ABSTRACT:
The planning may be determined as prediction and prognosis making of human resources in a long-term plan, in conformity with the aims of the particular healthcare institution. It is prepared by the medical manager based on different analyses and prognoses with the purpose of ensuring the needed number of human resources. The aim of the study is an exploration of some of the reasons for the shortage of human resources in the healthcare system. In order to be achieved the realization of the aim set, a task was assigned for analysis of the main aspects of human resource planning in the healthcare system. Data from available scientific sources on the subject were used; they were published in different scientific issues. The results from the study demonstrate that the human resource planning is usually determined by the volume of work, however, due to the specificity of the activities in the health care system, it is usually determined by the type of labor functions – basic, governing, assisting. The future needs of personnel are fully determined by the mission, strategy, and aims of the organization. A conclusion may be drawn that the human resource planning is a necessary condition for effective management of human resources, and it has a significant and decisive role in the prosperity of the particular hospital.

Keywords: planning, health care institution, human resource, personnel, motivation

INTRODUCTION
The planning may be determined as prediction and prognosis making of human resources in a long-term plan in conformity with the aims of the particular healthcare institution. Implementation of determining and planning of human resources is necessary both for the healthcare institution as a whole and for its individual structural units (Consultancy & Diagnostics Block, Hospital Block – Clinics, Clinical Departments, Sectors, Pharmacy, Administrative & Economic Block). The human resource planning is implemented by a medical manager, based on analyses and prognoses, with the purpose of ensuring of the needed number of human resources (positions on the pay-roll) with certain skills, qualification, and competence, which will be necessary for the normal course of the working process in the respective health institution for fulfillment of the short-term and long-term strategy of the medical manager [1, 2].

MATERIAL AND METHODS
The aim of the study is an exploration of some of the reasons for the shortage of human resources in the health care system. In order to be achieved the realization of the aim set, a task was assigned for analysis of the main aspects of human resource planning in the healthcare system. Data from available scientific sources on the subject were used; they were published in different scientific issues.

RESULTS FROM THE STUDY
The following basic aspects of the planning of human resources may be summarized from the literature sources reviewed:

Activities on the planning of the necessity of personnel – numbers, structure, certain qualification, taking of positions according to the requirements, regulated in laws and sublegislative regulatory acts, certain competence and experience, as well as other requirements, determined by the employer. The human resource planning is a necessary condition for effective management of human resources, and it has a significant and decisive role in the prosperity of the particular hospital. The planning represents a prediction of the necessary human resources for work in the hospital, however, it concerns a long-term plan, according to the aims of the healthcare institution. The future needs from human resources for the healthcare institution are predicted in the planning; they are determined entirely based on the mission, strategy, and aims of the health care institution, and last – but not least – on the assessment of the rival activities of other healthcare institutions. When the health institution
comes under article 5 of the Law for Health Care Institutions, the executive body of the hospital must clearly formulate the parameters of the plan for human resources. In the planning, the medical manager must also intend the possible outflow of personnel, working in labor and legislative relations in the healthcare institution and to determine the number and necessary level of competence of the remaining personnel. Concrete plans – including the needed activities – are to be developed [3, 4, 5].

The periods of planning may be different and are usually related to the time of administration of the medical manager, who is a contracting party for control and governing of the health institution for three years according to the Law of Health Care Institutions. Human resource planning may also be done in a more short-term plan – one year. The planning of the necessary numbers of personnel for the respective health institution both in entirety, and in the individual structural units: Consultancy & Diagnostics Block; Hospital Block; Pharmacy; Administrative & Economic Block.

It must be performed based on analyses of the volume of work, work loading or based on standards (specifications) of the numbers for service of patients, regulated in law or sublegislative regulatory acts, interior labor regulations of the health institution. The determination of the volume of work in connection with performed or forthcoming structural changes in the health institution:

Merging – of two or more Sectors, Clinical Departments, Clinics. A motivated suggestion for the numbers and structure of personnel is necessary to be required from the person who governs the respective new unit; the latter suggestion must include the aims and tasks of the new unit, as well as the time needed for their execution in the everyday work for one labor day [5, 6, 7].

Division – of existing Clinical Department or Clinic into two or more structures. A motivated suggestion is to be submitted; the latter suggestion has to concern the numbers and structure of personnel in the new structural units, which also includes a description of the everyday tasks, feasible for one labor day, as well as the time for their execution. The adoption of new activities with the opening of new units in the hospital or adding of new functions in the already existing ones is to be undertaken. The volume of the work is usually determined in connection with the human resource planning, however, due to the specificity of the activities in the health care system, the volume of the work in a given structure of the health care institution is usually determined by the type of labor functions – basic, governing, assisting. The direct qualitative parameters and measures, or the use of indirect parameters is not usually applied due to the specificity of the work. The standards for time, and direct measurement of the expenses for a time in a given activity, also do not find the application. Based on the subject of activity of the hospitals, the aims and tasks, and the strategy for governing, the medical manager also needs to determine, the needed competencies of the numbers of personnel. For that activity, he/she must get acquainted with the functional and job descriptions, and be clear as to what possible changes he/she would like to implement. Based on the functional and job descriptions, the competences - which the healthcare professionals must have – are determined. The so-called “framework of competence” or “profile of competence” – which the healthcare professionals must have – is most frequently used. “The framework of competence” may have a different degree of fragmentation into details. Individual “frameworks of competence” may be developed for the individual types and positions [8, 9, 10].

The planning of potential outflow of personnel, and establishing of the level of competence of the remaining personnel, usually comprises the prognosis of the employees, which are expected to discontinue their employment relations based on the following reasons:

Completing the insurance period and age for retirement. During the planned period by means of verification in the personal files of the employees, the number of persons – with forthcoming retirement – is easily found. Whether the employee will continue to work depends on the employer and on the person him-/herself; that has no relations to the completing of the insurance period and age for retirement, or to whether he/she wishes his/her working contract to be discontinued. The labor code provides legislative opportunity and - after the retirement of persons – they can work again under the labor agreement.

The discontinuation of the labor employment relation of the health care professional may be voluntary. That prognosis is more difficult for assessment, and it may be achieved in connection with the analysis of the reasons for vacating of healthcare professionals in past times. Important information for the reasons of vacating may be achieved by the so-called interviews on vacating. The study of the labor market may also provide an opportunity for such a prognosis. In connection with human resource planning, the medical manager must also perform establishing of the level of the competences of the present personnel. That analysis is performed on the correspondence between the competences - that the personnel has - and preliminarily developed a frame of competences:

- analysis of the performed medical activities based on the assessment of the fulfillment in the part which corresponds to the competences: individual methods for verification of the competence as practical examination, tests, etc.

- inquiry studies of the heads of Clinics, Clinical Departments, and Sectors, for the needed competences, which the health care professionals - administered by them - must have. The analysis of the competences must end with a list of persons taking the positions, raising most problems; these persons - occupying these positions - do not have the competence and qualification required for them [5, 9, 11].

In connection with the balance of the needs of human potential, continuing to work, the following hypotheses may be outlined:

- The necessity of medical personnel is equal to the personnel who would continue to work;

- The needs of medical personnel are bigger than the initial personnel, which may be necessary after restructuring of the health care institution;
• The needs of medical personnel are less than the personnel who will continue to work.

Upon the analysis performed, of course, different combined situations may be observed, and the medical manager will have to prepare and develop concrete activities, which must be undertaken in a certain period of time by taking the most adequate and correct administrative decisions, resulting from the known models for management of human resources. Another important component of the human resource planning is the balancing of the competencies in the healthcare institution. That is a necessary assessment, as well as the comparison between the competencies needed and competences which the personnel (that will continue to work) has. Based on the analyses, the medical manager must develop concrete plans for activities by means of the respective personnel. Concrete plans were developed:

• Structure, numbers (schedule of those permanently employed), and expenses for the personnel;

• Recruitment of new personnel — the positions for which recruitment of new personnel is necessary, potential sources of candidates, methods of selection, time for realization of the procedures of selection, appointment of new employees, persons who will carry the procedures of selection out, the financial resources which will be necessary;

• Training of the available personnel — the plans are most frequently of one-year duration;

• Discussion of the decisions for the introduction of flexible work time, flexible employment, and mobility of the personnel.

• Continuity and interchangeable opportunity — determination and differentiation of the positions which are determined as key for the healthcare institution. For them, the medical management is necessary to determine deputies of the available human personnel in the healthcare institution, who have the respective capacity for that [12, 13].

Upon necessity of decrease of the numbers of the personnel, the medical manager must prepare a nominal plan of the employees, which will be discharged. That plan must mark and consider the possibilities for alternative employment or prequalification of some of the medical employees, thus reducing the number of those discharged. Inclusion in a program for repeated structure formation, and also of compensatory programs, is to be implemented by outlining of the necessary financial means for that — as compensations for notifications, unused yearly vacations, etc. The program planned for a change in the healthcare institution is the ability of the medical manager to assess correctly the external and internal reasons that make it necessary, to do analyses, and to reach the regular decisions for changes, which are to be done imperatively. A clear definition is necessary to be done: What are its expectations after the change, and what is the aim of restructuring? The medical manager must perform determination and qualification of the organizational changes. He/she must clearly motivate the reasons, due to which he/she has done the structural changes in the health institution, and the solving of what problems by the latter changes is expected by him/her. He/she must be aware of what niches of the market the new structures may fit after the structural changes performed in the hospital. It must be analyzed, and prognosis must be done, what stream of patients is expected to seek medical aid in the hospital after the restructuring. Do such newly created structures duplicate with structures of health institutions close by distance, and what is the present rivalry in that sphere? In all cases, the medical manager must assess and discuss the possible sources of resistance, and it is best not to begin changes in the healthcare institution if they are not mitigated. [3, 14, 15] That usually is achieved by conversations with the working personnel, and presenting to them of the arguments for the overall strategy of the changes, the need, and expected results after its accomplishment. The resistance may be individual, production of personal interests of the particular health care professionals or organized resistance of workers, which happens most frequently, when the medical manager is not sufficiently convincing — he/she cannot protect his/her conception, and due to those reasons the healthcare professionals remain on opinion different from his/her. The medical manager must diligently study the arguments of the healthcare professionals for disagreement with his/her strategy of structural change, and sometimes that may be a reason for its change. Very frequently the reason for resistance of the employees in the health institution upon forthcoming restructuring is the medical manager him-/herself, who administers, gives orders from above of forthcoming changes, keeps strictly to the hierarchy in the hospital for achieving of information. Those old ways and methods of administration of health care institutions in all cases bring about anxiety, and no awareness of the employees for future changes, who respond with resistance. [4, 16] The medical manager must succeed in overcoming that resistance, mostly by providing detailed awareness to the health care professionals for his/her intentions and strategy for the change implemented. Only after managing of the internal resistance against the forthcoming changes in the healthcare institution, then the medical manager should begin to implement the restructuring. He/she must succeed in ensuring them that the current restructuring is good for both them and for the entire healthcare institution. The medical manager should not decide by him-/herself that the change is good for all medical employees, rather he/she must make efforts they themselves to get convinced of it. In the strategy for the restructuring of the health institution, besides the organizational changes, the medical manager must also develop a strategy by which indirectly to try to change the behavior of the healthcare professionals – administration by placing the accent on their skills, professionalism, dispositions, and expectations in relation to the new organizational structures. The human resource planning is directly linked to the determination of the priorities of the health care institution, as well as with the following steps, that the medical manager must include in the strategy and planning; they can be most generally grouped in the following way:

• To timely prepare the health institution for forthcoming structural changes as needed;

• To optimize the expenses for human resources and the usage of the qualities of labor power;

• To determine the aims in the sphere of personnel for a certain period of time for accomplishment of certain tasks;
To provide possibility for the employees to get acquainted with their aims and tasks as a part of the general priorities and mission of the health institution;

· To determine clearly the internal and external relationships with the purpose of increasing the effectiveness of work;

· To reveal for the heads - at different levels in the health institution - the components of the structural organization in the health institution and the possibilities for better awareness and the communication inside the hospital [1, 17, 18].

REFERENCES:
1. Barer M. New opportunities for old mistakes. Health Aff (Millwood). 2002 Jan-Feb;21(1):169-171. [PubMed] [CrossRef]
2. Marcotte L, Kirtane J, Lynn J, McKethan A. Integrating Health Information Technology to Achieve Seamless Care Transitions. J Patient Saf. 2015 Dec;11(4):185-90. [PubMed] [CrossRef]
3. Snell SA, Bohlander GW. Managing Human Resources. 16th Edition. South-Western College Pub. (January 1, 2012)
4. Royal College of Anaesthetists. The Role of Non-medical Staff in the Delivery of Anaesthesia Services. (2003) [Internet]
5. Horrocks S, Anderson E, Salisbury C. Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. BMJ. 2002 Apr;324(7341): 819-23. [PubMed]
6. Buchan J. Global nursing shortages. BMJ. 2002 Mar;324(7340):751-2. [PubMed]
7. Mello JA. Strategic Human Resource Management. 4th Edition. South-Western College Pub; (January 1, 2014) [Internet]
8. Dalal RS, Bhave DP, Fiset J. Within-person variability in job performance: A theoretical review and research agenda. Journal of Management. 2014 Jul;40(5):1396-436.
9. Thanacoody PR, Newman A, Fuchs S. Affective commitment and turnover intentions among healthcare professionals: The role of emotional exhaustion and disengagement. Int J Human Resource Management. 2014 Jul 20;25(13):1841-57. [CrossRef]
10. Bloor K, Maynard A. Consultants: managing them means measuring them. Health Serv J. 2002 Dec;112(5836):10-11. [PubMed]
11. Buchan J, Dal Poz MR. Skill mix in the health care workforce: reviewing the evidence. Bulletin of the World Health Organisation 2002; 80:575-580.
12. Robinson JC. Theory and practice in the design of physician payment incentives. Milbank Q. 2001 Jun;79(2):149-77. [PubMed] [CrossRef]
13. Vallance-Owen A, Cubbin S. Monitoring national clinical outcomes: a challenging programme. British Journal of Health Care Management. 2002;8(11):412-417. [CrossRef]
14. Baker GR, Norton, P. Patient safety and healthcare error in the Canadian healthcare system: A systematic review and analysis of leading practices in Canada with reference to key initiatives elsewhere: A report to Health Canada. Health Canada; 2002. [Internet]
15. Vincent C, Neale G, Woloshynowycz M. Adverse events in British hospitals: preliminary retrospective record review. BMJ. 2001 Mar;322(7285):517-9. [PubMed]
16. Druss BG, Marcus SC, Olfsen M, Tanielian T, Pincus HA. Trends in Care by Nonphysician Clinicians in the United States. N Engl J Med. 2003 Jan;348(2):130-7. [PubMed] [CrossRef]
17. Bloor K, Maynard A. Workforce productivity and incentive structures in the UK National Health Service. J Health Serv Res Policy. 2001 Apr;6(2): 105-13. [PubMed]
18. Zeigler-Hill V , Southard AC, Besser A. Resource control strategies and personality traits. Personality and Individual Differences. 2014 Aug 1;66:118-23. [CrossRef]

CONCLUSIONS AND FINAL STATEMENT
The results of the study disclose that the planning of the human resources is usually determined by the volume of work, but - due to the specificity of the activities in the healthcare – it is usually determined by the type of labor functions – basic, governing, assisting. The future needs of the personnel are determined as a whole by the mission, strategy, and the aims of the organization. The planning of the human resources is a necessary condition for effective governing of the human resources, and it has a significant and decisive role in the prosperity of the respective hospital.

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