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Strategic Planning in a Highly Specialized Orthopaedic Institution

Zoran Vukašinović¹, Vesna Bjegović-Mikanović², Radmila Janičić³, Duško Spasovski¹, Zorica Živković⁴, Sofija Cerović⁴, Zorica Terzić²

¹Institute for Orthopaedic Surgery "Banjica", Belgrade, Serbia;

²School of Medicine, Centre School of Public Health, University of Belgrade, Belgrade, Serbia;

³Faculty of Organizational Sciences, University of Belgrade, Belgrade, Serbia;

⁴Medical Centre "Dr. Dragiša Mišović", Belgrade, Serbia

SUMMARY

Introduction The Institute for Orthopaedic Surgery "Banjica" in Belgrade provides tertiary healthcare services on national level. After decades of constant development, a recent decline coincided with the decade of great social and governmental disturbance, the transition period after the dissociation of former Yugoslavia.

Objective In order to overcome the crisis, we used modern management methods to define problems in the institution management, and to propose appropriate strategies.

Methods A survey that included 100 employees (17.67%) was carried out, followed by descriptive statistical analysis, PEST and SWOT analyses.

Results The impact of political fluctuations, ageing of population, financing model, obsolete medical technology was evaluated. Various personal and interpersonal factors were assessed: the quality of medical service (3.59±0.76, mark 1-5); relations among health service participants (3.39±0.78); occupational conditions (not good-91%); human, financial and other resources; professional cooperation, stimulation; rivalry and mobbing (declared in 56%); public informing, institution image (rank 3.70±0.88) and PR activities (new to 78%). 93% declared to give maximum effort at work. **Conclusion** Using these results, we defined several strategic objectives. These include strengthening scientific activities, general orientation to specific and exclusive pathological conditions and treatment methods, improvement of management transparency, introduction of quality-based stimulation of workers, support of promotional and PR activities. **Keywords:** planning; management evaluation; orthopaedic hospital; SWOT analysis; transition

INTRODUCTION

During the transition process the healthcare system in south-eastern European countries has been primarily based on the public sector. As an adequate example we can state Serbian healthcare system, which is organized in three levels: primary, secondary and tertiary [1, 2, 3]. Specialist orthopaedic enrolment exists at the secondary level (district coverage) and tertiary level (regional coverage) [1, 2, 3].

The Institute for Orthopaedic Surgery "Banjica" in Belgrade is a typical example of the tertiary healthcare institution that provides both secondary healthcare services to the local community and highly specialized services to inhabitants of several districts. It covers complete orthopaedic and trauma pathology, with a capacity of 520 beds. The Institute was founded 50 years ago, and during the first four decades of permanent development it has achieved significant acknowledgement and reputation. Unfortunately, during the past decade there was a decline followed by a loss of national and regional leadership. Contributing factors include the unfortunate war operations in the region, federal instability and dissociation; economic problems; as well as inadequate implementation of modern management methods (especially in the human resource area), in order to overcome the crisis guided by well recognized strategic position and development course [4-13].

Until recently, in our institution planning had no strategic character. Over the past 3 to 5 years, we real-

ized the potential and importance of strategic planning, and implemented it as a management process of development and maintaining viable balance between organization goals, potentials and offering features. Based on strategic analysis and prediction models, mission and strategic goals are defined, strategies are formulated and implemented with control and evaluation [4, 5, 14-22].

OBJECTIVE

Our objective was to analyze the established changes in order to define the role of the management structure in the stagnation and strategic disorientation, barring in mind the possible impact of threatening surroundings. All of this could help to arrive at a suggestion how to restore the regional leadership by internal reorganization and improvement in human resource management. We believe that the improvement of organization, redefinition of the internal value system and implementation of scientific and medical achievements within human resources would significantly contribute to revitalization and better positioning of the Institute in the Serbian healthcare system.

METHODS

Strategic analysis of the Institute for Orthopaedic Surgery "Banjica" in Belgrade was carried out starting from September 2007 and finished in December 2007. Qualitative management planning methods were used (PEST and SWOT analysis), with a survey containing precise and appropriate questions defined by the authors [23-34].

PEST analysis was used to determine political, economic, sociologic and technologic elements of the environment, all with a significant impact on institution functioning.

SWOT analysis, confronting all internal strengths and weaknesses of a medical institution with external opportunities and threats, represented the key concept in situation analysis and enabled further analysis and strategic perspectives formulation.

The survey included 100 employees of the Institute for Orthopaedic Surgery "Banjica" in Belgrade; half of them were doctors (30 orthopaedic surgeons and 20 of other specialties), 36 were health workers (16 with a higher education level and 20 with medical school), and 14 non medical workers (university, higher or high school education level). A minimal education requirement of high school level was necessary to ensure adequate question comprehension and independent answering, so as to secure the anonymity of the survey. All participants were included on voluntary basis, 240 questionnaires were randomly distributed, and 100 were returned fully answered, so that the participation rate was 41.67 (Table 1).

The acquired data were analyzed by descriptive statistical methods and presented in figures, focusing on strategic position classification by SWOT matrix application.

Finally, based on these results we recommended improvement measures and determined optimal strategies for the Institute.

RESULTS

Preliminary analysis of environmental surroundings (PEST analysis)

Environment elements certainly influence conditions in health institutions and their analysis should precede any further investigation. The most simple and surely the most reliable method is PEST analysis.

Among political factors, most prominent are: 1) Changes in governing ideas and discontinuity of the Institute's development are most often the result of republican elections and changes within the government and Ministry of Health, with the probable consecutive change of the Institute Director and Management Board; 2) Mutual communication between the Institute employees and other institutions is essential. However, relations with certain biomedical institutions, such as manufacturers or medication trade-firms, orthopaedic materials and orthotic devices, are often established in a monopole and finan-

cially dependent manner, and as such are undesirable and should be avoided by all means; 3) Active engagement of political parties and organizations has generally a negative influence on relations within the medical institution and must be avoided. All relations at the institution should be founded only on medical principles; 4) Media also has a great impact on institution image, so it is very important to create adequate relationship since relevant informing about important events is valuable [14, 17, 18].

Economic factors in Serbia could be considered even more important - national income per capita, budget funding, cooperation with the Health Insurance Fund, etc. [1, 2, 32, 33]. The Institute is completely adjusted to providing health services for foreign patients, gravitating mostly from the surrounding countries. These health services provide extra income, since the foreign patients finance their medical treatment by themselves at prices higher than those for domestic patients. By sharing a part of this income for particular engagement, employees are encouraged to work extra hours, and the utilization of hospital resources is increased. Extra income is also acquired from the treatment of patients without medical insurance, and those willing to personally finance their treatment (in order to avoid regular waiting lists established for several pathological conditions). Human resources are considered as adequate. The health capacity of the Institute meets the general economic capabilities of our society.

The Institute is constantly adjusting to sociological environmental aspects. The aging of population has a significant impact on the work of the Institute forcing the need for the modification of surgical procedures and co-morbidity management (both in preoperative and postoperative stage). The Institute has been always adjusted to cultural and religious diversity of its patients. However, the services provided by the Institute do not quite meet the sociological demands and needs of the society. The medical knowledge of our patients is inadequate, but hopefully improving. As for the competition, it is certainly growing stronger, the district hospitals are improving, the healthcare market is harsh and under such conditions the Institute has difficulties keeping pace deluded by the traditional leading position in the past.

The technological aspect contains the greatest problems. Information technology implementation is unsatisfactory, with a system unsuited even for the present needs [1, 2, 3, 6-9]. Medical and other devices are obsolete, with occasional and incomplete renewal. The transparency of the Institute activities is inadequate. The means of providing information to patients are inappropriate. Hospital capacity and equipment are inadequate. Possibilities for improvement of clinical technological conditions exist, but are also inadequate.

Table 1. Participants in SWOT analysis

Participants	Institute's employees	Questionnaire handed out to	Questionnaire answered (sample)	Answer rate
Medical specialists	112	82	50	60.97
Health workers	376	122	36	29.51
Non-medical workers	78	36	14	38.89
Total	566	240	100	41.67

Complete analysis of internal and external surroundings (SWOT analysis)

A study of the present state of the Institute for Orthopaedic Surgery "Banjica" in Belgrade included a SWOT analysis. The objective was to consider various segments, medical and business aspects, to incorporate the opinion of personnel in defining strengths and weaknesses of the Institute, in order to define opportunities and threats (combining with PEST analysis results), thus helping restitution of its prominent position and reputation.

Most of the interviewees (93%) declared their readiness to give maximum effort in providing healthcare as employees of the Institute. The average ranking of service quality (ranging from 1 through 5, with grade 4 marked as least acceptable for strength to prevail over weakness) was 3.59±0.76. It was accepted as quite realistic since health workers included in the study, considered the service quality regarding the health worthy essence.

Although all interviewees (100%) agreed that the relation with health service consumers was essential (which is very important), it was given the value of 3.39±0.78 and was considered as strength (rank 3.35±1.17).

Most of the interviewees thought that the Institute needed renovation since it has seen better days (91%). Even more of them (98%) thought that conditions in patient rooms were poor and should be improved. This is consistent with the impressions of patients, collected in various questionnaires sporadically carried out over the past few years.

Rivalry among physicians was confirmed by 95% of interviewed, and was considered as a weakness (rank 3.16±1.50).

Ninety-eight percent of interviewees shared the opinion that the sources of financing were important for the Institute. Financing is in general considered an obstacle (rank 3.42±1.33), but particularly for our Institute (rank 3.06 ± 1.32). It is quite understandable since the national health institutions are mostly funded by budget, and thus financed upon the available amount rather than actual needs or expenses.

Besides budget financing, we are obliged to mention other sources of financing. The importance of sponsorship of various activities in health institutions was acknowledged by 86% of interviewees, overall the importance of health institution sponsorship was ranked 4.09±1.19, somewhat less at our Institute in particular (3.73±1.33). This source of financing is especially important for activities not officially recognized as priorities (and consequently without budget support), such as health workers education, participation at congresses, publication activity, scientific meeting organization, important jubilee celebrations, and others. Such is the case with donations: their overall importance in health institutions was acknowledged by 90% of interviewees, given the rank of 4.26±1.09 but still considered as insufficient at our Institute (rank 3.85±1.25), proving the lack of appropriate and sufficient activity of top management and other prominent individuals of the Institute.

The importance of public and internal informing, both concerning medical issues and Institute-related activities, was acknowledged by 81% of interviewees. The quality of overall information on health was ranked as 3.79±1.45, even

poorly concerning our Institute in particular (2.80±1.49). Such a low rank is expected due to the fact that there is no such service established at the Institute, and there is no a defined division of responsibilities among the personnel. The lack of appropriate informing compromises realistic and good impression of the Institute. Similar situation can be found in other healthcare institutions.

The importance of a good organizational model in health institutions was acknowledged by almost all interviewees (99%), with a general opinion that it represented an opportunity (rank 3.89±1.40), but when the Institute was concerned, it was considered rather as a weakness than strength (rank 3.15±1.47). The basic organizational model is defined at a national level, with some adjustment tolerance left to individual institutions. In that setting, the new organizational design of the Institute implemented in August 2007, was constituted based on the initiative of the Management Board, without any information of the employees and without any internal public debate. It might have raised the given ranks. Even after its implementation, employees were not informed systemically, but rather individually and mostly by coincidence.

The majority of interviewees (94%) was of the opinion that health institution prosperity significantly relied on the management capacity, considering high capacity as an opportunity (rank 3.93±1.40), and marking such a capacity at our Institute as very low (2.63±1.52). This failure could be improved by actual involvement at the operative management level (heads of clinical departments; coordinators of non medical services: financial, technical, etc.) since present development of specific skills in all these fields makes it virtually impossible for an individual with general management training to compile required characteristics, knowledge, skills and capabilities.

Almost all interviewees (99%) acknowledged the relation to the Health Insurance Fund as significant, considering a good relation as an opportunity (rank 4.15±1.07). The relation of our Institute with the Fund was considered rather as weakness (rank 3.51±1.26), mostly because of the reputation decline, and top management.

The essence and importance of strategy was acknowledged by the vast majority of interviewees (99%), but good strategic management of our Institute was acknowledged by only 24% (rank 2.59±1.00), for which again the top management was considered responsible (Figure 1).

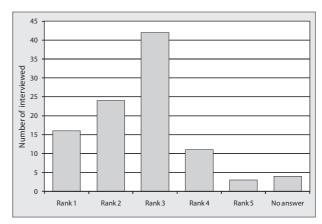


Figure 1. Assessment of strategic management of the Institute

Not many employees (62%) were informed, or at least had any suggestion about defined (or supposed) strategic goals of the Institute top management, while even less of them (24%) thought that the goals were achieved within planned deadlines. The employees barely participated in the process of strategic goals definition (rank 1.91 ± 0.94), and slightly more at functional (department) level (rank 2.39 ± 1.13) (Figure 2).

Communication among colleagues at the Institute was ranked as poor by the majority of interviewees (rank 3.13 ± 0.91), being slightly better in micro-surroundings (within departments – rank 3.61 ± 1.14). This unacceptable situation is mostly due to top management inactivity and unhealthy reputation and financial rivalry (Figure 3).

Professional communication between physicians and heads of departments was considered as bad according to 6%, average 49% and good 42% of the interviewed. This fact is encouraging, since it indicates relatively healthy units consisting of cooperative and collaborative persons, so the top management could make an extra effort to strengthen and stabilize the Institute by assembling them properly.

Professional communication of physicians and director the Institute is, sad to say, much worse (it is rated as weak by 23%, average by 55% and good by only 17% of the interviewees). It could also be improved by promoting interpersonal communication, diminishing artificial gap in the medical profession issues between top management and individual physicians, as well as extra coupling engagement of functional managers.

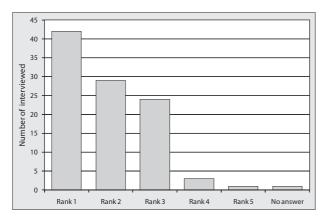


Figure 2. Assessment of employees participation in strategic goals definition of the Institute (particularly at functional level)

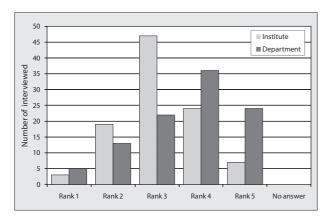


Figure 3. Assessment of communication among colleagues at the Institute (particularly within departments)

As far as professional communication between the Head of Departments and the Director of the Institute is concerned, 58% of the interviewed had no opinion (probably because of no information about it), 30% considered it as good and 12% as bad. It can really be better, and the Director should treat the Head of the Departments as an operative part of his team sharing his thorough respect, even more so since he has promoted them himself.

The majority of interviewees (83%) thought that the Head of a Department should be a person with the highest degree and educational level. Regretfully, this is not the rule in four departments of our Institute (Orthopaedic Oncology, Spinal Surgery, Neuroorthopaedics and Physical Therapy and Rehabilitation). It is not appropriate, nor is in the tradition of the Institute, and therefore should be corrected. The present example of human resource management has destimulating impact on the employees, devastates the Institute's strength and leads to further negative consequences.

There is a similar case considering the Head Nurse position. Most of the interviewees (89%) agreed that the Head Nurses should have more than a high school degree, but at the same time the real situation at the Institute is much worse than the situation concerning the head of departments; a great number of services has head nurses with a high school degree (Policlinic Sector, Orthopaedic Oncology, Reconstructive Orthopaedic and Skeletal Infection, Skeletal Traumatology, Spinal Surgery, General Female Orthopaedic I, General Female Orthopaedic III, General Male Orthopaedic I, General Male Orthopaedic II, Neuroorthopaedics, Plastic Surgery, Surgical Interventions, Laboratory, Radiology and other diagnostics). The Institute has been famous for the high educational level of its nurses, with the Head Nurse position (as well as all nurse positions in the operating theatres and Anaesthesiology, Reanimation and Intensive Care) exclusively reserved for higher educated nurses. It was the primary stimulating factor for additional education and implementation of new skills, resulting in overall improvement in health service quality, implementation of subordination and interpersonal relationship. The present weakness could and should be turned into a strength that contributes to re-establishing of a prominent position of the Institute.

Collaboration between the Institute's Director and the Institute's Head Nurse was ranked mark 3.56±1.02.

There was a good collaboration between the Heads of Department and the corresponding Head Nurses (rank 4.21±0.99), which is quite good, indicating a good teamwork in smaller units.

Collaboration between the Head Nurse of the Institute and the department Head Nurses did not reach the desirable level (rank 3.77±1.12).

The Institute is generally assumed to have enough doctors, but not enough nurses. This is a rather objective opinion, since there were more doctors than nurses participating in the survey.

Most of the interviewees indicated that the number of nurses was related not only to bed capacity (79%), but also to pathology (53%), patient mobility (17%) and patient's age (17%). We think that there is not enough attention

paid to the patient's age, so the Paediatric Orthopaedics and Trauma Services should have more nurses than present, and for several reasons: age-related hyperactivity that requires additional supervision (because of general security, as well as good treatment results, in the setting of short immobilization and early rehabilitation tendencies), greater number of meals (five daily, compared to three at other departments), a need for continuous health educational activity (general, condition-specific and related to psychosocial rehabilitation), etc.

The employees are not educated in communication skills, which are considered as necessary by the majority of interviewees (97%). And indeed it is so, thus such education should cover several segments of communication: interpersonal (among colleagues), throughout subordination structure (for better organization and productivity), to a specific target group - health service consumers (for greater service satisfaction).

Unjustified sick leaves were not recognized as a problem (46% of answers, in contrast to 47% of answers defining it as a problem). The majority of the interviewees (57%) thought that if full-time employees were absent, they could be adequately substituted by individuals employed on part time basis.

Most of the interviewees (67%) were not informed that the stimulating income addition existed (which is unacceptable), while 79% assumed that it was inadequately distributed. The lack of information, as well as the lack of official public criteria, prevents the stimulating income addition from fulfilling the basic function. In the absence of defined criteria, it would be logical (in analogy with other institutions and according to the scientific knowledge) [24, 25, 31, 32, 33, 34] to reward the best employees in all working units, considering it as stimulating for all employees. It could be even more efficient if the working norms could be defined, which is very difficult to establish in the health service. It is certainly not good to use the stimulating income addition as the means of gratitude for a defined group of people; not only deserved by work results, but restricted to only one hospital unit (whose members differ in knowledge, skills and experience, thus inevitably differing in the contribution and importance to the Institute as well).

The majority of interviewees considered affiliation and loyalty to the Institute as very important for the achievement of good results (94%), with overall loyalty ranked 2.84±0.93 and personal loyalty ranked 4.37±0.78 (Figure 4).

Sixty-six percent of the interviewees felt motivated for achieving higher standards in their daily work. Primary motivation was not money (14%), but the acknowledgement from colleagues, staff and patients (49%), whereas nobody declared being motivated by the acknowledgement from the Institute management structure. It is unacceptable, and the Institute management structure can and must find the way to motivate all employees appropriately.

Only 47% of the interviewees had a chance for further development, while 67% was under the impression that further development was not encouraged. Only 17% of the interviewees thought that the development was encouraged, but mainly in terms of further education. This situation resulted in the lack of highly educated nurses (resulting in the Head Nurse position anomalies discussed above), as well as a decline in scientific development of physicians (resulting in impending loss of the status of the "Institute", held over the past 10 years, and reverting to the lower status of a "Special Hospital").

Unfortunately, 56% of the interviewees declared (or experienced) mobbing at the Institute, mostly on the hierarchy level (46%). It is unacceptable, and must be stopped. We believe that promoting individuals with the highest educational and academic levels to managing positions at the Institute is the best way. They enjoy inherent respect, do not have to fear for their (legitimately gained) position, do not need to envy anyone in the hierarchy structure, nor to exhibit harassment of the subordinated (except in rare psychopathological cases which needs prompt reaction) [19, 21, 22, 23, 29, 30].

Fifty-three percent of the interviewees claimed that in case of the crisis, the Institute did not have a crisis headquarters, and 77% did not know who was responsible for the contact with media in the case of crisis. Such situations are common nowadays, and they can be avoided only by an adequate and timed reaction.

The vast majority (78%) of the interviewees did not know (15%) or thought that the Institute did not have (63%) a Public Relations Manager, in spite of the fact that it does have one! His "invisibility" is probably caused by his inactivity. PR management is supposed to be a significant management function, with the PR manager being an important person in a health institution, with numerous and concrete

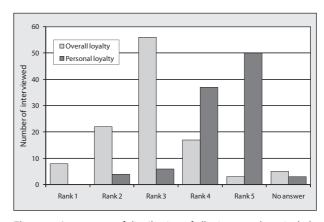


Figure 4. Assessment of distribution of allegiance and particularly personal loyalty to the Institute

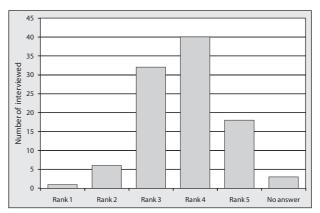


Figure 5. Assessment of distribution of public reputation and sta-

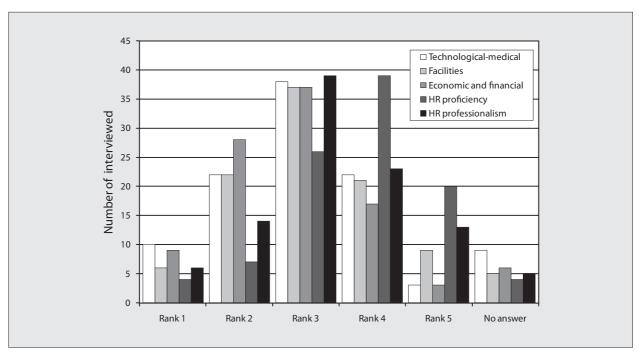


Figure 6. Assessment of the quality of various resources

Table 2. SWOT matrix

	Large bed capacity (520 beds)			
Strengths	Training centre of Medical Faculty, Higher Medical School and High Medical School in Belgrade			
	Staff: optimal number of physicians, high competence and experience, devotion to the Institute, motivation for the quality in work, awareness of the impact of kindness and service quality to the Institute's image			
	Good department organization (professional communication within department hierarchy)			
	Long-term experience and quality in providing specialized health services			
Weaknesses	Loss of well-known acknowledgement of the Institute in the past, as well as its formal status			
	Insufficient level of health service quality and relation with health service consumers			
	Poor material and technical resources (patient rooms, operating theaters, obsolete equipment)			
	Poor organizational structure			
	Poor management activity			
	Poor human resource policy (promotion of managing positions without criteria, titular false presentations, negative competition among colleagues)			
	Insufficient scientific development			
	Inadequate stimulation system			
	Mobbing and harassment down the hierarchy			
	Poor informing and PR activity			
	Obsolete and expensive computer system of the Institute			
Opportunities	Good geographic position			
	Legislative features (including costs of health services uncovered by health insurance)			
	Introduction of new EU health programs "Together for Health"			
	Attention of donors and sponsors			
	New markets (foreign patients paying treatment at commercial rates)			
	Population aging			
	Orientation towards traumatology, following the expansion of traffic injuries			
	Introduction and offering of new commercial services			
	Orientation towards specific pathology and treatment, with the creation of reference centres and reclaiming of the respectable reputation			
	New physical therapy department for early and prolonged rehabilitation			
	Promoting the Institution through various activities			
	Staff education			
	Improvement of material and technical resources			
Threats	Financing model			
	Closing of large institutions for short hospitalization policy			
	Powerful and disloyal competition			
	Limited overall state financial resources			
	Reorganizing of staff policy			

activities [15, 16, 23, 35]. He should not be appointed just to fulfil a legislative obligation, regardless of his capabilities and of his motivation to be a part of the management process. Modern management activities are so diverse, numerous, time consuming and requiring specific skills that any individualization could compromise the whole process.

The majority of the interviewees considered the reputation and status of a health institution very important, giving our Institute the rank of 3.70±0.88 on this matter (Figure 5). Slightly more than half of the interviewees (56%) were of the opinion that the Institute showed a distinct public responsibility. Considering the Institute's image, 96% of the interviewees thought that it was shaped by the staff kindness, as well as the health service providing process. It is something that should constantly be improved and promoted.

The survey revealed that various resources of the Institute were acknowledged as weak: technological-medical resources (rank 2.85±1.00), facilities resources (rank 3.05±1.05), economic and financial resources (rank 2.76±0.97), human resource proficiency – relation to health service consumers (rank 3.67±1.02), human resource professionalism – interpersonal relations (rank 3.24±107) (Figure 6).

We created a SWOT matrix derived from all the issues discussed above (Table 2).

DISCUSSION

The mission of the organization justifies its very existence and is related to the credo, purpose or the declaration of its existence philosophy and values it represents. A well formulated organizational mission inspires employees and secures achievable goals, in other words it should inspire and govern the employees in the decision making and establishment of the basic production process. It pervades the organization with the sense, not only pointing out the goals, but also guiding the ways. The mission is symbolically addressed as "the glue" that keeps the organization compact by sharing common values and standards. These variations in the mission definition should have some common elements, such as: target population, spatial domain, job type, job growth and development, basic philosophy, social responsibility, desired image [17, 18, 29, 31, 32, 33].

Before defining the mission, internal resources of the organization, its history, competition and legislation should be assessed and incorporated. The mission declaration should evolve from the idea of the institution management about future perspectives, i.e. from the vision. The vision defines strategic tendency and represents a platform for the mission and goal formulation. Thus, the basic purpose of the vision is to maintain the course in spite of many vague changes that future may bring.

The proposed vision, mission and values for the Institute for Orthopaedic Surgery "Banjica" in Belgrade could be formulated as follows:

The Vision – Our vision is to provide the highest quality of orthopaedic traumatology services in our country, all in order to achieve excellent treatment and prevention results in our patients, therefore enabling both

- their satisfaction and working capability for the benefit of themselves and the whole society;
- The Mission Our mission is the treatment of orthopaedic patients, their recovery and reintegration into the community, all by providing modern, efficient, evidence-based treatment, highly ethical and human rights compatible, by maximal professional engagement and continuity in professional development and education, within a supporting, secure and patient-oriented ambient. In this way the Institute should become the leader in the country and in the region;
- The Values 1) acknowledgement and affirmation of unique and individual values of every person; 2) treating every client with compassion, benevolence and understanding; 3) absolute sincerity, integrity and fair business relation; and 4) trust in colleagues and team members, dedication to loyalty, respect and dignity.

CONCLUSION

The presented analysis of the internal and external setting of the Institute for Orthopaedic Surgery "Banjica" in Belgrade, derived from SWOT analysis, and proposed vision, mission and values, all together form a significant resource for both establishing the strategic objectives and the selection of appropriate strategies. The modus operandi, as already mentioned, will be to improve the strengths, to overcome the weaknesses, to utilize the opportunities and to eliminate the threats, maintaining the vision, mission and leading values.

Strategic objectives that will guide the Institute through an impending long-term period must be defined with the participation of the employees (similar as the functional level decision making), and they include:

- Strengthening the Institute's feature of the Medical Faculty Training Centre; stimulating employees in term of scientific activities (research projects, publications, master and doctorate degrees, scientific title promotion) in order to maintain, but also improve the Institute's excellent reputation, both scientifically and financially. Achieving this would mean improving human resource policy, assigning the position of the Head of the Department to those with a highest degree and educational level, titular false presentation restricted, and by all means further individual development supported. Various continuous medical education courses should be introduced for those with interest and financial ability. Also, resources for video conference and global networking to medical centres should be implemented.
- Restructure of the Institute's organizational structure
 in attempt to improve the public image of the Institute,
 to facilitate the struggle with competition and develop
 possibilities for sponsorships and donations. The repair
 would also lead to a more efficient utilization of extensive bed capacity, by turning back to the pathological conditions and treatment methods exclusive to the
 Institute, supported by the long-term experience of
 the Institute's employees, such as paediatric orthopaedics, neuroorthopaedics, spine surgery, oncoorthopaedics,

- dics, the Ilizarov method, revision surgery; better bed capacity utilization could be also related to improving the aspect of orthopaedic trauma management, since the increasing trauma events frequency subsequently increases the needed bed capacity; and by improving the physical therapy service so as to provide a high-quality early rehabilitation, leading to increased patient turnover, shorter hospitalization, improved utilization of many surgeons available, and their better satisfaction.
- Precise definition and a full transparency of workers' stimulation system maintain the stimulating effect and improve positive impact on work results; disallow illegal financial stimulation of the privileged minority (surgical teams involved in alloplastic surgery) and thus stop the unallowable employees' discrimination on this matter. Stimulation and motivation measures are certainly more appreciated than the inefficient and non-productive repressive policy. All employees, physicians in particular, should be treated with colleague respect and compassion. Refrain from the demonstration of force!
- Improvement of the service quality level, with all the medical statements and ideas to be evidence-based, and with the improvement of relations with service consumers. Adequate service quality represents the most powerful tool in keeping up with the present and attracting new patients, also it represents the best form of defence from the competition. It can be defined as total service attributes that fulfil the consumer's specific needs. The quality of medical service was not in focus until recently, and for several reasons. First, medical service financing was not in relation to the quality, nor even to the quantity of services. It was enough to establish a health institution, hire health workers, and the money would stream according to some defined criteria, regardless of the kind or amount of the services provided. Second (related to the previous), the lack of competition concept led to the judgment that there was no need for the newly established healthcare institution to fight for a position among other similar institutions. Third, generally the financial funds could have been considered as sufficient (excluding the crisis period in the whole country during the last decade of the twentieth century). Fourth, providing the basic resources was considered as most that could be done to improve the quality of work. We must acknowledge the ever present sporadic examples of personal initiative, but generally the lack of a systematic approach to the service quality is detected. However, a new era requires a new philosophy. Insufficient financial funds lead to a rationalization in all public segments, including the healthcare system. Inevitably, the concept of healthcare market arises, followed by new legislative concepts of healthcare institutions financing models [35]. Accreditations, licensing, chosen physician, private health insurance, extrahours work and other new concepts introduce the quality system, directly or indirectly [2, 3, 6, 7]. The golden standard is a high quality service, fulfilling the recognized needs of service consumers at all levels, top competence and credibility, and workers' complete dedication to such a quality system. There are several strategies for achieving these goals: connection between the

- employees and the quality system, definition of professional standards, creating professional manuals, continuous medical education, acknowledgement of service consumers' attitudes and needs, establishment of a quality control system.
- Improvement of informing and PR activity, as well as the promotion of the Institute (marketing). This strategic goal refers to the marketing itself, because the achievement of all other goals generally contributes to the promotion of the institution. When introducing and implementation of a marketing concept in a health institution we must also bear in mind the actual benefits that patients expect from health services. All strategies and techniques for achieving the benefits will be accepted if proved to be useful: entering into a hospital, the patient does not seek treatment per se; it is merely the way of fulfilling his primary expectation – the improvement of his health condition. In developed countries, most public hospitals understand the need for a business philosophy shift, and respect the market impact. There are numerous marketing and management seminars organized for the staff, with emphasis on the segmentation of the healthcare market. Potential patients are divided into two groups: "economic class" (with limited financial resources) and "business class" (with substantial financial power and ability to choose among health service providers). The requirements of this category are closely monitored and analyzed, their desires are acknowledged, engaging the best of staff. Marketing is a function of the management, which coordinates all the activities of a health organization, focusing them towards the final consumer - the patient. It is a long-term perspective, and it requires maximal utilization of the health institution resources and capacity. Full load of the institution is organized on competitive basis, including the diversity, quality, permanent availability and accessible price of services, as well as the staff availability and kindness, requiring continuous attention towards both market and the competition, and an innovative spirit [2, 3, 4, 14, 15, 16, 20, 30, 35]. Healthcare marketing, as a business philosophy, targets the health service market, service consumers and the competition. It tends to adjust, develop and coordinate the health organization business activity. Professional success, leading to the institution's growth and development, can be achieved if business is in accordance with the consumer needs, market potential and social capability. The ideal event includes satisfaction of both the patient's and society needs, production of profit, good reputation of the institution, and great market share, and calls for the following strategies: service differentiation strategy, innovation, special service strategy, quality/price strategy and public promotion strategy.
- Improvement of technical resources, especially restoration of the whole Institute, and improvement of the patient's accommodation (patients' rooms, toilets, air conditioning, hygiene). Without this, no other strategic goals could be fully accomplished. The present condition of the Institute is below the lowest standard, so the improvement of work conditions and patient accommodation, as well as the equipment renewal, should be con-

sidered as a necessity for basic functioning, rather than a prerogative for modernization. It generates dissatisfaction and repulsion of service consumers, problems and retention of workflow, and exhaustion of already limited resources mainly used for constant repairs. The desired outcome is a building completely restored according to modern standards, fulfilling functional requirements, and decent appearance, with air conditioning wherever required, with modern both medical and non-medical equipment (laundry and drying machines, remote heating system, kitchen appliances). To fulfil these goals several strategies are proposed: creating the project documentation for full building reconstruction; long-term projections of the equipment requirements; intensification of communication with all the relevant structures (The Ministry of Health, The Republic Health Insurance Fund), focusing media attention; enhancing cooperation with humanitarian organizations and potentials sponsors; organizing donating events.

Rise in self-generated income (by greater orientation to the patients coming from the surrounding countries and foreign citizens living in our country; by broader introduction of commercial non-standard services etc.). Self-generated income is the only financial segment that the Institution can control with relative independence. Because of growing governmental pressure for cutting down the budget dispenses the self-generated income gains importance. This income was mostly spent for the employment of deficient profiles, with only a small portion left for the stimulation of employed or minor investments. The growth of this income would enable significant investments in various segments of the Institute, at present insufficiently (or entirely) covered by the budget, such as: implementation of a modern computer system, air conditioning, stimulation of the employees, and purchasing of scientific literature, among others. The desired outcome is to double selfgenerated income in a three-year period.

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Стратешко планирање у високоспецијализованој ортопедској установи

Зоран Вукашиновић¹, Весна Бјеговић-Микановић², Радмила Јаничић³, Душко Спасовски¹, Зорица Живковић⁴, Софија Церовић⁴, Зорица Терзић²

¹Институт за ортопедско-хируршке болести "Бањица", Београд, Србија;

²Центар "Школа јавног здравља", Медицински факултет, Универзитет у Београду, Београд, Србија;

³Факултет организационих наука, Универзитет у Београду, Београд, Србија;

⁴Клиничко-болнички центар "Др Драгиша Мишовић", Београд, Србија

КРАТАК САДРЖАЈ

Увод Институт за ортопедско-хируршке болести "Бањица" у Београду пружа терцијарне здравствене услуге на националном нивоу. Након деценија непрекидног развоја, током последњих година, у условима великих социјалних и државних промена, периода транзиције и распада бивше Југославије, дошло је до слабљења Института.

Циљ рада Ради превазилажења кризе, применили смо модерне методе менаџмента, како бисмо дефинисали проблеме у вођењу установе и предложили одговарајуће стратегије опоравка.

Методе рада Спроведена је анкета на 100 испитаника (17,67%) запослених у Институту. Резултати су обрађени методама дескриптивне статистичке анализе, *PEST* и *SWOT* анализом.

Резултати Оцењен је утицај политичких флуктуација, старења становништва, финансијског модела и технолошке застарелости. Испитивани су бројни персонални и интерперсонални фактори: квалитет медицинске услуге (3,59±0,76, ска-

ла 1-5), однос између учесника у процесу здравствене заштите (3,39±0,78), услови рада (описани као неодговарајући у 91% случајева), људски, финансијски и други ресурси, професионална сарадња, стимулација, конкуренција и мобинг (забележен у 56% случајева), јавно информисање, углед институције (оцена 3,70±0,88) и *PR* активности (непрепознате у 78% случајева). Скоро сви испитаници (93%) су се изјаснили да на послу улажу максимални напор.

Закључак На основу резултата истраживања дефинисано је неколико стратешких циљева. Они обухватају јачање научних активности, општу оријентацију ка специфичним и ексклузивним патолошким стањима и методама лечења, побољшање транспарентности у руковођењу установом, увођење система стимулације запослених на основу квалитета, подршку промоцији и *PR* активности Института.

Кључне речи: планирање; оцена менаџмента; ортопедска установа; *SWOT* анализа; транзиција