INTRODUCTION

The reform of the healthcare sector is a process that aims at major changes in national policies, in programs and practices by means of changes brought about to the priorities of the healthcare sector, to the laws and regulations, to the organizational structures and to the management, to the means of securing funds. The goals targeted by the reform of the healthcare sector are improving access, fairness, efficiency, quality and sustainability [1]. The continuous quality improvement is an obligatory condition for the achievement and maintaining of the performance in healthcare services. Introducing the concepts of quality improvement in medical practice represents a distinctive component of the hospital reform in Romania [2].

The problems which appear in the Romanian system are mainly caused by the difficulties which appear when collecting the funds [3].

The healthcare budget ought to reflect the sum allocated depending on the degree of service use, which fluctuates from one country to another. At the same time, the population’s expectations have risen dramatically since 1950 and the trend is an upwards one, as a result of the creation of new drugs and technologies, of progress in the field of prevention and diagnosis, even in the field of therapy, and last but not least, the development of certain sectors of the demand for services – for instance, care for the elderly population [4].

Ensuring the funds for the optimal functioning of hospitals has become increasingly difficult as the effects of the economic recession escalated. As a solution to that problem, the government took the decision to shut down several hospitals across the country and to reassign the patients they used to serve to county hospitals. The decision to re-organize the medical sector encompassed 13% of all hospitals nationwide (that is to say 66 hospitals) [5].

The purpose of this study is to highlight the effects brought about by the implementation of the healthcare reform starting from the reorganization of the hospital system, a fact that brought about several problems across the territory which directly impact on the access of the patients, no matter their age, to the various types of medical services they require.

METHODOLOGY

Highlighting the characteristics of the current healthcare system in Romania by means of the socio-economic classification system and the Geographic Information System (GIS) enables visualization of the state of health of the population and the healthcare services rendered, in close correlation with the extant socio-economic and demographic context [6].

The redistribution of the patients in Caraș-Severin county in the wake of the reorganization of the hospital system was analyzed from the perspective of the manner of representation of the affluent of patients and the degree of their ease of access to the county hospital in the city of Reșița. The analysis of the accessibility to medical services was grounded in the use of the Geographic Information System (GIS) taking into account on the one hand the distances and the road network [7], and on the other hand the conditions of the natural environment that may sometimes act as obstacles, in terms of access (for instance, in the Southern and South-Eastern parts of the Caraș-Severin county, the hill and mountain relief is predominant,

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which causes difficult access). Taking into consideration the importance of the city of Reşiţa in the county, from the administrative point of view, its area of healthcare influence was calculated, for a reference time span (before and after the enforcement of the decision to shut down several hospitals in the county) so as to highlight the effects of that decision on the intensity of the flow of patients coming in from across the county with the goal of using the medical services of the county hospital in Reşiţa. At the same time, for a more accurate representation of the redistribution of patients in Caraş-Severin county to the hospital in Reşiţa, the area of healthcare influence of the city was calculated as well, for several reference years, with the goal of emphasizing certain fluctuations in terms of space of the polarization area of the city of Reşiţa, fluctuations partly influenced by the political decisions.

RESULTS

In time, various interrelations of an economic, social, cultural and medical nature, among others, are established between urban centers and areas in their vicinity. The importance of a city is reflected by its capacity to attract, from several points of view (economic, cultural, social and medical) the population from the surrounding area.

The city of Reşiţa is the most important urban center in Caraş-Severin county, and this is due not only to its administrative function, but also to its capacity to polarize a large surrounding area. The area polarized by the city of Reşiţa from the medical point of view was analyzed taking into account its evolution, with the goal of capturing the changes that occurred in its territorial scope and in the intensity of the population flows it attracts from outside the city and which resort to the medical services of the county hospital, at different moments, but chosen function of an important fact: the reorganization of the hospital system in Caraş-Severin county.

In order to demarcate the area of healthcare influence of the city of Reşiţa, there were taken into consideration both long-term hospitalizations and ambulatory treatment, as well as emergencies involving patients in Caraş-Severin who benefitted from the medical services of the county hospital in Reşiţa in several reference years (2008, 2011). The data were supplied by the National School of Public Health, Management and Improvement in the Healthcare Sector Bucharest (SNSPMPDSB) [8]. The indicator (expressed in percentages) was calculated by matching the number of patients who benefited from specialized medical assistance against the total population of the locality of origin [9].

When analyzing the movement of the population in Caraş-Severin county towards benefiting from the medical services offered by the county hospital in Reşiţa in 2008, one notices that the city attracts people coming from all over the county, but there are differences in terms of intensity, in direct proportion with the distance between the city and the area of provenance. The most intense patient flows (with values ranging from 6.96% to 14.35%) are those originating in the settlements close to the city (for instance Bocşa, Ezeriș, Târnova, Văliug, Anina) (figure 1).

One exception is the commune of Eftimie Murgu which, although located at a bigger distance from the city of Reşiţa, is included among the communes with the highest percentage of people who chose medical services provided by the county hospital in Reşiţa. This situation may be explained by the fact that the Bozovici hospital lacked the medical staff or the medical equipment needed to treat a wide range of patient conditions, and the patients were reassigned to the Reşiţa hospital, better equipped from the point of view of the human resources and the medical equipment. A second high value (2.09% and 6.96%) of the flows of patients who chose the medical services of the county hospital in Reşiţa persists in the area closest to the city (for instance Lupac, Berzovia, Doclin, Goriua). The lower the values of the patient flows, the bigger is the distances between their area of provenance and Reşiţa.
Thus, it can be noticed that the settlements on the borders of the Caraş-Severin county register the lowest intensity in the flows of people (the 0.01%-0.37% range is predominant): for instance, the communes of Costantin Daicoviciu and Rusca Montană on the Northern and North-Eastern border, and Sicheviţa and Berzasca on the Southern border.

An analysis of the area of healthcare influence of the city of Resiţa by 2011 reveals a series of important changes, compared to the state of things by 2008 (figure 2).

First of all, one notices an intensification of the flows of patients, a fact that is directly connected to the shutdown of certain hospitals in the county (Anina, Boşca, Bozovici).

The intensification of the patient flows also spreads beyond the area closest to Resiţa: in the Almaş depression, an area previously served by the hospital in Bozovici there are settlements with high rates of patients who chose the hospital in Resita (6.54% - 10.27%): Lăpuşnici Mare, Eftimie Murgu, Prigor, Dalboșeț.

There remains an identical pattern to the 2008 moment, and that is to say the settlements on the borders of the county register low values, but there nevertheless can be noticed higher values in the case of the settlements in the Southern region. At the same time, in the Eastern region of Caraş-Severin county, there remain, just like in 2008 low values, as a result of the difficult access, as many patients chose to go to the hospital in Caransebeş.

The diversity of specializations and the quality of the medical staff of the hospital in Resita are the factors that determine a constant affluence of the patients coming from most of the settlements in Caraş-Severin county. There can be also noticed an important number of patients coming from Caransebeş, an urban center that has its own hospital.

The role of the county hospital in Resiţa is particularly important at the county level, even more so as it is surrounded, with few exceptions, by a deeply rural area, which suffers from a major deficit of medical attention at local level.
The analysis was also conducted from the point of view of the accessibility of the population in the county to the hospital in Reşita, taking into consideration a series of physical-geographical characteristics that generate a series of restrictions (the presence of the hill and mountain relief in the Southern and South-Eastern regions of the county) (figure 3). This fact is a genuine problem in the situation where several hospital units were shut down, and the patients had to be transported to the county hospital in Reşita, across a bigger distance (for instance the population in the Almăj depression) (figure 3).

Easy access is a particularly important criterion in the analysis of the manner the population is supplied with medical services. The distance travelled may be a criterion of the utmost importance in ensuring emergency medical services. The consequences of this action were not late in emerging; while in the case of the towns of Bocşa and Anina, located at a relatively small distance, emergencies could make it to Reşita in time, Bozovici is 80 km away from Reşita, a situation that made it impossible to handle several emergency situations. In addition, the medical unit in Bozovici served circa 15,000 people in 24 settlements inside the Almăj depression.

However, there have been recurrences of the decision to reorganize hospitals, for instance in Bozovici a multifunctional center opened in 2012, which is subordinated to the Reşita Emergency County Hospital. A SMURD center was also created in Bozovici.

It is important to point out that the difficult access, as a result of the long distances that have to be travelled is not the only genuine problem, there are other problems that derive from the shutdown of hospital units in Caraş-Severin county; one may also mention the overload of the county hospital in Reşita, as it took on a high number of patients.

The overload also occurs in the context where, every single year, the number of beds in hospitals drops, although the population’s demand for medical services is on the rise. As the first step in the reform enacted in the health-care sector, a total of 9,200 hospital beds were eliminated nationwide, in those hospital wards that could offer ambulatory medical services (dermatology, ophthalmology, etc.), using the criterion of not impacting on the medical care of patients [5]. The decision to cut down the number of beds in hospitals nationwide was made before the decentralization of hospitals, reasoning that the hospital system in Romania is one of the most overloaded in Europe [5].

**CONCLUSIONS**

The matter of the decentralization of the Romanian healthcare system has been pondered ever since the early 1990s. In time, it has become one of the main policies, and its enactment in the past few years has involved the reorganization of the hospital system. The decision to reorganize the hospital system should have been analyzed from several points of view: administrative, of population density, of the degree of accessibility to county hospitals, of the degree of operability in serving the population in emergency situations. As far as the chosen case study is concerned, the conclusion is that there have been shortcomings especially connected to supplying the population with emergency medical services in time. This situation bought about the reopening of a hospital that had been initially shut down.

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