republished. Dental technicians carry out dental prosthesis work based on orders placed by dental doctors, according to the clinical necessities and financial possibilities of the patient; thus, there is geographical limitation at local/regional level, as in the case of dental offices.

Medical staff in the national system

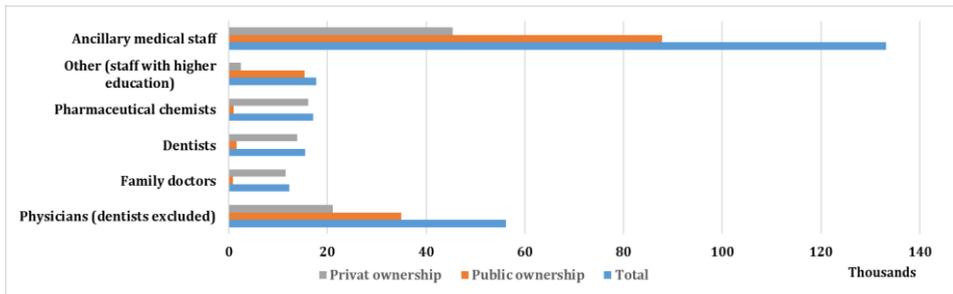
The total number of employees in the sector of health services in Romania was evaluated at 317,564 people in 2015, increasing by 25,652 people compared with the previous year. The evolution of the personnel employed in the analysed sector is presented in figure 7. In comparison with the state sector, where the number of employees has remained practically constant, registering a slight fluctuation in 2010-2011 (because of the entry into force of the Health Law), the private sector has registered a permanent dynamic over the last few years, with an important increase of 33% between 2014 and 2015.



Source Author, by using NIS Data [9]

Figure 7. Employees in the national health system sector

The percentage of specialised personnel, in 2015, is presented in Figure 8. As percentage, the auxiliary personnel represents most of the employees, with more than 50% out of the total. The number of auxiliary employees has had a relatively constant evolution in the analysed period, with an average of 125,000-133,000 people. Doctors represent a second category of employees, with a percentage of 22%, being followed by dentists and pharmaceutical chemists, with 7% each. With the exception of doctors and auxiliary personnel, the number of employees in the private sector exceeds the one in the public sector.



Source Author, by using NIS Data [9]

Figure 8. Medical staff, on specialisations and forms of ownership

Regarding gender distribution, female employees represent the majority, with a percentage between 67 and 90% at sector level. Private medical services are characterised by a higher average percentage of female employees compared to the state sector (figure 9).



Source Author, by using NIS Data [9]

Figure 9. Medical staff, by sex

6. Conclusions

Over the last few years, Romania has implemented a series of measures in reforming the public medical system, materialised in the reduction in the number of hospitals and beds, privatising various services (family medicine, dental medicine, etc.). Although some progress was registered, the recent modifications in the medical system has not solved the problems of the services provided, the present existing system being a hybrid one, innovative from this point of view, questioning health policy decisions regarding long term efficiency. Legislative restrictions, the aggravation of state of affairs, and inconsistencies between different stages in the health reform in Romania, impose the identification of viable solutions for improving the Romanian health system.

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