ROMANIAN HEALTH CARE SYSTEM IN THE EUROPEAN UNION CONTEXT

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Abstract: *The aim of this research paper is to analyze the Romanian health care system in the context of European Union, highlighting the differences in terms of life quality and resource allocation. The results show that although improvement has been noticed in the past years regarding life expectancy of the population, it can be mainly explained by an increase in the income of the population, one of the significant factors that predicts the well being of the individuals, according to World Health Organization. Meanwhile, Romanian healthcare system continues to be underfinanced, placing Romania on the last place among EU countries. Moreover, data show that Romania lacks medical personnel, while the discharges of hospital inpatients are above EU average. These are the signs of a poor human resource management and the effects can be seen looking at the high number of personnel leaving the system. In this context, the dominant organizational culture found in hospitals, along with the corresponding values, play a significant role in the quality of services given to population. The research found, using the Organizational Culture Assessment Instrument, that the dominant culture in the sample is hierarchical, confirming the initial hypothesis. The analysis of the data also reveals that the preferred culture is still hierarchical, followed by market and clan. However, there are some differences between the actual organizational culture and the preferred one, so some policies could be chanced so the employees would be more engaged in the decision making process. This would in turned make them feel more valued and this will develop, in turn, a higher involvement in their work and it will also increase the cohesion of the organization, around its main values and behaviors. In the lack of a health care financing at least similar to EU average, the organization culture can be a valuable instrument to foster higher quality of the services offered to the population.*

Keywords: organizational culture; public health care; European Union

JEL classification: I18; M14;

1. Introduction

The health status of people and the responsibilities of public systems in making sure the population is healthy are key issues in any society. All countries face challenges of assuring a balance between costs and providing access to health services. Since Romania has joined EU, the health care given to people from other EU member states has become a real benchmark for Romanian citizens. Data have shown that a child born in Romania has 5 times more chances of dying before first anniversary than one born in Germany and 2 times more than one born in Hungary. In addition, mortality rate for children under 5 is 11 per 1000 children in

Romania, while EU average rate is under 5 per 1000 children. Health is one of the fundamental principles of the EU, article 35 stipulating that “everyone has the right of access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices”.
While in the early 80s, health status in Romania was comparable with ones in countries with more powerful economies (France, Germany), the last ten years of communism era brought many challenges, making it to lag behind almost all European countries. After the 1990 the increase in poverty and decrease in standard of living took its toll on the health status of Romanian population (Vladescu et al., 2008)
Although progress has been made over the last years since the integration, the gaps are still significant, leaving a lot of room for improvement, as seen in Table 1. In the same time, statistics show that heath conditions and diseases that in other EU states have been eradicated are still the culprit for the death of many Romanians or they put a negative pressure on the quality of their lives. For example 8.9% of the total population aging 20-79 suffer from type 1 or type 2 diabetes, while the average prevalence rate in EU is 6.2, according to Eurostat data for 2015. In addition, Romania along with Bulgaria has the highest incidence of tuberculosis from all EU member countries and it is continuously increasing. The same reality applies to hepatitis B. The women from Romania have the highest rate by uterine cancer, the risk of dying because of this condition being 10 times greater than in France, for example. Most of these conditions can be prevented and kept under control nowadays by an efficient sanitary system.

Table 1: Hospital morbidity tabulation (per 100000 inhabitants)

	Cancers	Circulatory systems	Respiratory systems	Digestive system	Pregnancy Childbirth	External causes
Romania	1940	3002	2721	2230	1552	1127
Bulgaria	1787	3971	3025	2281	1826	1373
Hungary	2329	3557	1545	1458	1337	1368
France	1180	1885	1038	1482	1528	1341
Germany	2457	3609	1473	2216	1074	2388

Source: made by author using data from Eurostat

If we further refer to the deaths that could have been avoided the numbers are shocking, as almost half of the deaths in men could have been prevented and almost a third in women. In other words, an efficient health system can save lives by treating and preventing their conditions, but we must change the paradigm and seeing health as an investment rather than expenditure.
In the same time, a new challenge is made to the public health sector by the freedom of movement Romania has gained once it entered the EU. Since 2007 a significant number of the working force from sanitary system has decided to work abroad. Over 6000 medical doctors leave Romania yearly to work in other countries, while just under 5000 enter the system by graduating faculties of medicine. If this trend will not change Romania risks having no medical doctors in 2040. The medical personnel are mainly dissatisfied with the working conditions and not just with the salaries.

2. Romania's Public Health System

The World Health Organization (WHO) defined health in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity." A country's health care financing system has a small impact on the heath status of its citizens. Mainly, health is determined by the circumstances and the environment in which people live. To a very large extent the following factors have significant impact on health: where we live, our income, genetics, our education, the environment or our relationships with family and friends. On the other hand, the access and use of health care services have usually a lower impact. Some of the most important health determinants are, according to WHO:

- Income and social status: the higher the income, the healthier the individuals
- Education: individuals with lower education have poorer health, as well as lower self confidence
- Physical environment: safe water and healthy work environments influence the heath status
- Culture: the traditions and beliefs of a family and community influence the health status
- Genetics: the genetic baggage plays a significant role in the likelihood of developing certain illnesses. In addition, men and women suffer from different type of diseases and have different life span
- Health services: it is essential to have access to health care services to prevent and treat illnesses

According to the World Health Organization, the health system is represented by "all organizations, institutions and resources devoted to better health". Important institutions in Romanian health system are: Ministry of Public Health, National Insurance House, Medical College, College or Pharmacists, patient's associations and the National Medicines Agency. However, other institutions have different roles and competencies in healthcare, as well. For example, Ministry of Public Finance is managing resources of public finances including the budget of national health insurance single Fund. Often these are the institutions found guilty for any malfunctioning of the health care system, although, as shown above, there are many factors influencing the health status of the population. The main principles behind public heath care is to create an active partnership between the public government and local authorities, the former creating the directions of public health care intervention, while the latter have to implement them locally.

It is almost universally accepted that health care cannot be the sole responsibility of the citizens and that the state should have a specific role in such matters, mostly in the allocation and redistribution of resources. While in theory, an optimal allocation of resources can be attained in a perfectly competitive market, in reality this is very hard to obtain, due to many obstacles. For example, the patients have limited information about the effectiveness of different treatments or procedures, relying mostly on the producers of health care. Moreover, a perfectly free market cannot be obtained due to the high cost of medical services, limiting therefore demand.

Generally speaking, health systems have three main goals. On one hand, they have to improve the health of the populations they serve. Secondly, they need to respond to the reasonable expectations of the populations. Last but not least, the

health systems need to collect the funds in a fair manner.
Regardless of the level of economic development, al countries face a continuous struggle to keep their health systems efficient, while the demands are increasing (Fried & Gaydos, 2002). Among these pressures are the need to achieve a balance between costs and access to health care services, between public and private services and between the preventive and curative services.

2.1 Romanian Health System in EU context

Table 2 shows clearly different patterns regarding the health status of inhabitants in EU countries. While the life expectancy gaps between the Romania, on one hand, and the western countries, on the other hand, has decreased, a lack of financial resources for health and citizens' lifestyle (no resources to influence it) might explain some of these differences (Figure 1).
The average life expectancy is Romania 74.9 years in 2015, as reported by World Health Organization, five years shorter than EU average and more than 6 years shorter than in Germany.

Table 2: Life expectancy in EU

Country	Life expectancy: 1970-1975	Life expectancy: 1995-2000	Life expectancy: 2015
Romania	69.2	69.8	74.9
Bulgaria	71	70.8	74.4
Hungary	69.3	70.7	75.7
France	72.8	79.1	80.6
Germany	71.4	77.9	81.7

Source: made by author using data from Eurostat

Figure 1 highlights the differences in GDP per capita between Romania and other countries in EU, in the same period of time. While the trend is positive, considering Romania's GDP more than doubled since 2000 to 2015, the nominal gap between it and the western economies continues to enlarge.

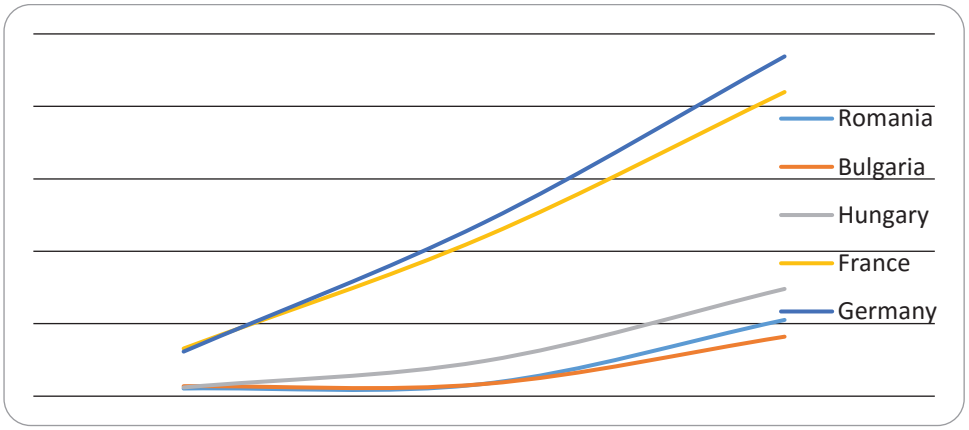

Figure 1: GDP per capita
Source: made by author using data from Eurostat
If we combine the two sets of data, one regarding the GDP evolution for Romania

and the other regarding the life expectancy in Romania, we can notice a similar trend, confirming the findings of World Health Organization, which state that income is a significant predictor of life expectancy (Figure 2).

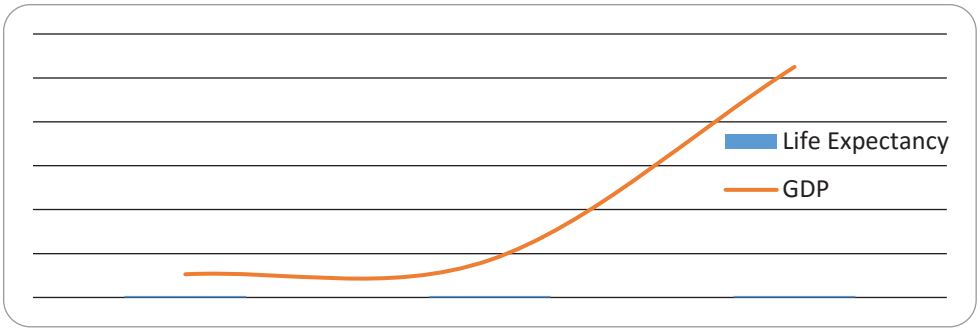

Figure 2: GDP and life expectancy in Romania
Source: made by author using data from Eurostat

However, showing the percentage of GDP allocated to public health expenditures is even more eloquent than the previous data and can be one of the causes of the still significant differences between Romania and other EU countries.

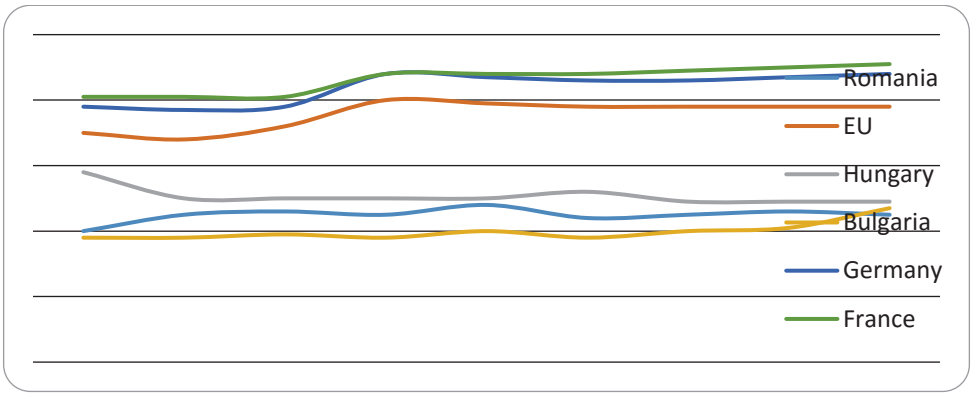

Figure 3: Percentage of public health expenditure from GDP
Source: made by author using data from Eurostat

Not only Romania's GDP is lower than EU average and much lower than in Western economies, but so it is the percentage of GDP allocated to public health expenditures. Figure 3 highlights that the allocation of resources decreased in Romania increased slightly from 2006 to 20014, from 4% to under 5%. This evolution can be partially explained by the economic crisis which hit Romania and by the corresponding austerity measures taken by the government, but also by the smaller number of personnel. We can also notice that Bulgaria allocated more resources to the public health sector in 2014 than Romania, but both countries are bellow EU average (8%) and France (9%).

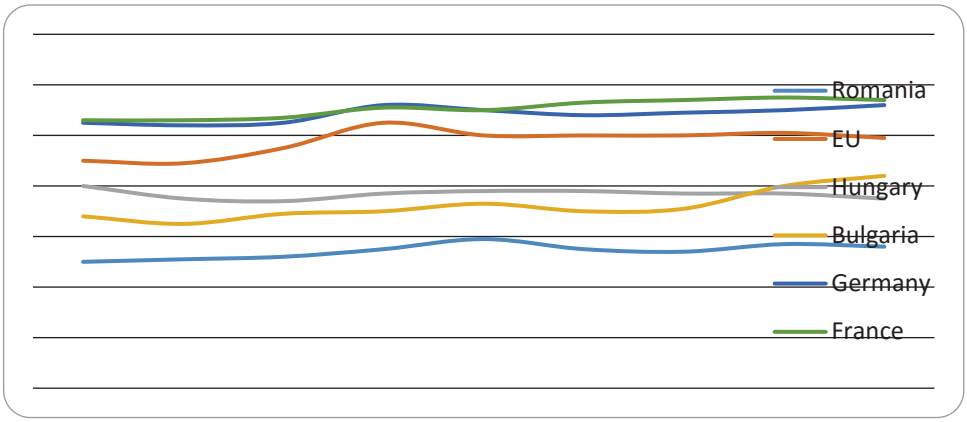

Figure 4: Total health expenditures (percent of GDP)
Source: made by author using data from Eurostat

If we also add the private health expenditures (Figure 4), the differences between Romania and the other countries increase even more. We can notice that Bulgaria's total health care expenditures are significantly higher, placing Romania on the last place among the EU countries. The trends concerning access to health are worrying, as accessibility of services and equality of access are decreasing. Currently there are some categories excepted from contributing to the Single National Fund for Health Insurance, but pressures coming from international institutions (IMF, WB) might determine the authorities to eliminate these exceptions, preventing them from having access to specialty health care services.
Usually, the efficiency of health systems is evaluated using broad measures of mortality, such as total mortality, life expectancy, premature mortality or years of life lost. More recently, other measures have been added to the list, such as: the time lived in poor health.

Table 3: Performance of health systems (WHO, 2000)

Rank	Country	Rank	Country
1	France	50	Poland
2	Italy	99	Romania
3	San Marino	102	Bulgaria
10	Japan	150	Nepal

Source: made by author using data from World Health Organization

Analyzing Romania's health system performance based on these pillars, a study made my World Health Organization ranks it 99th in the world, as seen in Table 3. There is significant potential for improvement, considering Hungary, which has a similar GDP.
Romanian health system is mainly based on hospital care, having one of the highest hospitalization rates in EU. In addition, the access to medical drugs remains one of the most acute problems of Romanian health system, especially for the categories of population with low income, such as unemployed or retired people.

Table 4: Healthcare indicators (per 100000 inhabitants)

	Practicing physicians		Hospital beds		Hospital discharges of inpatients	
	2002	*2012*	*2002*	*2012*	*2002*	*2012*
Romania	196	239	766	612	-	21825
Bulgaria	352	391	649	635	-	26060
Hungary	319	309	785	719	24354	19944
France	-	308	771	637	16904	15734
Germany	334	389	887	822	20204	24069

Source: made by author using data from World Health Organization

Table 4 shows the Romania has one of the smallest number of practicing physicians in Europe, while the number of hospital beds is similar to EU average. However, as already stated the number of hospital discharges is one of the highest in Europe. Large differences between the health status and access to health care services also refer to the different geographical areas in Romania, especially if we speak about the rural area, where the number one physicians is a few times lower than in the urban areas. The same differences apply to the number of hospitals, pharmacies or health centers. With 46% of the total population of Romania living in rural areas, according to the 2011 census, this should represent a significant concern. These data show that the management of human resources in the Romanian health care system is poor, considering the lack of medical personnel compared with EU average statistics that has to handle one of the highest level of hospitalization discharges in EU.

2.2 Health Status and Economics

Health has a significant role in the economy, as it is a very dynamic sector that generates jobs and wealth. Most jobs created in the healthcare system require qualifications and innovations. In Romania, according statistics, about 4% of the total active population works in the healthcare and social work sector, as compared to 9% in the EU. Moreover, health has a direct influence in the quality of the workforce, by prolonging life spans, by increasing the availability and profitability of organizations and by improving training. In addition, improving the health of the population would increase in turn the productivity of the working population. Considering that nowadays services account for about 70% of the total GDP, the role of health is even more important than ever. An increase in life expectancy by 10% will lead to a 0.3$ increase in the GDP per year, according to Barro (1998).

On the other hand, a poor health of the population is an obstacle in the development of any country. A significant amount of the economic growth difference between rich and poor countries can be explained by the heath status. However, the relationship between the economic growth, the level of healthcare expenditures and the health status of the population is a subject that has raised many question marks. For example, a high level of healthcare spending might mean a lower spending on other productive areas, putting a negative pressure on the economic growth. Some economists even suggest that above a certain level of public healthcare expenditure, the effects on population health status are marginal. Usually, the health care budget is the result of negotiations between several parties, as there is a competition for the same limited pool of resources (spending

on health of education?). In addition, even inside the health care system there are different views on which areas or policies to direct the spending.
Organizational culture has been found to be one of the elements that influence the quality of the services provides by hospitals (Purcell et al, 2004). Some aspects are shared by all organizations providing health care services, but each one has its own approach when establishing a culture aiming at delivering safe and efficient services. As Mosadeghrad showed (2012) the healthcare professionals have different experience, abilities and personalities, so their differ in terms of quality and not only. Leaders also play a significant role in establishing such a culture, as they are the ones making the mission and the direction of the organizations clear. Generally speaking, leaders' actions don't go unnoticed. Most hospitals are large organizations with multi-levels so in order to get full support for the vision, the staff must be emotionally connected to the values. In order to achieve this, staff must be consulted and involved in the discussions from the early stages. These discussions should cover topics such as the expected behaviors that match the values promoted by the organization. Some organizations go even further, by including these behaviors in the annual assessment of the staff. Leading organizations with aimed at quality and efficiency show it clear that culture is an important factor to the delivery of the health care services.
A study conducted in UK (Robinson et al, 2012) shows clearly that top performing organizations in the health sector have invested time and effort to develop cultures that focus on the delivery of high quality, safe and efficient care. In these organizations, the mission and visions are promoted by the management team, but all staff members are encouraged to take part in the preliminary steps when the values are discussed (Alvesson, 2002). The key is the staff engagement and connecting with each individual on an emotion level, helping them to acknowledge that some behaviors are detrimental to the organization. In addition, research has found that the job security helps when trying to change the behavior (Schein et al, 2004). Considering the under financing of public health system in Romania, many employees do not feel safe, making it harder to build an organizational culture around the values of safety and quality. Good human resource management increase employee satisfaction and loyalty, but on the other hand it also influences customer satisfaction. Employees which are committed to the organizational values perform better health care services which determine better results in terms of patient satisfaction.

3. Research methodology

The present scientific paper studies the organizational culture found in emergency hospitals in Bucharest, using the competing values framework. This research is based on non-probabilistic sampling, more specifically on rational theoretical guided sampling. Medical personnel working in hospitals from Bucharest filled questionnaires and were interviewed face to face. The studied population is represented by medical personnel from an emergency hospitals located in Bucharest. The organizational culture was diagnosed using the OCAI (organizational culture instrument). Individuals had to respond to six items. This instrument has been found to be accurate in diagnosing the aspects of an organizational culture. The instrument helps indentify both the current and the preferred culture of the organization. Questionnaires were sent by email to 114

persons working in the above mentioned organizations, of which only 87 have been returned, 87 being valid. All the questionnaires were sent after face to face discussion with medical personnel from the hospitals. All the questionnaires were checked for validity, before analyzing the data.
Out of the 87 persons that filled the questionnaires and whose answers were valid, 52 persons were women and 25 were men. Out of the 87 respondents, 80% had higher studies. The hypothesys (H1) of this study is the dominant organizational culture found in the sample is hierarchical.

4. The results of the research

As in other industries, the public healthcare system is competitive, especially with the increasing number of private hospitals and considering the liberalization policies. The hospitals also face the pressure of attaining economic objectives, besides having to offer health care services. Any hospital, as any other organization has a corporate culture. The scientific literature has presented many example of organizational culture having a significant impact on corporate performance. The hospitals being living organizations have to develop strong cultures that bond the workers together and that gives them a higher purpose for their daily work. The need to diagnose the organizational culture for hospitals is more important than ever, as they have to change and adapt to structural changes that have occurred (capitalism, economic crisis, technology breakthroughs) (Denison, 2000).
Organizational culture reflects social phenomena which translate the codified character and norms of an organization, including the beliefs, system of values, symbols, myths and others.
According to Cameron and Quinn (1999), the culture in an organization can be seen between two dimensions: focus (internal versus external) and processes (organic versus mechanical). Using the Competing Values Framework, four dominant organizational cultures emerge, based on the intersection quadrants of above mentioned axes: clan, adhocracy, hierarchy and market.

- The clan culture distinguishes by a very friendly work environment where people feel free to be themselves and to share a lot of their true selves. It can be viewed as an extended family, where the leaders are seen as mentors. In the clan culture the commitment is high, as well as the loyalty. The organization focuses on long term development and the success is defined in terms of concern for customers. The main values of clan culture are teamwork, participation and consensus.
- The adhocracy culture is dynamic and entrepreneurial. The work environment is very dynamic, where people are encouraged to take risks. In this culture innovation and experimentation are the forces that bond together the organization. The organizations focus on growth and acquiring new resources and success is defined in terms of creating unique new products.
- The market culture is result oriented, the main objective being getting the job done. The people working in this culture are competitive, while the leaders are hard drivers. In this culture the focus is on winning, as well as on reputation and success. Moreover, these organizations want to capture as much market share as possible.

- The hierarchy culture can be described as a very formal clime to work in, The leaders think in term of efficiency and consider themselves as great coordinators and organizers. The formal rules and policies hold the organization together, while the long term focus is on stability and efficiency. Success is defined in a hierarchy culture in terms or dependability, low cost and scheduling.

This instrument of research is designed so it represents the balance of different cultures present in the same organization. Furthermore, the CFV examines the beliefs and unspoken assumptions that truly influence the attitudes at work, as well as the behaviors.

Table 5: Organizational culture types found in the hospital

	Mean	Standard Deviation
Clan	2.87	1.301
Adhocracy	2,79	1.178
Market	3.2	1.062
Hierarchy	3.62	1.007

Source: made by author

After analyzing the data collected through the questionnaires, it can be seem that the dominant organizational type found in the hospital is the hierarchy one, followed by the market and clan culture (Table 5). The results are consistent with the H1 and with previous studies. Considering the limited sample, we can interpret the results as being explained by the nature of the healthcare industry, which is based on stability, order and control. These organizations need to be stable, predictable and to follow mechanical process, while paying attention to costs, due to the limited resources.

Considering that the success of an organization resides on the extent to which the organization's culture matches the demands of the competitive environment, we can notice that there is an alignment between the two sides. The nature of an industry requires leaders to ensure the procedures, measurements and monitoring systems are in place to maintain the processes and performance in control. In addition, coordination must exist within the organization, as well with other units and managers have to share information. The members of a hierarchy culture are helped to become clear what is expected from them, as well as what are the standards of the organization.

In the case of a mismatch between the demands of the environment and the culture's traits, an organization will find it hard to survive. In addition, the dominant culture tells us what kind of leadership attributes are valued within the organization, what behaviors are likely to be rewarded and what management style is proffered by the medical personnel. In healthcare organizations, the leaders are very well informed and have the power of expertise. The leaders must also be attentive to details and their influence has roots in the control of information. The persons in charge are dependable and reliable, due to the nature of their work and to the impact of any mistake. In an organization with a hierarchy culture, stability and control are actively pursued. In addition, the standard set of procedures and policies are stated clear, so everyone knows how to get the job done.

When analyzing the data referring to the preferred organizational culture, we can notice several differences. First of all, the order of the dominant culture remains the

same, but the strength of each one differs. Table 5 shows that the medical personnel wants a stronger adhocracy and clan culture, as they value some of the corresponding beliefs and behaviors associated to them.

Table 6: Preferred organizational culture

	Mean	Standard Deviation
Clan	3.126	1.224
Adhocracy	2,189	1.203
Market	3.237	1.098
Hierarchy	3.568	0.947

Source: made by author

In order to increase the clan culture, surveys could be done to find out the employees needs. In addition, the management could focus more attention on improving ream work and the participation of the staff in decision making processes. However, increasing the clan doesn't mean that the employees would become undisciplined or they would not work hard.
In order to increase the adhocracy culture in the organization, the management could implement a few policies. Therefore, they should encourage innovation and become a more forward-looking organization and have a more clear vision for the future. Increasing the strength of adhocracy culture doesn't mean that the personnel should disregard customer requirements or they should take unnecessary risks.

5. Conclusions

Romanian health care system faces significant challenges, in terms of financing and number of professionals working in hospitals, having a direct impact on the health status of the population. Most of the indicators have improved since Romania's integration in EU, but they still lag behind the EU average.
The quantitative research reveals that the dominant organizational culture found in the studied sample is hierarchical. The results support the initial hypothesis and are consistent with previous studies and with the nature of the activity. However, the results show that in a preferred situation, employees would want to feel more engaged in the decision making process and that the organization would support more innovation.
The limitations of this research are about the number of respondents and their location, as the primary data were collected from professionals working in one emergency hospital from Bucharest.

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