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NECESSITY OF HUMAN RESOURCES PLANNING IN THE WORK OF A HEALTH INSTITUTION

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Abstract. Many of the challenges that health organizations face today are different in their work and depend on the regulations of changes in business, competition, but also the insufficient amount of all resources. The main goal of health organizations is to achieve a high quality of service. Today, the health sector is facing competition that leads to the need to gather information about current and potential users of adequate medical services. The efficiency and quality of the services provided by health institutions is largely determined by the qualification of the staff and the quality of the work team. This should be set in the conditions of increased need for better and more accurate diagnosis of various diseases and better treatment of patients. Therefore, the leaders of the organization of the health institution have a difficult task regarding the application of strategic management in order to best organize good working conditions in the team and create success in the treatment of patients. The success that the health institution will achieve depends on the education of employees, but also the application of new technologies, but also the procurement and provision of modern and adequate equipment. All this together can lead to significant and notable results in treating patients and achieving success and progress. An appropriate strategy is needed that will be implemented, but also overcome the challenges of today. That is why human resource management is one of the important tasks for an organization to survive in a changing environment and achieve success. There are three important goals in this. First of all, it is necessary to solve the problem and define the concepts related to the process of human resource planning. The second part is the one related to achieving competitiveness and specificity of the health institution. The third part included continuous training of health workers through scientific research, education and training and adaptation of innovations in health. Based on all the achieved results, it is necessary to draw conclusions and provide guidelines for further work, which indicates the need for continuous monitoring and constant creation of plans for the future.

Keywords: health institutions, human resources

1. Introduction

There are a large number of challenges that organizations face today in their business, which are of different natures such as regulatory regulations, changes in business conditions, competition, insufficient resources and the like. The imperative in the field of health is high quality of service.

The health sector is characterized by competition that leads to the need to gather information about current and potential users of adequate medical services. The efficiency and quality of services provided in health care institutions is largely determined by the qualifications and quality of the workforce. In addition to the above, it is necessary to point out changes in medical diagnosis and treatment. For these reasons, managers have a difficult task regarding the application of strategic management in order to create the best organizational climate, which will be stimulating for employees and thus the organization will achieve remarkable results. The success that the organization will achieve depends on the characteristics of the work team: knowledge, learning abilities, skills. This will distinguish one organization from another, on the one hand, while on the other hand these and other characteristics are the reasons for gaining a competitive advantage. An appropriate strategy is needed to be implemented, but also to overcome today's challenges. That is why human resource management is one of the most important tasks in order for an organization to survive in a changing environment and stand out in a sea of others.

2. Human resource planning

In recent years, there has been a need to strengthen policies aimed at health workers in order to improve the success of the health system as a whole. This would lead to greater availability, safer and better services. This strategy is the right choice, bearing in mind that the success of the health system as a whole is determined by the quality of human resources. Human resource planning must be part of the growth strategy of the health institution itself. The focus on human resources is very important, namely, it is about resources that:

- Unlike other resources, they can put into operation all available potentials in order to complete the work task,
- b) The combination and their direction should be in such a relation that the effect that is realized as a whole, is greater than the individual effect.

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- Human resources are the only resources that can provide a synergy effect,
- Human resources can only change the vision, create a strategy, create and realize an idea, design a new product,
- d) Knowledge, skills and qualities of a person can be observed and presented as potentials of the organization if they are aimed at achieving the goals of the organization,
- e) These resources have a long-term impact on the business of the organization due to the action of certain decisions,
- f) The attitude of the organization to the action of human resources can be viewed from the economic, social and health aspects,
- g) Resources are characterized by the possibility of self-renewal and development,
- h) Investing in human resources is the most profitable investment [1].

All these characteristics point to the conclusion that human resources can be seen as a way to achieve competitive advantage. Human resource planning is defined as timely forecasting of human resource needs by occupations, professions, number, qualifications, deadlines for that fulfillment, financial investments. The literature most often talks about three levels of planning:

- Level of organization at this level the most important is the general importance of personnel, working conditions, elements of personnel policy,
- Level of organizational units at this level decisions are made on the allocation of resources by organizational units,
- 3. The third level is focused on the distribution of staff by function and their organizational segments [2].

In order to get a true picture of the labor market, human resource planning is applied. The data obtained by internal and external analysis are shown in the following table:

Table 1. Results of internal and external data analysis

Internal analysis **External analysis** Number of Degree of employment in a employees particular field Qualification and Unemployment by profession age structure Educational institutions in a place Years of service or a specific region Number of workers Percentages of employee transfers in the same job from one organization to another Career development review Improvement **Progress** Performance evaluation Employees with potential for advancement Employees before retirement

Source: D. Ječmenica, L. Barjaktarović, (2012), Human Resources Planning, Operational Management in the Function of Sustainable Economic Growth and Development of Serbia, 2011-2020, Eighth Meeting of Businessmen and Scientists, p. 157.

All information collected is used to meet the need for human resources that are in line with the planned activities. Sometimes the main disadvantage of this type of collected data is the huge time period. The need to employ human resources is short-term, so it is necessary to overcome this time difference. Characteristics that must be taken into account, which may indicate a disruption of the human resources planning process, relate to:

- Unpredictability of people's behavior that can limit the power of control;
- 2. Uncertainty of market developments;
- 3. Insufficient information used after the planning and decision-making process;
- 4. Plans that become obsolete in a dynamic environment [3].

The human resource planning process itself can be explained in the following order:

- Defining the stage of the life cycle of the company for which the planning process is performed;
- Determining the type of organizational culture related to the life cycle and tasks of the human resources department;
- Study of the strategic plan of the company with the mission, strategic options, goal, way of achieving the goal through plans and action plan;
- Linking the life cycle of the company, organizational culture, production plan with the state of employees, in order to determine the overall human resources problems to which it is necessary to focus the planning process;
- Linking the basis of the human resources plan with the strategic plan of the company;
- Application of one of the planning methods (short-term, medium-term and long-term), number and profile of the required work team;
- Monitor the implementation of the plan and take corrective action if necessary [4].

3. COMPETITIVE ADVANTAGE IN HEALTHCARE

Healthcare and the institutions of our national economy can be greatly improved and the level of functionality and efficiency increased through innovation and competitive advantage. In order to achieve a competitive advantage, one of the solutions would be to connect entities in the form of clusters so that all members of health care, faculties, institutes, associations to help individuals and pharmacy institutions achieve the best results. The synergistic effect of all these entities will have multiple effects on the entire system. Knowledge, skills and experience enable sustainable development of the system as a whole, act on the construction of infrastructure and raise the level of quality in the networking process. If we look at the last thirty years of the development of medicine, there are a large number of processes to which the medical sciences have been exposed. Numerous challenges were noted in the process of resource management and managerial activities, which were primarily related only to economic activities. Global changes have led to the transformation of healthcare, which has imposed a change in the entire business process, which has been reflected in the process of providing services. Health and health care are basically humanistic and have always had conflicting interests between the business principle on the one hand and the common interests of health care on the other. The comparative advantage of health care, health care institutions, institutions, faculties are based on at least three aspects:

- 1. Specialization;
- 2. Cooperation;
- 3. Functional efficiency [5].

Specialization is a critical success factor related to resources, their best use and management. Through specialization, the goal is to ensure continuity in training. It is achieved through teamwork and learning, management and knowledge exchange. Cooperation leads to survival in the process of sustainable development because it is based on the principles of market business. Through cooperation, the best possible limited resources should be used in order to achieve success in conducting business activities. Competence, openness, connection and cooperation with others are the main features of medicine and health, which creates the basis for the process of creating a competitive advantage.

4. QUALITY-CHARACTERISTICS OF HEALTH

Standards in business are changing, the process of globalization requires the adjustment of business processes, while digitalization and the growing presence of technology leads to the improvement of processes. All this has affected the health care, which imposes appropriate changes. One of the basic operational goals is to improve the results and quality of the system in the provision of health services. The organization as a whole must recognize and manage all activities in order to achieve appropriate action. The best answer to all these changes is the application of a process approach, and health is one of the activities that can give adequate results.

At the center of providing health services, their quality and achieving competitive advantage are patients as end users in order to achieve a certain level of satisfaction. The entire organization is included in activities that contribute to increasing value. From the management of the health institution, the way of using resources, the process of measuring the actual with the planned situation, the needs change in the process of providing health services in order to achieve the mentioned satisfaction. The primary goal is continuity in the quality management system, and the basis for that is a quality personnel structure. Teamwork of employees, identification of problems to be solved is based on the analysis of collected data. The initial phase in improving quality in healthcare is learning about the quality system, the methods used to achieve the best results.

${\bf 5.~WAYS~TO~ACHIEVE~COMPETITIVENESS~OF~HUMAN~RESOURCES~IN~HEALTH~CARE}$

The competitiveness of health care is determined by the readiness of employees for the process of training and education. The institution itself should be a stimulating environment when it comes to continuing professional development. It depends on the mission of the institution which parts of training and education will be given the greatest importance in the process of creating a business strategy. In order to realize the vision, as well as the planned business activities, a comprehensive strategy for the development of infrastructure is needed to achieve competitiveness and create a basis for improving health. Some of the factors that affect the sustainable development of health are:

- The quality of the multidisciplinary approach in diagnosis and treatment,
- Organization of research work with educational institutions and other educational institutions,
- Permanent harmonization of formal and nonformal health education,
- Development of health and information technologies,
- 5. Development of key knowledge and skills in health care,
- 6. The level of commitment of employees to the goals of the organization [6].

5.1. Research and scientific activity

This segment refers not only to the educational part, but also to the research of the occurrence of diseases, diagnosis, treatment and prevention of complications. Institutes together with medical faculties, research centers, clinics, clinical centers and other similar entities have a key role in the process of research development. The development of the capacity of hospital institutions in terms of research activities should be directed towards research in terms of diagnostics, disease prognosis, pre-clinical research and the like. Particular work should be done to maintain relations with foreign partners, especially at European level, in order to improve existing knowledge and technologies. IPA, pre-accession European funds and other entities such as award-winning institutions are of great importance here. Mentoring through experience with specialists and trainees enables the development and application of scientific work. All this leads to the emergence and development of a quality future work team, and therefore in the process of human resource planning must take into account the education and connection of institutions in order to achieve the best quality for end users of services. In order to achieve the greatest possible benefits for all parties in the process of providing health services, it is necessary, above all, adequate education and training of employees.

5.2. Education and training of employees

Information today is one of the most important resources that is of immeasurable value in relation to numerous material resources. Knowledge is the most important resource of any institution, regardless of its usefulness for society, and is acquired in the learning process. Its most important bearers are members of the working collective. The value of knowledge is especially related to educational institutions and service activities. It is the basis for future work activities. Through education, knowledge increases, and its application achieves certain economic results. For these reasons, it is considered a factor of competitive advantage. In order for the economy as a whole to develop, knowledge is necessary. With formal education in the field of medicine, a person becomes able to work. Sometimes there is a huge time gap between investing in knowledge and the effects of its manifestation. The basic characteristics of knowledge that make it competitive for the organization are:

- Uncontrolled spread, because knowledge is easier to transfer even than money,
- Vertical mobility because it is accessible through formal and non-formal education,
- Knowledge is the potential for success, it is the basis of work and it is possible to achieve huge benefits if used in the right way [7].

Through the model of continuing education (the concept of lifelong learning) knowledge keeps pace with change. In health care, continuing education is set as the most important postulate for the development of all employee skills. Formal and non-formal education through the concept of lifelong learning is needed in order to improve or build certain skills, diagnostics, clinical examination, evaluation. Numerous trainings, periodic renewals of work licenses, are just some of the ways to continue educating employees. Education at the level of the health institution affects the quality of patient treatment, faster and better results, better teamwork, and more equal role in the team. Depending on the institution in which the worker works, as well as the position, the period of training and their frequency will be determined. Through the courses, it is possible to use news from practice and their transfer to employees, as well as safe implementation in the practice of providing health services.

Reasons why managers must consider the learning process and the use of knowledge relate to:

- Finding the fund of explicit and implicit knowledge available to the organization (do we know what we know),
- Development of mechanisms for the formation and development of information and database, as well as their use (knowledge of knowledge),
- Identifying gaps in knowledge and mechanisms for filling them in the process of recruitment, retraining and development (what we do not know),
- Investing in knowledge, knowledge bases and monitoring the effectiveness of that investment [8].

Regardless of the activity, education and training are the two basic postulates of professional development and monitoring change. Also, they can be considered as a way to achieve a competitive advantage. Acquiring knowledge within educational institutions is a very important, but also a responsible task of both educational institutions and future staff who will provide health services. Due to the growing division of labor in health care, the need for training and the acquisition of skills that are specific to a particular field of medicine, as well as the acquisition of a large number of new competencies, has led to changes in education. The application of new ways of education in the world has contributed to the manifestation of certain advantages related to:

- Ability for students to adapt the content of teaching to their pace of learning,
- Possibility of self-assessment for students and lecturers through educational tasks and quizzes as an integral part of education,
- Ability to receive feedback,

- Possibility of interaction with the lecturer,
- Ability to discuss and answer questions when they arise [9].

The institution itself should create the right strategy for employee education and find the right balance between congresses, courses, self-education and other forms of knowledge acquisition. Congresses are a way of gathering experts from medical fields and the possibility of using scientific events with examples from practice. Through self-education, using various literature, it is possible to gain insight into news from the profession, while on the other hand, practical training is the best way to upgrade knowledge and skills. In addition, it is necessary to develop so-called soft skills such as cooperation, communication. All this leads to the creation of a competitive advantages and opportunities for employees to learn better than employees of another institution.

5.3. Change and human resources

Today, a large number of companies and activities are facing change. The ability to adapt to change is a feature of human resources and there is a need for proper management. Involving employees in a timely manner in the process of change in an appropriate way is the only right answer. The three categories of human resources that can be involved in the change process are:

- Change strategists the responsibility of this group lies in initiating change and their role is crucial in the initial stages of change;
- Change implementers a group directly responsible for implementing change. This process is considered to be more demanding compared to the first category;
- Recipients of change resources that are affected by change and that accept it depending on their character and how they present themselves [8].

The key to surviving and maintaining a competitive advantage is to embrace change and act as best you can in the face of change. Sometimes change leads to resistance, and depending on the approach of the manager and how the change is presented, the reaction to it also depends.

$\bf 6.$ Competitiveness of human resources of the Republic of Serbia

According to the data published on the World Health Day on April 7, 2021. year, the World Health Organization has determined that per 10,000 inhabitants that make up the population of our national economy, an average of 31.25 doctors come, which positions us highly in the world and represents an increase compared to 2020 when the number was 29.1.

According to the Agenda, the goal is to increase funding in the field of health, recruit, develop, train and retain health workers, which is especially important for developing countries [10]. The Serbia 2030 report shows the readiness of our national economy for the implementation of the 2030 Agenda, which emerged as a result of civil society organizations, as the backbone of the Platform for Public Dialogue on Implementing

Sustainable Development Goals in Serbia ("Sustainable Development for All"). Medical staff statistics also support our national economy. The results show that the number of nurses and midwives per 10,000 inhabitants is 60.86, which ranks us 55th out of a total of 194 economies. The goal of the health system, which is especially emphasized on the occasion of the World Health Day, is to support health workers (especially in today's conditions), the standard and quality of health services in order to preserve human health. The implementation of the Agenda began with its adoption in 2015 and includes 17 goals of sustainable development. All of the above is the basis for the harmonization and direction of public policies and activities that contribute to achieving the goals of sustainable development. The goal under number three, which refers to ensuring a healthy life and preserving people's health, is especially emphasized. The Republic of Serbia is implementing the Agenda with the support of Germany and Switzerland thanks to the Public Finance Reform - Agenda 2030 project.

The third goal, which refers to ensuring a healthy life and preserving people's health, has only partially become part of the national goals. The universal coverage of the health care of the Republic of Serbia is achieved through the obligatory health insurance of all employees, the self-employed and their families, and the state provides insurance to certain groups. Resource equipment (number of doctors per capita, number of hospital beds, etc.) is above expectations for comparison according to United Nations indicators [11]. In order to achieve the goals of sustainable development as needed, the cooperation of all institutions is necessary. A special segment that must be taken into account concerns healthcare employees. The reason in favor of that is that the health system does not follow demographic changes and current trends. There is a large number of uncovered areas with health care, which emphasizes the importance of the personnel structure. Changes in the demographic structure are not sufficiently taken into account when drafting personnel plans, they are mostly the result of data that do not reflect the real situation and are often dry without significant value. The importance of focusing on employees in the health sector stems from the increasing number of migrations, which is especially evident because the Republic of Serbia is still not part of the European Union. Insufficient structure in some areas is noticeable, as well as predictions that such a trend will continue [12]. In addition, inequality in the development of local selfgovernment units must not be neglected, so the quality of staff in less developed areas and the quality of health services provided must be taken into account. All this leads to an even greater need to invest in the personnel structure.

If the number of dentists per capita and competitiveness at the district level are observed, service users will turn for help to a territorial unit that has a larger number of qualified professional staff, better infrastructure, more hospital beds and the like. The service in such institutions is of better quality, faster, the number of days spent in the treatment process has been reduced, and customer satisfaction is higher. For the end result, it will contribute to the increase competitiveness of the observed territorial unit and greater trust in it, while others will have to fight to improve their position through greater investment.

7. CONCLUSION

Global changes have brought changes in a large number of activities, so the medical sector was not excluded. In order to survive, and having in mind the seriousness of the services, continuous training and education is necessary. Quality staff is the basis for providing quality services, with the end user being at the center of all activities. In the planning process, the task of the manager is to provide the appropriate work team in order to provide the best for the users. Specialization, cooperation and functional efficiency arise if the planning process is carried out as planned, i.e. if a quality work team provides appropriate services. Education, self-education, training and courses lead to constant upgrading and acquisition of new skills.

Planning in the right way leads to the selection of adequate people in the right place, as well as to the responsibility for achieving or not achieving a certain organizational goal. The success of an individual refers not only to what he has achieved in a certain position, but also to the quality of the entire hierarchy. Everything in the organization is connected, both employees and activities. If one link is not appropriate, then material and quality losses are provided.

Given the complexity and specificity of services at the primary, secondary and tertiary levels, the selection of staff regardless of the tasks performed is a key but also a critical factor in the success of the health institution. In addition, if we look at the district level of our national economy, health systems are mutually competitive. The services provided must be of appropriate quality. The basis for providing services is the personnel structure, so there is a great responsibility on the management and on the employees themselves. Both the individual and the team as a whole need to act synergistically to achieve the best possible results. It is necessary to take into account all the ways of improving skills and changes that are inevitable, because the survival of the system as a whole is largely determined by all factors.

REFERENCES

- A. Stanković, M. Pećić, B. Ostojić, "Važnost ljudskih resursa u poslovnom odlučivanju," Vojno delo, Upravljanje sistemima, vol. 70, br. 7, str. 431 – 446, 2018.
 (A. Stanković, M. Pećić, B. Ostojić, "The importance of human resources in business decision-making," Mil. work, Syst. Manag., vol. 70, no. 7, pp. 431 – 446, 2018.) DOI: 10.5937/vojdelo1807431S
- 2. P. Jevtić, Lj. Stošić-Mihajlović, J. Starc, "Kadrovske funkcije top menadžmenta," и Zborniku radova 10-te Међународне мајске конференције о стратешком менацменту (IMCSM 2014), Bor, Srbija, 2014, str. 533. (P. Jevtić, Lj. Stošić-Mihajlović, J. Starc, "Personnel functions of top management," in Proc. 10th Int. May Conf. Strateg. Manag. (IMCSM 2014), Bor, Serbia, 2014, p. 533.)

Retrieved from:

http://media.sjmo6.com/2014/07/Final-IMKSM14_Book-of-Proceedings.pdf

Retrieved on: Mar. 15, 2022

3. J. Jaganjac, "Planiranje ljudskih resursa u funkciji uspješnosti na radu," *Tranzicija*, vol. 12, br. 25 – 26, str. 137 – 145, 2010.

(J. Jaganjac, "Human resource planning in the function of success at work," *Transition*, vol. 12, no. 25 – 26, pp. 137 – 145, 2010.)

Retrieved from: https://hrcak.srce.hr/clanak/95200#

Retrieved on: Mar. 15, 2022

- S. Marušić, "Politika ljudskih resursa za europsku konkurenciju", *Privredna kretanja i ekonomska politika*, vol. 11, br. 88, str. 29 - 51, 2001.
 - (S. Marušić, "Human Resources Policy for European Competition", Eco. Trends Eco. Policy, vol. 11, no. 88, pp. 29 – 51, 2001.)

Retrieved from: https://hrcak.srce.hr/18788 Retrieved on: Feb. 21, 2022

- A. Gračanac, "Klasterizacija u zdravstvu," PONS-Medicinski časopis, vol. 9, br. 3, str. 114 – 115, Sep. 2012. (A. Gračanac, "Clustering in the health care," PONS-Med. J., vol. 9, no. 3, pp. 114 – 115, Sep. 2012.) Retrieved from:
 - https://www.ponsjournal.info/pons-casopis/pons-

Retrieved on: Feb. 21, 2022

- M. Čavlin, S. Ignjatijević, G. Čavlin, "Savremeni koncept upravljanja performansama javnih zdravstvenih ustanova u Republici Srbiji," Vojno delo, Upravljanje sistemima, vol. 67, br. 4. str. 301 - 316, 2015. (M. Čavlin, S. Ignjatijević, G. Čavlin, "Modern concepts of
 - performance management of public health institutions in the Republic of Serbia," Mil. work, Syst. Manag., vol. 67, no. 4. pp. 301 – 316, 2015.)

DOI: 10.5937/vojdelo1504301C

A. R. Boljević, J. D. Premović, V. R. Stojanović-Aleksić, "Ljudski resursi kao faktor kreiranja konkurentskih preduzeća, prednosti turističkih Tehnika Menadžment, vol. 69, br. 1, str. 145 – 150, 2014. (A. R. Boljević, J. D. Premović, V. R. Stojanović-Aleksić, "Human resources as a factor of creating competitive

advantages of the tourism enterprises," *Tech. – Manag.*, vol. 69, no. 1, pp. 145 - 150, 2014.)

DOI: 10.5937/tehnika1401145B

- Đuričin, S. V. Janošević, Đ. M. Kaličanin, Menadžment i Strategija, 4-to izdanje, Beograd, Srbija: Centar za izdavačku delatnost Ekonomskog fakulteta, 2009, str. 72.
 - (D. N. Đuričin, S. V. Janošević, D. M. Kaličanin, Management and Strategy, 4th ed., Belgrade, Serbia: Center for Publishing Activities of the Faculty of Economics, 2009, p. 72.)

15 Active-learning Strategies, USC Center for Excellence in Teaching, Los Angeles (CA), USA. Retrieved from:

https://cst.usc.edu/teach/strategies/the-invertedclassroom/

Retrieved on: Mar. 19, 2022

10. Dobro zdravlje: Cilj 3. Obezbediti zdrav život i promovisati blagostanje za sve ljude svih generacija, Indikatori ciljeva održivog razvoja, Njujork, SAD, 2017. (Good health and well-being: Goal 3. Ensure healthy lives and promote well-being for all at all ages, Sustainable Development Goal indicators, New York (NY), USA, 2017.)

Retrieved from:

https://sdg.indikatori.rs/sr-latn/area/good-health-and-

being/?subarea=SDGUN031201&indicator=031201IND

Retrieved on: Mar. 19, 2022

Србија и Агенда 2030: Мапирање националног стратешког оквира у односу на циљеве одрживог развоја, Републички секретаријат за јавне политике, Београд, Србија, 2018.

(Serbia and Agenda 2030: Mapping the national strategic framework in relation to the goals of sustainable development, Republic Secretariat for Public Policies, Belgrade, Serbia, 2018.)

Retrieved from:

https://rsjp.gov.rs/wp-content/uploads/Agenda-UN-2030.pdf

Retrieved on: Mar. 19, 2022 T. Radosavljević, "Demografski trendovi i kadrovski potencijal Srbije," predstavljen na *Demografski trendovi* i kadrovski potencijal Srbije, Beograd, Srbija, Maj 2013. (T. Radosavljević, "Demographic trends and personnel potential of Serbia," presented at the Demographic trends and personnel potential of Serbia, Belgrade, Serbia, May 2013.)

Retrieved from:

https://www.rlkbg.org.rs/images/docs/demografskitren dovi.pdf

Retrieved on: Mar. 19, 2022