

## **The role of the education of hospital managers in a high-performing health system – prerequisites for the unique national standardized program in health management and medical leadership**

**Elena Iuliana PAȘCU GABĂRĂ**

Bucharest University of Economic Studies, Romania  
pascuelenaiuliana@gmail.com

**Abstract.** *Would hospital managers in Romania be more vigilant about covering the demand for medical services without Covid-19 pandemic? In the epidemiological context of the last 3-years became clear that training hospital managers became essential. This paper analyzes perception of hospital managers about importance of standardized-educational-programs in health management. Managers consider being resource-oriented as their main quality and recognize that the lack of knowledge is the biggest impediment. Main application of this research is that it can be used as a tool for a pilot study as a concrete measure in the professional training of hospital managers for a solid health-system.*

**Keywords:** health management, organizational performance, hospital managers, national educational program.

**JEL Classification:** I15, I18, I24, J24.

## Introduction

The contemporary era brings to the fore the Covid-19 pandemic, which represented a large-scale phenomenon with disastrous consequences for the global population and which deeply influenced every field of activity. The activity of the medical sector multiplied its workload significantly, being in the front line of the fight against the pandemic, and the medical staff had to face numerous challenges from the lack of material resources (medical equipment, masks, ventilators, treatments and others), of human resources (staff deficit or exhaustion and burn-out among employees) and time (one of the most important resources, considering that some employees practically lived at their workplace during the pandemic) (Restauri and Sheridan, 2020; Norman et al., 2021; Coleman et al., 2022). Wei et al. (2022) concluded that the risk of infection with SARS-CoV-2 among medical personnel was significantly higher than the general population.

Having the main objective of dealing with the pandemic, the international joint effort of the competent health organizations has materialized through the recommendations of epidemiologists to prevent the spread of the SARS-CoV-2 infection, by supporting the health systems in each country to provide adequate medical assistance the massive demand for health services and the limitation of mortality rates, by directing the existing human and financial resources towards the urgently needed areas and many others (Samaan et al., 2022). In addition, pharmaceutical companies have accelerated the medical research process to provide an effective vaccine for population immunization, although long-term safety issues regarding adverse effects are still under study (Rosenblum et al., 2021). Low-income or middle-low income states and those in the process of development had wider consequences compared to states with above-average incomes or well-developed (Zhu et al., 2022). The interventions of the authorities in navigating towards the reduction of human and material losses caused by the pandemic proved to be useful when they focused on measures taken to protect vulnerable population groups such as the elderly (Angel and Mudrazija, 2020), but also by adopting many essential measures intended to protect the general population such as information actions, provision of financial support and food, facilitation of home quarantine and social distancing (Sohel et al., 2022). A vital role in this epidemiological context was played by hospital managers who had to face the extraordinary situation of simultaneously treating a very large number of patients which, in most cases, exceeded the capacity of the hospital lead and which, at the same time, exposed the medical staff to risk, making decisions that focused on teamwork, emotional management and respect for organizational decisions (Martinez Estalella et al., 2021).

Based on an important segment of the literature regarding the epidemiological context of the last three years, the importance of the performance of the health systems in each state to face such major emergency situations becomes a topic of interest (Abdi et al., 2022).

From an economic point of view, the COVID-19 pandemic is considered to be the biggest threat to the global economy since the financial crisis recorded in 2008-2009 (Tandon, 2020).

The bio-psycho-social impact cannot be equaled in terms of the loss of human life or the physical and mental disabilities of the pandemic survivors.

McKinlay et al. (2021) highlighted the need for continuing interprofessional education and team work as solutions of interest for a better management of the pandemic.

In the literature, the importance of the professional training of the hospital medical staff and management teams was described in order to be aware of the critical situation of a pandemic or another disaster, to understand the roles and responsibilities of everyone, the emergency protocols with immediate applicability and the effective response optimal to treat a large number of serious patients (Devereaux et al., 2014).

Taking into account the multidimensional implications of the COVID-19 pandemic, the main objective of the current work is to analyze the point of view of hospital managers in Romania regarding the importance of professional training in the field of health management, emphasizing the possibility of the authorities developing and implementing a unique standardized educational program dedicated to them and their availability to follow this program. In addition, the questioned health managers had the opportunity to make proposals about the organization and structure of this professional training program.

This study is designed according to the following plan:

- Section 1 presents the introduction to the studied issue.
- Section 2 offers benchmarks from specialized literature regarding the importance of professional training of employees in management positions in hospitals and the culture of medical leadership.
- Section 3 presents the research objectives and the study methodology.
- Section 4 shows the analysis of the collected data and the presentation of the results.
- Section 5 presents discussions about particular aspects of the research, limitations and advantages of the research.
- Section 6 highlights the research conclusions.

This research paper is supplemented by Appendix 1 which reproduces the questionnaire that provided the database analyzed in the study.

## 1. Literature review

In recent years, medical leadership has become a topic of interest for the scientific community from a conceptual point of view in specialized literature, but especially in a practical sense through the prism of the anticipated positive effects on all actors of the health environment at the global level. Positive influences are expected in terms of the standard of care of the population, patient safety, cost efficiency (Warren and Carnall, 2011), the management of crisis situations such as the Covid-19 pandemic, and especially a beneficial effect on hospital employees. Research shows that hospitals have higher performance indicators when they are led by medically trained employees (Clay-Williams et al., 2017). In addition, some researchers believe that physicians exert more influence on fellow clinicians than hospital professionals without medical training (Bresnen et al., 2019). By engaging in leadership positions, medically trained staff could play a decisive role in encouraging fellow clinicians to achieve contemporary clinical and organizational targets.

Due to the awareness of the importance of professional training in medical leadership of medical personnel with management functions, at an international level, medical programs are increasingly adjusting their training curricula to include management skills. Medical university students would like more management and leadership training in their preparatory years, because in the current situation they feel partly unprepared for a future career that goes beyond the boundaries of strictly medical studies (Rouhani et al., 2018). Time-tested medical leadership development educational programs have also emerged that are designed for medically trained professionals (Frich et al., 2015).

The popularity of medical leadership training is also reflected in the scientific literature. Research on this topic is developing from year to year, mainly gaining insights into essential variables such as knowledge, skills, institutional characteristics, activities, so necessary for the formation of leaders in the medical field (Hopkins et al., 2015). Although evidence for the significance and necessity of medical leadership has been found in practice as well as at the research level, the importance of which factors are associated with effective leadership remains under study, and researchers (Berghout et al., 2017) who conducted a systematic review of the literature on this theme, they emphasized two relevant aspects: the formal managerial role, with a specific appointment, and the informal role, where management is automatically included in the daily work of doctors. Whether the assignment is formal or informal, this scholarly approach has elicited three main areas of factors that medical leaders should master: personal characteristics, context-specific characteristics, and activities. Personal characteristics refer to the skills, attitude, knowledge, competences, management experience and credibility that a medical leader should have and include a wide range of character traits such as communication skills, employee motivation and clinical knowledge. Context-specific characteristics refer to experience in health management, support and time given to subordinates and management, and include a variety of institutional and cultural characteristics of the hospital, relying on an assumed dichotomy between the managerial and the medical side. The third area of interest is based on the activities and tasks necessary to fulfill the role of medical leader, such as strategy and decision-making, organizing networks, both intra-hospital and sustainable partnerships outside the health institution that he manages, and the responsibility for meeting the objectives organizational target. This delineation of areas of interest in the professional training of managers in the medical field raises the question to what extent a medical leader could or should master all these individual variables, and therefore what is the importance of each studied through targeted research.

The abundance of determinant variables in the professional training of healthcare leaders could be explained by the potential views of various professionals (e.g., physicians, nurses, auxiliary staff, technicians, laboratory personnel) about what is most important for an effective medical management. These types of research, which include the perspective of healthcare facility employees, can provide insight into what healthcare professionals and managers in a specific hospital believe is important for effective hospital-based medical leadership, and the results they can influence what type of leadership is aspired to compared to the type of medical leader today. Furthermore, hospitals and current medical leaders

could use the results to gain an overview of the activities and decisions necessary or desirable to enhance the effectiveness of medical leadership with anticipated positive future outcomes for the benefit of the healthcare consumer population.

Hospital managers must constantly adapt and balance the real needs of the population with societal trends so that the medical system and hospitals function efficiently and provide appropriate medical care at the highest level. Very often managers are clinicians and their training in terms of management skills, organization, leadership, entrepreneurial qualities is minimal or requires improvement (Liang et al., 2020). The need to constantly train managers so that the services provided by health systems are adequate is great and vital, but this does not happen in most cases. Although it can be observed an enthusiasm to continuously reform the health system in Romania, it is useful to temper these decisions proven to be frequently taken on impulse and to be aware of the real needs of the population, the resources available to the health system and at the same time to design a strategic plan in the long term based on the uniformity of the professional training of hospital managers, independent of the basis of formal education that managers already have in the field of health management.

A hospital manager must have a special set of competencies and critical skills, both technical and non-technical, such as, for example, social qualities, or the ability to inspire others. An important aspect is the ability to use available resources to efficiently deliver requests for health services, taking into account the social, political, economic context of each period. Another advantage is the ability to visualize the overall picture on one's own as well as to get involved in teamwork and planning together with hospital departments to fulfill the final mission (Ochonma and Nwatu, 2018). Most managers are doctors and thus predominantly focus their attention on medical aspects, research, patients, and although these are qualities that managers must have, many of them do not have good training in the field of management per se: leadership, organization, resource management, medical staff education. They must receive a formal education in health management. Their responsibility also includes the training of the medical staff for various situations, for the good functioning of the hospital as a whole (Ochonma and Nwatu, 2018).

Studies show that the working environment in hospitals has become increasingly stressful in recent years, especially in the epidemiological context of the Covid-19 pandemic (Nyberg et al., 2022). Medical personnel, often insufficient for the needs of the community and for the level of work required in the hospital, are frequently overworked, subject to emotional and physical stress factors and much greater pressure than other professions. The mental health and therefore the good functioning of the medical staff must be one of the concerns of hospital managers because if they are affected, the number of resignations and medical leaves increases, the ability to concentrate decreases and even medical errors occur and thus the medical unit does not fulfill its purpose (Genrich et al., 2020).

The interventions proposed by the authorities at the organizational level must be coordinated by the hospital managers and integrated into the already existing system so that they do not create imbalances and aim to improve the organization and functioning of the institution (Genrich et al., 2022). It seems that many programs that are trying to be

implemented fail due to lack of time and lack of personnel, among the most difficult to implement are organizational programs between various departments. (Brooke-Sumner et al., 2022, Genrich et al., 2020)

Responsibility towards society must be one of the central concerns of a health institution manager. Managers must take into account many important aspects for patients, including: reducing costs for medical procedures, easy access to investigations with high-performance medical equipment, decreasing mortality and infections rates, improving the efficiency of service delivery, the general satisfaction of patients, the rational distribution of resources and reducing pollution. A directly proportional connection was observed between the degree of social responsibility perceived by the manager and the quality of the services offered by the health institution (with the reduction of mortality rates, unnecessary interventions) and the increase of patient satisfaction (Gorji et al., 2021).

One of the goals of hospital managers must be to improve the performance of the health system, and their work plays a very important role in achieving this goal. Their qualities include: the ability to plan specific strategies for the needs of society, the ability to make decisions in exceptional situations, the ability to work in a team but also a good individual relationship with each employee, motivation, professionalism, the desire to constantly improve the hospital's activity it leads him but also to constantly train professionally in accordance with contemporary educational requirements. They must also have the flexibility to adapt to constant and rapid changes, to keep up with the changes that appear in the health system and in society, so that the well-being of the staff and patients is always ensured (Moradi et al., 2020). One of the challenges faced by managers is the existing deficit of both human and financial resources and the need to manage them efficiently. It is necessary for them to integrate internal and external factors and to plan in the medium and long term so that the institution develops constantly over the years (Ranjbar et al., 2019).

All these critical skills and competencies are key points that can be acquired or enhanced following a unique standardized educational program in the field of health management that hospital managers. This program can become a reference foundation in the training of health managers, with significant long-term benefits. The experience of well-developed states that recorded a better management of hospital activity during the pandemic can serve as a recommendation for an approach to increase the performance of healthcare units in Romania by including in the curriculum of a unique standardized educational program the basic principles of the cost-effective operation of health systems.

## **2. Research objectives and methodology**

The main objective of the current work refers to researching the perception of the medical staff who hold management positions in a hospital regarding the professional training in the field of health management and the usefulness of the implementation by the competent authorities of a unique national educational program standardized in the field of health management to train an employee with a management position in a medical institution.

In addition, new knowledge and skills that can be acquired through education are highlighted. The main practical application of this study is that by directly questioning

managers from Romanian hospitals, a major contribution is made to validate the conception and proposal of a theoretical and practical model of professional training and personal and interrelational development of staff with management positions within an institution medical.

For this research, feedback was collected and analyzed from medical staff with management positions within some Romanian health units, especially regarding the perceptions of health management education and leadership culture.

The scientific approach included the following stages:

- The design of a questionnaire applied to the medical staff holding management positions in a hospital in Romania with reference to the current context of the training level of each respondent in the field of health management and their own perception of education in this field.
- Data collection, validation and analysis of information.
- Concluding and highlighting the positive aspects of this scientific approach, identifying points of vulnerability that can be improved and suggestions for the design of a standardized pilot educational program in the education of health managers.

The research method used was that of the opinion poll in which the participants were invited to answer a predefined set of questions. The main research tool, the questionnaire, was made up of 15 questions (8 questions with pre-formulated answers and 7 questions where there is an option to freely express a particular situation among the answer options). Out of the total number of questions, 13 questions require a single answer and 2 questions have the possibility of a multiple answer. The questions can be grouped into three distinct categories as follows: demographic characteristics of the population sample that completed the questionnaire (questions 1-8), the level of training of the respondents in the field of health management (questions 9-13) and the perception of the respondents regarding the implementation by authorities of a single standardized national educational program for the accreditation of hospital managers (questions 14 and 15).

The respondents to the valid questionnaires, considered relevant for the research, are doctors who currently hold management positions in a Romanian health unit (hospital manager/CEO, administrative/economic director, medical director or head of medical department), over 25 years old years. The questionnaire was distributed and completed electronically by the respondents. The questionnaire distribution period was 3 weeks (January 30 – February 19, 2023).

The inclusion criteria in the study were:

1. The questionnaire respondent is a medical doctor (MD).
2. The questionnaire respondent currently holds one of the management positions specified above.
3. The health facility where the respondent is employed is located on the territory of Romania.

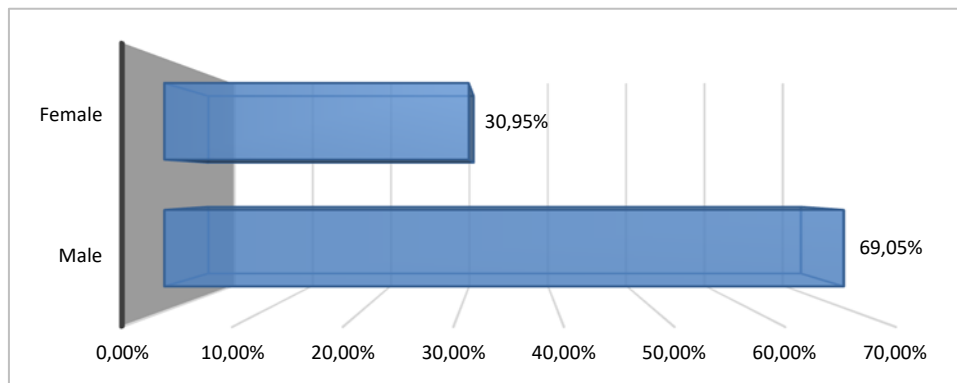
When analyzing the results, out of the total of 54 completed questionnaires, 42 questionnaires were validated for the study meeting the initial conditions of the proposed study. A number of 12 completed questionnaires were excluded because they did not meet

the selection criteria: 3 questionnaires were completed by doctors outside Romania's borders, 2 questionnaires were incomplete, 5 questionnaires were completed by non-medical hospital staff and 2 questionnaires were completed by staff of health facilities who do not currently hold management positions.

### 3. Analysis of collected data and results of research

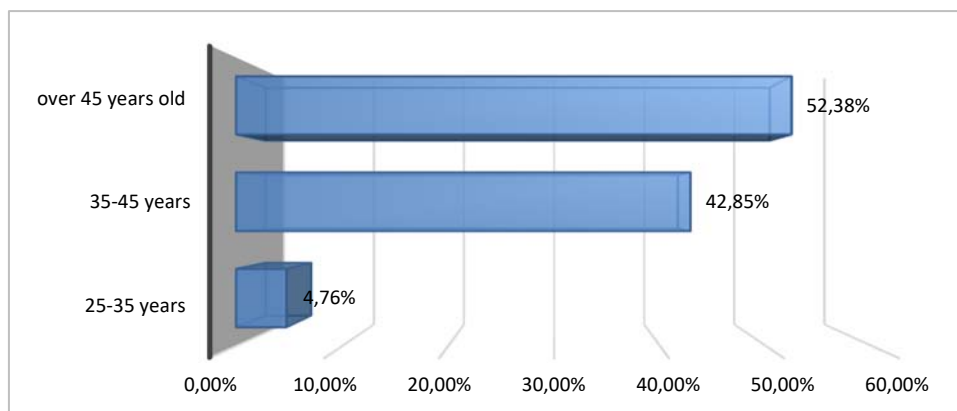
When analyzing the results, it is noted that the respondents to the valid questionnaires are doctors who currently hold management positions in a health unit in Romania (hospital manager/CEO, administrative/economic director, medical director or head of department/section), the majority being male (29 male, 69.05%) versus female respondents (13 female, 30.95%) as illustrated in Figure 1.

**Figure 1.** Distribution of respondents according to gender



Also, the demographic analysis showed that medical staff with management positions are mainly over 45 years old (22 doctors, 52.38%), representing more than half of the completed questionnaires, this category being closely followed by the group of doctors aged between 35-45 years (18 doctors, 42.85%). Only 2 people are in the 25-35 years category, being the least expressed category, as shown in Figure 2.

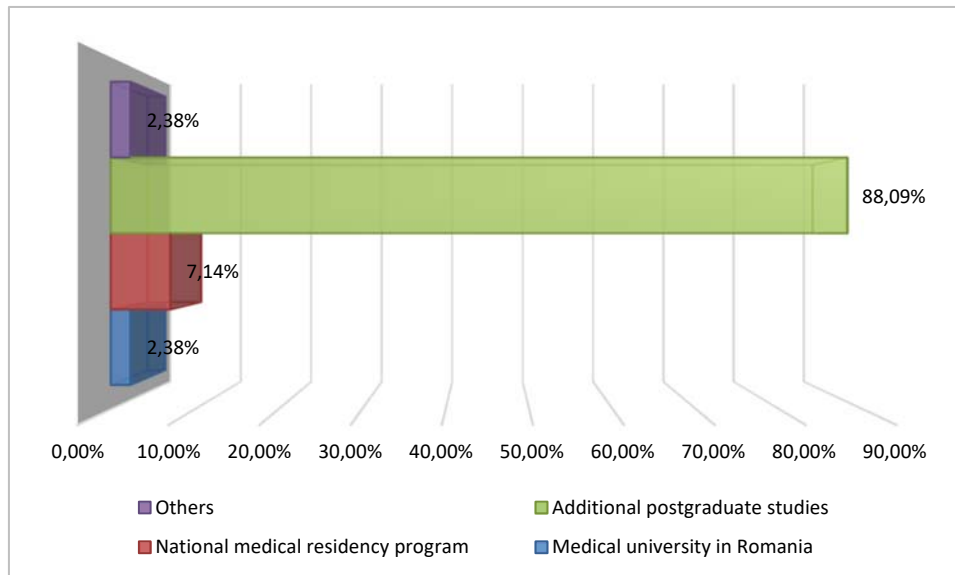
**Figure 2.** Distribution of respondents according to age



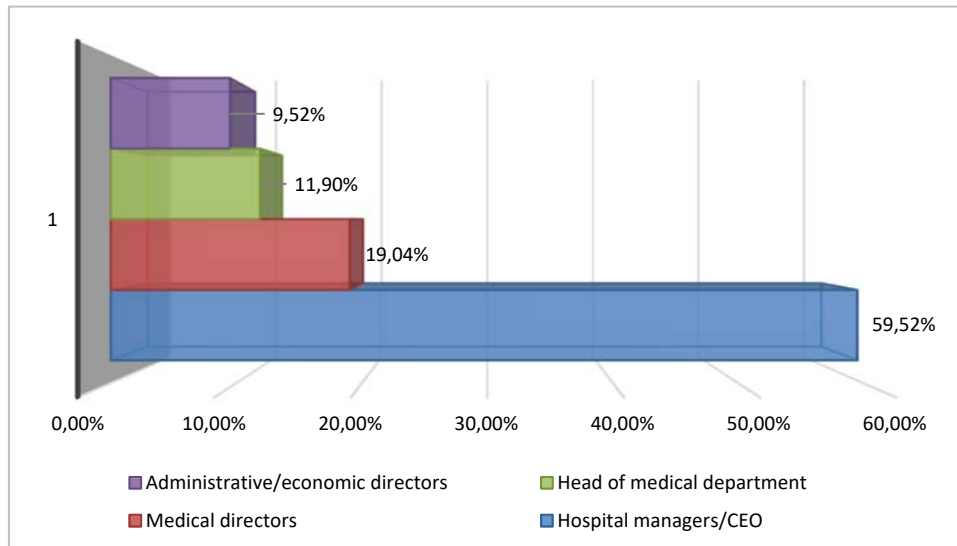


Regarding the level of academic training prior to occupying the current management position, the analysis of the results highlights the fact that the majority of respondents to the valid questionnaires are medical doctors who followed additional postgraduate studies through master's or doctorate programs (37 doctors, 88.09%), while only 3 respondents completed a national residency program (7.14%) with no other postgraduate studies. Only one subject completed a medical university in Romania and currently holds a management position in a health unit without having completed other types of postgraduate studies (2.38%). The particular situation "Others" as illustrated in Figure 3 refers to one respondent (2.38%) who mentioned that he attended all his studies outside the country (university of medicine, residency program, postgraduate studies).

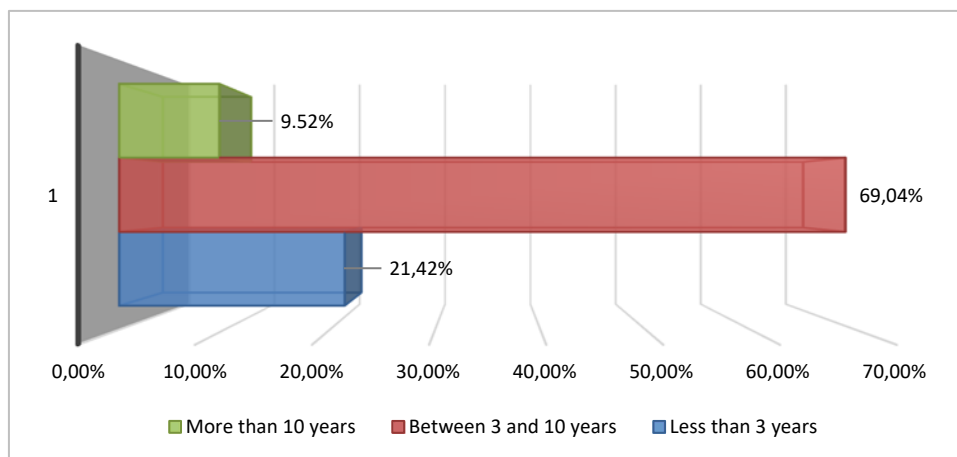
**Figure 3.** Distribution of respondents according to academic training



Regarding the management position currently occupied, the analysis of the valid questionnaires showed that medical personnel with management positions mainly occupy the position of hospital manager/CEO (25 respondents, 59.52%), representing more than half of the completed questionnaires, this category being the most representative. The following categories are less expressed as follows: medical director (8 respondents, 19.04%); head of medical department (5 respondents, 11.90%) and respectively the category of administrative/economic directors (4 respondents, 9.52%) as illustrated in Figure 4.

**Figure 4.** Distribution of respondents according to the current management position

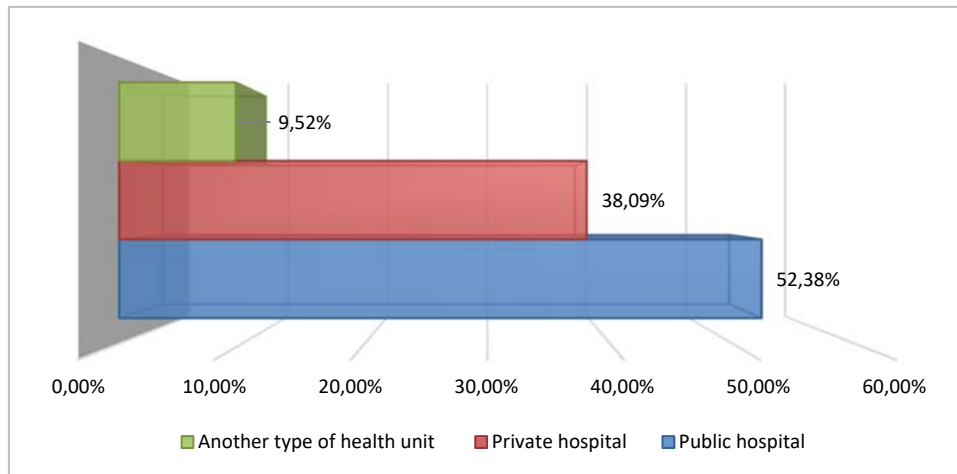
Also, the analysis of the selected population sample, from the point of view of seniority in the currently occupied management position, showed that the majority of respondents have seniority between 3 and 10 years (29 doctors, 69.04%), representing more than half of the completed questionnaires, while only 9 respondents admit that they have less than 3 years in their current position (21.42%). 4 people have more than 10 years of seniority in the management position (9.52%), as shown in Figure 5.

**Figure 5.** Distribution of respondents according to experience in the current management position

Regarding the analysis of the information collected from the point of view of the type of health facility where the respondent of the questionnaire currently holds a management position, it was found that the majority of doctors (22 doctors, 52.38%) work in a public hospital, located in subordinate to the corresponding town hall, while 16 respondents mention that they hold their current position in a private hospital (38.09%). 4 people are in

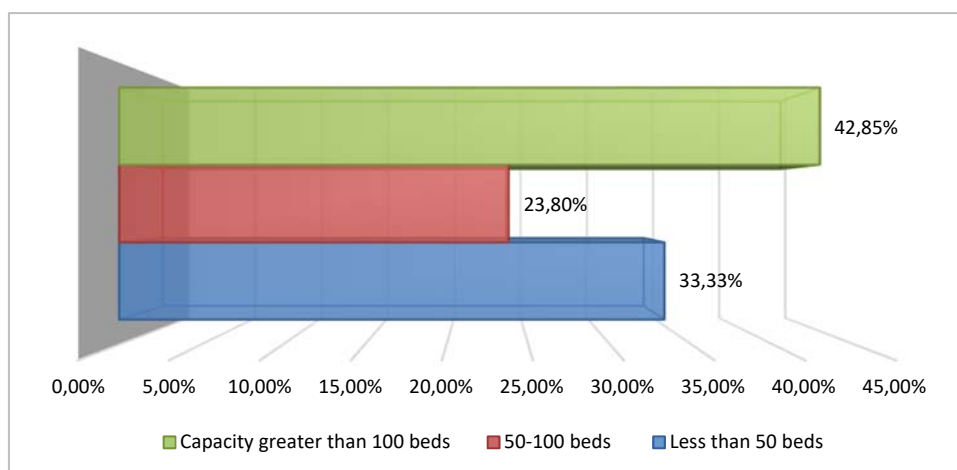
a particular situation holding a management position in another type of health unit (9.52%) as follows: 2 individual medical offices, an analysis laboratory and a dental clinic, all this information finding in Figure 6.

**Figure 6.** Distribution of respondents according to the type of health institution where they currently work



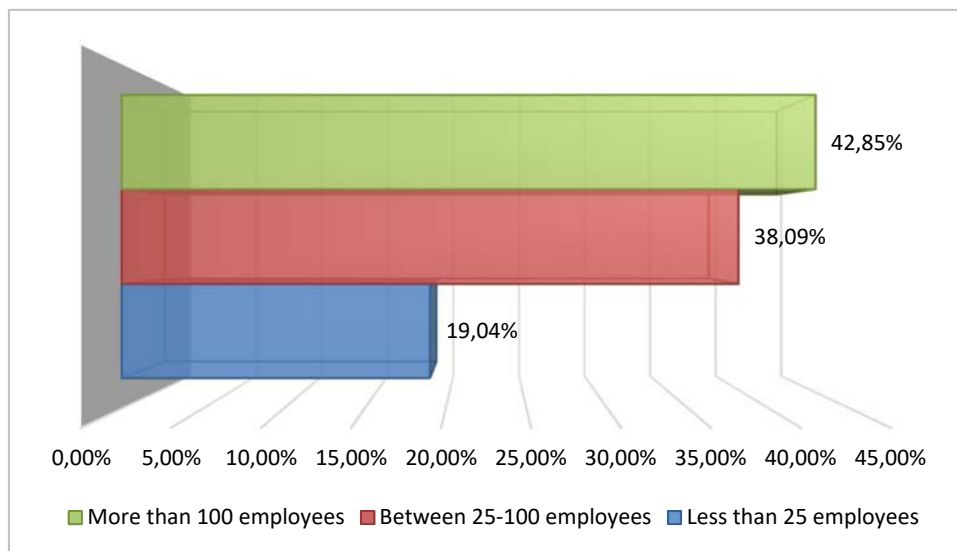
Centralized data on the number of beds in the health facility where the questionnaire respondent currently holds a management position represents a descriptive variable of the health facilities they manage and highlights the fact that most hospitals (18 health facilities, 42.85%) have a capacity greater than 100 beds, while a third of the hospitals mentioned in the questionnaires (14 health facilities, 33.33%) have a capacity of less than 50 beds. The least represented category is represented by hospitals classified as having an average capacity, having a proportion of 50-100 beds (10 health units, 23.80%), as illustrated in Figure no. 7.

**Figure 7.** Distribution of respondents according to the number of beds in the health institution where they currently work



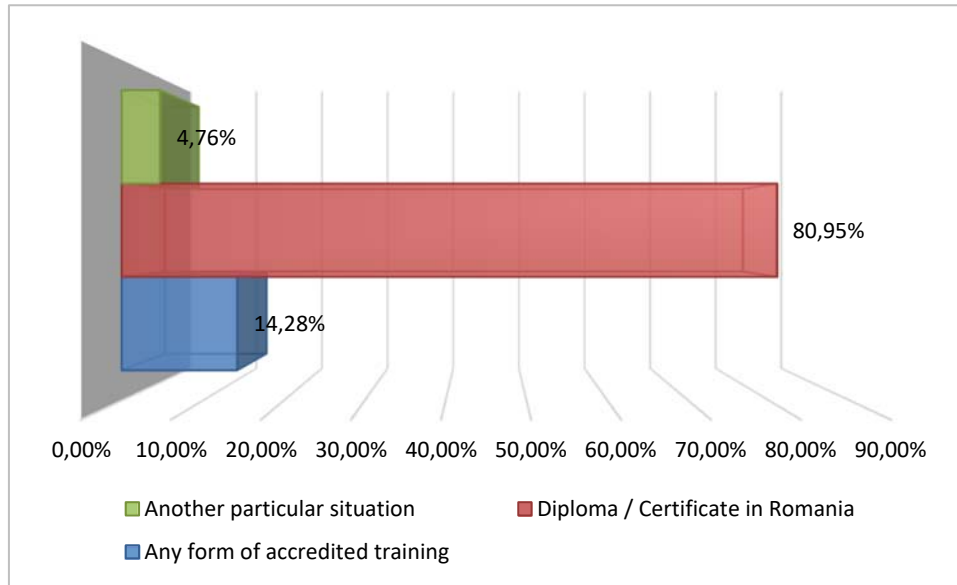
Finally, the last item in the first section of the questionnaire, the part that refers to the characterization from the point of view of the demographic features of the population sample that completed the questionnaire, analyzes the information regarding the number of employees of the health unit where the respondent holds a position of management and it follows that there are two categories in the majority: large hospitals with more than 100 employees (18 health units, 42.85%) and medium hospitals with a number between 25-100 employees (16 health units, 38.09%). The least represented category is represented by hospitals where less than 25 employees work (8 health units, 19.04%), as shown in Figure 8.

**Figure 8.** Distribution of respondents according to the number of employees of the health institution where they work



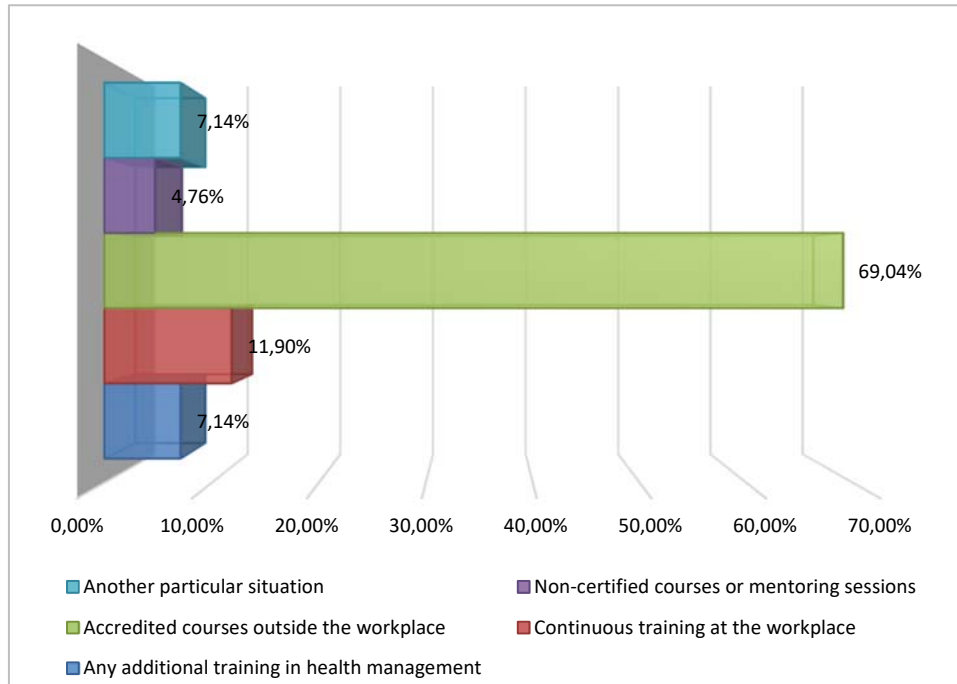
From the second section of the questionnaire, including questions that refer to the description of the level of training of the respondents in the field of health management, the first item analyzes the information regarding the level of academic training of the subject prior to occupying the current position and it was highlighted that the majority of respondents have a diploma or certificate obtained in Romania by following an educational program such as an accredited course, master's program, doctoral program or similar (34 doctors, 80.95%), while 6 respondents admit that they did not follow any form of accredited training in the field of health management prior to assuming the current management position (14.28%). Two particular situations were reported (2 doctors, 4.76%) who mentioned that they followed an accredited training abroad in the field of health management prior to taking over the current management position, a situation illustrated in Figure 9.

**Figure 9.** Distribution of respondents according to the level of accredited training in the field of health management prior to occupying the current position



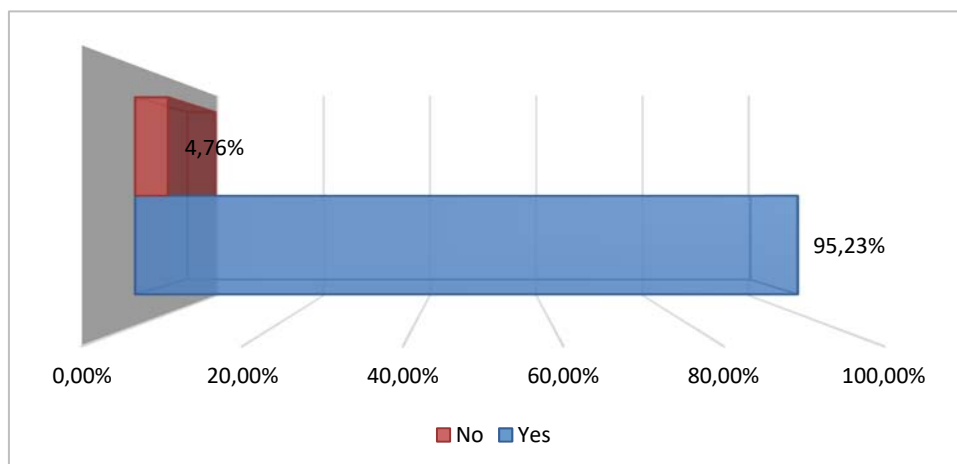
Regarding the analysis of the information collected from the point of view of the level of training in the field of health management since the subjects occupied their current position, it resulted that most doctors attended accredited courses outside the hospital where they work (29 doctors, 69.04%) while 5 respondents mention that since they hold their current position they have followed continuous training at the workplace through group sessions with other employees, participation in seminars, courses, presentations in the hospital where they work (11.90%). From the research of the answers it was noted that 3 respondents admitted that they did not have any additional training in health management since they are in their current position (7.14%). 2 people mentioned in the questionnaire that the training carried out after occupying the current position represents non-certified courses or mentoring sessions (4.76%), and another 3 doctors (7.14%) specified that the training in the field of health management followed after occupying the position current was carried out abroad and shown in Figure 10 below in the "Others" category, with reference to another particular situation.

**Figure 10.** Distribution of respondents according to the level of training followed in the field of health management since the subjects occupied their current position



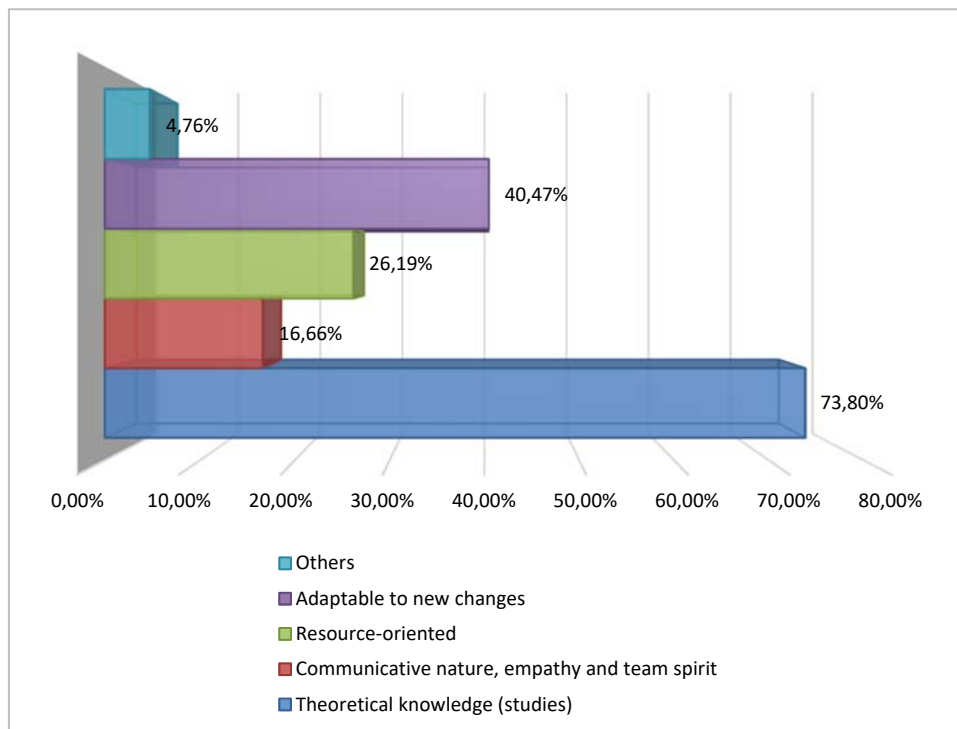
Also, when analyzing the selected population sample, from the point of view of the intention to participate in any educational program in the field of health management at present, it was found that the majority of respondents agree with this approach (40 doctors, 95.23%); only 2 respondents expressing their disagreement (4.76%), a situation that is illustrated in Figure 11.

**Figure 11.** Distribution of respondents according to the intention to participate in any educational program in the field of health management at present



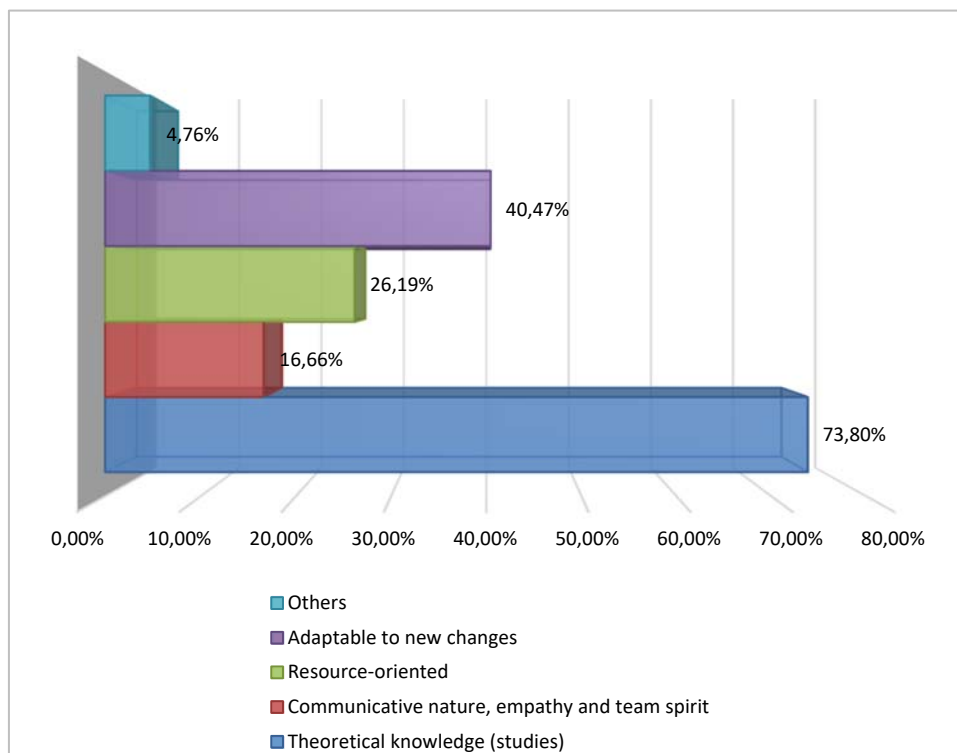
From the second section of the questionnaire, another item concerned the information regarding the perception of which qualities and skills the subjects believe they acquire and help them achieve a positive example of management in the hospital where they are employed. When analyzing these data, it was noted that the majority of respondents consider it important that they have the ability to be a resource-oriented employee (31 doctors, 73.80%) both to be a good administrator of already existing resources and to make efforts to find new resources for the good functioning and development of the institution he manages. Another skill of a good manager was considered by more than half of the respondents to the questionnaire is that they possess a communicative nature, that shows empathy and team spirit, that encourages subordinates and recognizes their contribution to the performance of the hospital (27 doctors, 64.28%). Theoretical knowledge obtained through studies in the field of management is considered an important quality by fewer respondents (10 doctors, 23.80%), while only 5 subjects (11.90%) consider it a positive quality to be adaptable to new changes (e.g. pandemic, war, natural disasters...). The special category "Others" with free answers from doctors was recorded in 5 questionnaires (5 subjects, 11.90%) among which are mentioned: self-critical spirit, the ability to provide open and honest feedback to subordinates, professionalism, the ability to provide motivations (days off, financial bonuses) for employee performance, the ability to create a network of partners. The above results are reproduced in Figure 12.

**Figure 12.** The distribution of respondents according to the perception of which qualities and skills they believe they acquire and help them achieve a positive example of health management



When analyzing the perception of which qualities and skills the subjects believe they do NOT possess, but having them could help them to achieve a positive example of management in the hospital where they are employed, the fact that most of the respondents consider important the theoretical knowledge obtained through studies in the field of health management (31 doctors, 73.80%), and in the current social and epidemiological context an extremely important skill that is indicated among the respondents as necessary is adaptability to new changes (for example pandemic, war, natural disasters...) what 17 doctors (40.47%) admit they need to improve this skill in the way they carry out their current work. Only 11 physicians (26.19%) mention that it is important to develop as an employee in a resource-oriented leadership position both to be a good manager of existing resources and to make efforts to find new resources for a good operation and development of the institution they manage, while 7 doctors admit that it would help them to have a communicative nature, which shows empathy and team spirit, which encourages subordinates and recognizes their contribution to the performance of the hospital (16.66%). Only 2 questionnaires brought suggestions to the particular category "Others" (4.76%) mentioning the organization and/or funding of continuing medical education programs for employees within the institution they manage. The above results are reproduced in Figure 13.

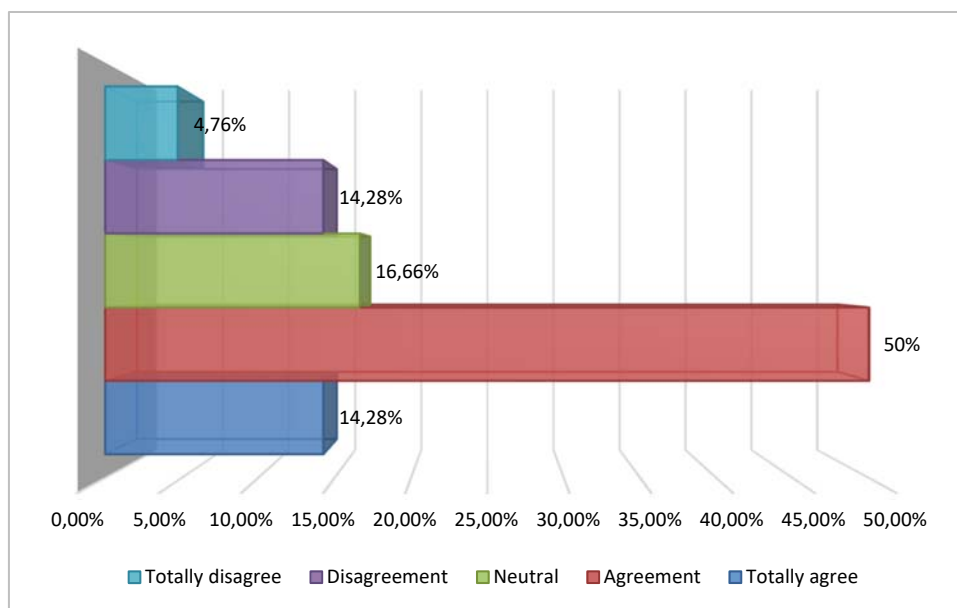
**Figure 13.** Distribution of respondents according to the perception of which qualities and skills they believe they do NOT possess, but acquiring or improving them will help them achieve a positive example of management within the hospital where they are employed





From the third section of the questionnaire, including questions that refer to the respondents' perception regarding the implementation by the authorities of a unique national standardized educational program for the qualification of hospital managers, one item analyzes their own perception expressed by agreement/disagreement with such unique standardized national educational program, and the analysis of the collected data revealed the fact that the majority of respondents expressed their agreement (21 doctors, 50%) together with 6 other respondents (14.28%) who expressed total agreement, thus totaling 27 questionnaires (64.28%) with a positive attitude towards such an educational approach. 7 neutral opinions (16.66%) were recorded from people who chose to express neither agreement nor disagreement with this topic. Respondents who expressed an opinion of disapproval are less represented – 8 questionnaires completed as follows: disagreement (6 doctors, 14.28%) and, respectively, total disagreement (2 doctors, 4.76%), the results being shown in Figure 14.

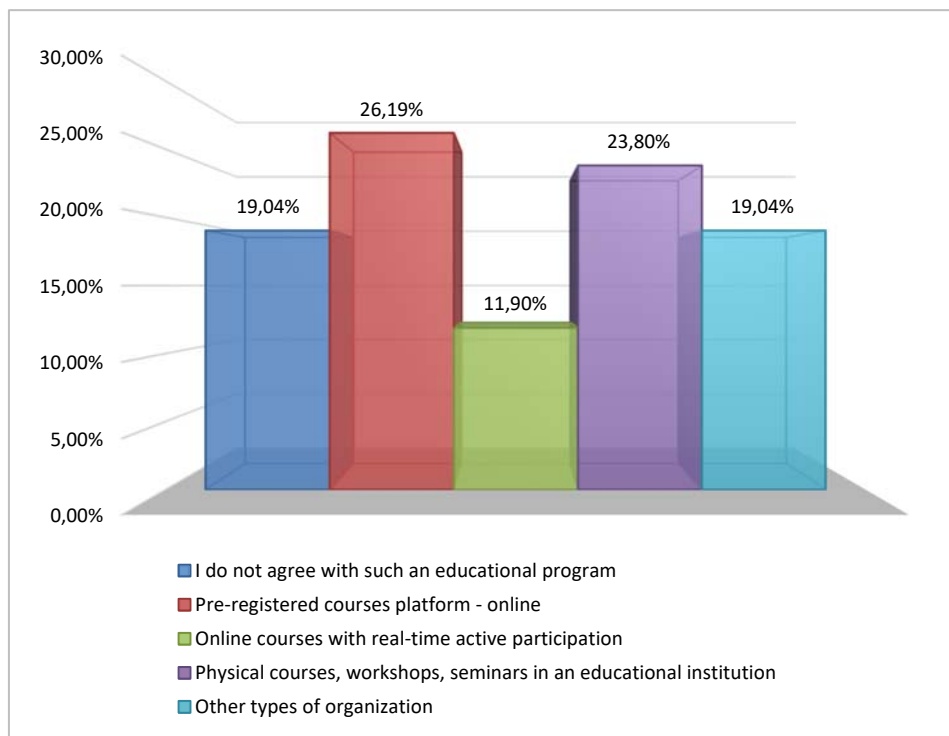
**Figure 14.** Distribution of respondents according to their own perception regarding the implementation by the authorities of a unique standardized national educational program in health management



Regarding the structure of such a unique national educational program for the qualification of hospital managers, in Figure 15 presented below are illustrated the data related to the analysis of the respondents' own perception of what would be easier to follow in practice by the medical staff with management positions as follows: most doctors consider it easy to follow a training that is based on a platform of pre-registered courses, program followed exclusively online (11 doctors, 26.19%), while almost the same number of respondents (10 doctors, 23.80%) consider more effective an educational program with a classic structure that includes physical courses, workshops, seminars, all of which are held in an accredited institution. Only 5 respondents (11.90%) mention that the structure of a doctor's qualification program would require online courses with real-time active participation.

There were 8 questionnaires (19.04%) illustrated above in Figure 14 who did not agree to such a single standardized national educational program for the qualification of hospital managers. From the research of the answers it was noted that in the "Others" category, with reference to other types of organization among the 8 questionnaires (19.04%) were suggested: a mixed structure that would include common courses and individual projects that require individual study; 1:1 mentoring sessions in this sense, there is a list of accredited people on a platform where the learner chooses under the guidance of whom he wants to learn directly, partnerships with institutions from abroad with real-time online studies with structure and type model case studies and others.

**Figure 15.** Distribution of respondents according to their own perception of which structure of the educational program managers believe would be easier to follow in practice



In the following, the most important results of this research are summarized:

- Most of the medical personnel with managerial positions who completed the questionnaire were male (29 men, 69.05%).
- Medical staff with management positions are mainly over 45 years old (22 doctors, 52.38%).
- Most of the respondents to the valid questionnaires are doctors who followed additional postgraduate studies through master's or doctoral programs in the field of health management (37 doctors, 88.09%).
- Most of the medical staff with managerial positions surveyed, mainly the respondents held the position of hospital manager/CEO (25 respondents, 59.52%).

- Most of the respondents have a seniority in the position held between 3 and 10 years (29 doctors, 69.04%).
- Most of the doctors included in the study (22 doctors, 52.38%) work in a governmental state hospital.
- Most hospitals where the respondents work (18 health facilities, 42.85%) have a capacity of more than 100 beds.
- Large hospitals with more than 100 employees (18 health facilities, 42.85%) represented the most frequent workplaces among the respondents.
- The majority of respondents have a diploma or certificate obtained in Romania following an educational program such as an accredited course, master's program, doctoral program or similar in the field of health management (34 doctors, 80.95%) regarding the level of academic training prior to occupying the current position.
- Most respondents attended accredited courses outside the hospital where they work (29 doctors, 69.04%) since occupying the current management position.
- Most of the respondents intend to participate in a unique national standardized educational program in the field of health management (40 doctors, 95.23%).
- Regarding the subjective perception of which qualities and skills the subjects claim to acquire and help them achieve performance, the majority of respondents consider it important that they possess the ability to be a resource-oriented employee (31 doctors, 73.80%).
- When analyzing the perception of which qualities and skills the subjects believe they do NOT possess, but having them could help them achieve the proposed objectives, most of the respondents consider the theoretical knowledge obtained through studies in the field of health management to be important (31 doctors, 73.80%).
- The research on the subjective perception of the respondents to the implementation by the authorities of a unique standardized national educational program for the qualification of hospital managers highlights that the majority of respondents (27 questionnaires, 64.28%) showed agreement, respectively full agreement.
- Regarding the structure of such a unique national educational program for the qualification of hospital managers, most doctors consider it easy to follow a training that is based on a platform of pre-recorded courses, a program followed exclusively online (11 doctors, 26.19%).

#### 4. Discussions

Following the analysis of the data collected through this opinion survey, especially the free-response items that provided significant suggestions, and taking into account the specialized literature covered in Figure 16 below, we have designed a set of key values and skills that an employee with management positions in a health care facility should acquire them.

**Figure 16.** *The proposed set of leadership skills for hospital managers*

**Source:** representation of the author.

In Table 1 below are presented the main strengths and weaknesses that can be improved in this study.

**Table 1.** *Presentation of the main strengths and weaknesses that can be improved in this study*

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>▪ The present questionnaire can be adjusted and used as a pilot study for the design of research to determine the most cost-effective nationally standardized educational program for the qualification of medical personnel with managerial positions in hospitals</li> <li>▪ The first part of the questionnaire that collected demographic data was comprehensive in order to compile a profile of the employee with management positions in Romanian hospitals, all of which is useful information in designing an educational program</li> <li>▪ The open-ended questions provide valuable suggestions for the design of a unique national standardized educational program for the qualification of medical personnel with managerial positions in hospitals.</li> <li>▪ It does not require ethical consent from the authorities because it does not involve studies with patients.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The small number of respondents (42 valid questionnaires) is not enough to get an overview of the researched topic, so it is necessary to fill it out by more subjects</li> <li>▪ The distribution of the questionnaire was done over a short period of time (three weeks), so in order to have more data collected, a longer period of time is required for the accumulation and recording of information</li> <li>▪ The questions need to be adapted to the management position occupied (e.g. a head of department/section will be more open to a training course on how to manage his section, not the whole health unit)</li> <li>▪ Section 3 of the questionnaire contains only 2 items and it is essential to be improved by adding new questions to include the suggestions received through the free responses from the pilot study</li> <li>▪ Require consent approval from the authorities to apply such a tool on a large scale (at national level) when there is an intention to use the results to design a pilot study</li> <li>▪ The statistical interpretation of the data can be deepened, for example to test the hypothesis that managers of large hospitals (with more than 100 beds) are the majority group that clearly expressed their agreement to follow a qualification educational program.</li> </ul>

**Source:** original work, according to the author.

## 5. Conclusions of the study

The scientific approach in this research has established the critical need for both informal and formal health management training for health managers and that this training needs to be applied as soon as possible to enable health management staff to effectively manage effectively the enormous responsibilities of the health sector and of health facilities in particular. The focus on accredited training should be on younger managers who are less likely to have already received such educational training, on smaller healthcare facilities (with lower bed capacity and fewer staff) and private hospitals and clinics that are less likely to encourage such training among their staff and not least the less academically trained senior medical staff among health managers. Finally, health management training should become a requirement for promotion to managerial staff in our health system and hospitals, especially to enable its application by managers with administrative responsibilities. Moreover, the periodic renewal of the right of free practice by the College of Physicians for doctors occupying management positions in Romanian hospitals should require some training in hospital management to reduce the gap in their health management capacity.

For health facilities in low- and middle-income countries, improving organizational learning culture is a particularly critical goal. In health care systems that are limited in their ability to use expensive drugs and technologies, achieving performance can only be possible through a hospital culture that maximizes the impact of available resources. Learning strategies that enable hospital staff to provide more prompt and effective care may be particularly important in resource-constrained systems. In today's era of global communication and knowledge sharing, these goals have never been more achievable.

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## Appendix 1

### Applied questionnaire

No.	Applied questions
1.	Female or male gender?
2.	Age: - 25-35 years. - 35-45 years. - 45-60 years (category over 45 years, without age limit if the selection criteria are met).
3.	What kind of academic background do you have? - License from a Medical University in Romania - Postgraduate diploma (by completing a residency in Romania) - Additional postgraduate studies (Master's/PhD completed in Romania) - Other (please specify)
4.	Management position currently held? - Hospital manager/CEO - Administrative/economic director - Medical director - Head of hospital department/section
5.	Experience in the management position currently held? - less than 3 years - 3-10 years - more than 10 years
6.	What type of healthcare facility do you work in? - Public hospital (governmental, managed by the municipalities) - Private (non-governmental) hospital - Other particular situation (please specify)
7.	Number of beds in the health institution where you work? - Less than 50 beds - 50-100 beds - More than 100 beds
8.	Number of employees in the health institution where you are employed? - Less than 25 employees - 25-100 employees - More than 100 employees
9.	Have you received any accredited training in the field of healthcare management prior to employment in your current position? - None - Diploma/Certificate obtained in Romania - Other (please specify)
10.	Have you received any training of any kind in the field of healthcare management since you have been employed in your current position? - None - Continuous training (workshops, seminars, etc.) within the managed hospital - Accredited courses outside the hospital - Non-certified courses/Mentoring - Other (please specify)

11.	Do you plan to attend any educational training programs in the field of healthcare management in the next 5 years? - Yes - No
12.	What qualities/skills do you think you possess and help you achieve a positive example of management within the hospital where you hold a management role? (multiple answers possible) - Theoretical knowledge (studies) - Communication, Empathy and Team Spirit - Focus on obtaining resources and managing available ones - Adaptability to new changes - Other (please specify)
13.	What traits do you feel you do NOT possess, but by improving them will be useful in achieving a positive example of management in the hospital where you hold a management role? (multiple answers possible) - Theoretical knowledge (studies) - Communication, Empathy and Team Spirit - Focus on obtaining resources and managing available ones - Adaptability to new changes - Other (please specify)
14.	Do you consider it necessary for the authorities to implement a unique national educational program in the field of health management? 1. Totally agree 2. Agreement 3. Neutral (indifferent, neither agree nor disagree) 4. Disagreement 5. Totally disagree
15.	What structure of such an educational program do you think would be easier to follow in practice? - I do not agree with such an educational program - Platform for pre-recorded courses followed exclusively online - Online courses with real-time active participation - Physical courses, workshops, seminars within an accredited institution - Other types of organization (please specify)