

## Collaboration between users and the institution of public health as the basis in successful strategic management

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### Abstract

**Background:** The improvement of management in healthcare system is one of the basic goals of the modern management style of Serbia. Among the most significant institutions of public healthcare is the Institute of Public Health, which has a long tradition within the country.

**Methods:** This cross-sectional study was conducted from December 2007 to January 2008 at the Institution of Public Health (IPH) in Kikinda. The study involved a population from the North Banat district, who, at the time, used some of the Institution's services: hygienic-ecological, epidemiological, and microbiological. The instrument of the study was a questionnaire which was used to assess the opinion of the users of the Institution's services in terms of the performance and the quality of the services provided.

**Results:** The relation between political factors in the country and the public health services provided was highly assessed by the responders, with the highest influence being attributed to the changes in the government, i.e. state elections, and the lowest to the local authorities. The responders were satisfied with the quality of the provided services but satisfaction regarding the collaboration between the IPH and various regional organizations was lower. The social factors, population aging and multicultural environment, were evaluated as being the most significant for the performance of the IPH.

**Conclusions:** The identification of population needs and requirements for active inclusion in resolving priority problems should incorporate in the strategic management of public healthcare institutions, which would lead to the achievement of defined goals, as well as to the improved satisfaction of the users.

*Key words: strategic management, public health, users*

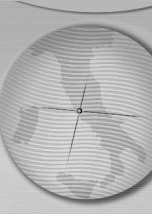
### Introduction

The critique that most often refers to the healthcare system in Serbia is its inefficiency and ineffectiveness. Such a system reacts slowly to changes preventing the identification and solution of even the simplest problems. Each form of internal and external communication is very poorly developed and there is a frequent lack of any kind of orientation toward the user [1].

The improvement of the healthcare management system is one of the basic goals of modern management. It can be achieved by the introduction of modern, systemic and institutionalized management that is based on goal orientated management and total quality management. The reform of the healthcare system implies the engagement of educated managers in a decentralized healthcare system, with the concurrent respect of healthcare providers' autonomy. Management activity must be more firmly expressed than it has been previously

under the hierarchical administrative system of leadership [2-5].

Among the most significant institutions of public healthcare are institutes and institutions of public healthcare, which have a long-standing tradition in this country. Their role in the system of healthcare is to preserve and improve the population's health, to identify the most significant risk factors for health, to collect data using quantitative and qualitative methods and to publish them, to form a system for rapid reaction under emergent situations (epidemics, elementary disasters, accidental occurrences - physical, chemical, bioterrorism), to promote a healthy lifestyle and to collaborate with the population. The general characteristic of such institutions is to be orientated to the health of the community, to be state-owned, and to be organized on regional and national levels. They coordinate and professionally interconnect the activities of healthcare institutions for the territory of their establishment.



Both the Ministry of Health experts and healthcare providers are agreed that sustainable financing, improvement of service quality, infrastructure improvement and changes in the activities of institutes and institutions should be the basic determinants of the transformation [6].

### **Objective**

The objective of the study was to investigate users' opinion about the functioning and the quality of services provided by the Institution of Public Health in Kikinda, which would be taken into account when the new strategic management was created.

### **Methods**

Our research is a cross-sectional study conducted from December 2007 to January 2008 and undertaken at the Institution of Public Health in Kikinda, Serbia. The study involved a population of 50 subjects from the North Banat district who, at the time, used some of the Institution's services: hygienic-ecological, epidemiological, and microbiological. The response rate was 100%.

With regards to the Institution's Hygienic and Epidemiological Service, four responders attended counselling for nutrition and six received counselling for HIV which was open for patients once a week. During the studied period the Microbiological Service, laboratories, open weekdays, were utilised by 20 responders for isolation and identification of pathogenic bacteria from various collected samples: four for examination of possible food contamination, six for the identification of contaminants from general use objects, eight for water analysis, and two responders for the examination of air-pollution and noise disturbance.

Of the total number of responders, 74% were citizens below 50 years of age; 70% were employed in state-owned firms; 8% were retired; 72% were married or cohabited. There was an approximately similar percentage of participants with secondary and university levels of education (34%:36%), while 4% had an elementary education.

### **History of the Institution of Public Health, Kikinda**

In accordance with the Plan of Healthcare Institutions Network of October 1st 1993, the Government of the Republic of Serbia founded the Healthcare Institution of Kikinda. This new institution was initially created by taking over some units from the Medical Centre of Kikinda. The activities of the institution, a highly specialized organization, cover the territory of the

North Banat district, which consists of six municipalities with 50 populated areas.

Since 2002 the establishment rights over the Institution of Healthcare in Kikinda have been transferred to the Executive Council of the Assembly of Vojvodina. Based on the Public Health Legislation [7] and the decision regarding its foundation dated September 2007 [8], the Institution of Healthcare was renamed and now functions as the Institution of Public Health, Kikinda.

The Institution of Public Health, Kikinda performs its activities covering a territory of 2,329 km<sup>2</sup>. According to the 1996 Population Census, the North Banat district had 179,783 inhabitants, with the average settlement rate of 77.2 inhabitants/km<sup>2</sup>, while according to the 2002 Census there were 165,881. The main town of the district is Kikinda. There has been also a marked depopulation tendency in relation to the territory of Vojvodina as a whole. The number of inhabitants slightly changed due to migration in 1996, when 6,065 refugees were forced out of Croatia, and Bosnia and Herzegovina. The vital characteristics of inhabitants are characterized by a declining male rate (965 males vs 1000 females), age index of 0.8 and a markedly low natality rate of 8.7% [9,10].

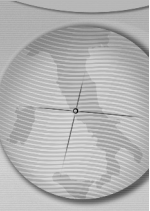
### **Instrument of study**

The Instrument of study was a questionnaire designed for the particular needs of the research. The questionnaire contains 59 questions divided into four sections relating to the political, economical, social and technological factors of the environment. The questionnaire was used to examine users' opinion on the provided services of the Institution regarding the influence of the environmental factors on the activities of the Institution and the responders' opinion on the quality of its services. The responses are presented on the Likert scale rating from 1-5, where 1 indicates the lowest rate and 5 the highest rate.

The continuous variables are expressed as means  $\pm$  SD and the categorical variables as frequencies/percentages. The data were analyzed using the statistical program SPSS14.

### **Results**

The influence of political factors, i.e. events in the country, on the activities of public healthcare institutions, including the functioning of the Institution, was highly rated by the responders. As evaluated, the highest influence was government transformation, i.e. national elections, while local authorities were rated as having the lowest



influence. The average rates indicating satisfaction related to implemented collaboration between the Institution of Public Health and various district organizations were rated lower. Satisfaction related to collaboration with independent industrial enterprise obtained the best ratings, while cooperation with sport organizations had the lowest rates (Table 1). It is interesting to note that 22% responders had no any knowledge about the cooperation between the Institution of Public Health and sport organizations.

Related to the economic power of the society, the responders rated the Institution's capacities as an average rate of  $2.63 \pm 0.787$ , and the adequacy of personnel with an average rate of  $2.47 \pm 0.929$ . The expertise of the Institution's personnel was rated  $3.46 \pm 0.691$ , kindness  $3.56 \pm 1.027$ , the quality of provided services  $3.42 \pm 1.012$  and satisfaction with services rendered  $3.54 \pm 1.067$ . However, the responders assessed the transparency of the Institution's activities as insufficient ( $1.76 \pm 0.797$ ), as well as the transfer of information to the population ( $1.80 \pm 0.700$ ).

Considering the social factors, aging of the population and multicultural environment were evaluated as very significant for the activities of the Institution. The Institution's activities concerning prompt and exact information relevant to the population's health was assessed as very low (promptness -  $2.28 \pm 0.970$ ; exactness -  $2.28 \pm 0.904$ ), particularly in relation to the information regarding safe drinking water and aero-pollution. The responders had very little information about the Institution's activities related to the promotion of health. The responders evaluated the provided services and activities of the Institution as the most poorly adjusted to the requirements of the inhabitants ( $2.65 \pm 1.376$ ) (Table 2).

All the responders considered that it was most important that the Institution's activities took into account the expectations of the users. In addition, all the responders considered that the Institution should resume the leading role in the education and healthcare of the inhabitants. However, although 94% of the responders considered themselves to be informed of the Institution's activities, only 28% replied that they were acquainted with the Institution's activities involving healthcare. Educational activities aimed at disease prevention were rated  $1.78 \pm 0.790$ , and education aimed at the prevention of diseases specific for the region was rated  $1.48 \pm 0.707$ .

The responders gave different rates to technical and technological resources of the Institution;

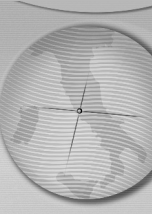
office areas were rated  $3.0 \pm 0.742$ , equipment  $2.85 \pm 0.667$ , and usage of informatics technologies  $2.47 \pm 0.774$ .

### Discussion

Regional political factors are considered the most significant in the functioning of public healthcare institutions. The influence of the republican administration, i.e. the Ministry of Health, is recognized as highly significant in the functioning of the Institution, primarily in relation to the passing of systemic legislations. However, despite significant transfers of power from the republican level to local officials this has remained unrecognized. In addition, the local authorities are in charge of the nomination of top management positions; until now, political appointees have mostly filled such posts. Only some of the appointed top managers have demonstrated that they are able to meet the challenges. Political events should not reflect on the activities of the institutions, which should be defined from an unclouded perspective. This could be achieved by the engagement of educated managers. The political influence of local officials has been reduced to the jobs and activities that can be financed by the local self-government. Regarding the activities and development of an institution, the presence of triple-leadership presents a problem in the case of collision within political interests at various leadership levels. It is in the interest of citizens to create and implement public health strategies, which are independent of political influence and turbulent movements.

Good cooperation with public media and the impact of media on the creation of the Institution's image is recognized as a possible means for the Institution to use marketing in the promotion of its services and tasks to prevent and eliminate disease development, as well as in other activities relevant to population's health. This should lend marketing support to the introduction of a public relations manager, which would enable increased transparency of the Institution's activities. Thus, information about the activities and results would be more amenable to the citizens. In addition, it is necessary to strengthen the two-way communication with the Institution's users and to obtain their trust through teamwork, personal and collective responsibility. Honest and fair relationships with service users would create a favourable environment in which everybody's interests could be fulfilled.

Non-recognition of cooperation between the Institution and various partners in the community

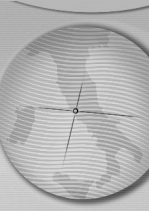


**Table 1. Average rates of assessed influence of political factors in the district on the activities of the Institution of Public Health, and evaluated satisfaction related to the implemented intercollaboration.**

Political factors of the district	Average rates
Influence on activities of the Institution of Public Health:	
Changes of government	4.38±0.667
Regional officials	3.54±0.885
Local officials	2.78±1.375
Political parties	4.10±0.789
Engagement of employees in political parties	3.84±0.934
Collaboration with political parties	4.18±0.774
Collaboration with media	3.88±0.940
Satisfaction with implemented collaboration with:	
Local self-government	2.38±0.697
Non-government organizations	1.89±0.729
Sport organizations	1.21±0.409
Educational institutions	1.96±0.683
Industrial enterprise in the district	2.50±0.968
Independent industrial enterprise	3.41±1.098
Local media	2.38±0.697

**Table 2. Average rates of assessed influence of social factors on the activities of the Institution of Public Health and evaluation of the Institution's activities.**

Social factors of the district and Institution's activities	Average rates
Aging of population	4.06 ± 0.740
Multicultural environment	3.20 ± 0.857
Information on:	
Safety of food products	2.24 ± 0.960
Hygienic correctness of drinking water	1.30 ± 0.463
Aero-pollution	1.64 ± 0.827
Occurrence of epidemics	2.68 ± 0.913
Significance of healthy life-style	1.72 ± 0.730
Significance of adequate nutrition	2.34 ± 1.081
Significance of physical activities	2.56 ± 1.181
Anti-smoking campaigns	2.24 ± 0.981
Anti-addictive diseases campaigns	2.22 ± 0.840



is justified keeping in mind that in practice such collaboration has been reduced to a minimum. The programs lack consistency and are implemented sporadically. This presents an opportunity for the Institution to improve its collaboration with community partners, to expand its influence in the region and to better inform the inhabitants about its activities. It is necessary to define the programs of activities, with exact schedules of the activities, which would be implemented in cooperation with a team of experts in all communities within the territory of the district. At the same time, the collaboration with industrial enterprises has been insufficiently developed, this requires the creation of a model of better and deeper cooperation.

Based on the demographic structure of the inhabitants and the special needs of different vulnerable groups, it is possible to expand the activities of the Institution. The information reaching the Institution from the district should be used to improve the provision of the required services, such as healthy life-style, cessation of smoking, healthy nutrition and the promotion of physical activity. All this would open new possibilities to the Institution, also keeping in mind the assessment showed that the Institution does not sufficiently implement activities related to the prevention of the diseases specific for the region. On the other hand, the users are of the opinion that the Institution has potential in the personnel and office areas to implement and expand its activities; however, there is a need for investment in order to procure new equipment. Considering that the quality of the provided services is a significant premise for the future success of the Institution's activities, it is necessary to make further efforts on its continual improvement.

### Conclusions

Users of the services of the Institution of Public Health have assessed that political changes have the highest influence on the Institution's

activities, that the degree of collaboration with district partners is insufficient, and that the Institution's activities are not sufficiently directed toward the needs of the inhabitants. Contrarily, the users also stated that the Institution possesses expert and kind personnel and expressed their satisfaction with the quality of the activities provided. The identification of the inhabitants' needs and the requirement for an active role in finding solutions for priority problems should be undertaken by the strategic management of the public healthcare institutions. This in turn would lead to the realization of set goals and an improvement in users' satisfaction and their loyalty.

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