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## NEW SKILLS NEEDED FOR MANAGING THE HEALTH CARE SECTOR

#### **Abstract**

In this moment in the health sector of Serbia, the need for reform is specially high in the sector of management and organization of the health care on all levels. Today, Serbia country context is extremely difficult and changing due to rapid process of reforms following the EU accession requirements. EU reports alert on the public administration/public sector human resource capacity weaknesses as one of the key areas for improvement. This paper investigated HR skills, skills of managers in health sector – Clinical center Nis – 11 Surgery clinics – as HR capacity to implement reforms within the process. The aim of present study was to identify key managerial skills based on opinion and attitudes of medical staff following the WHO HR managerial framework. Data collection was done through field study/questionnaire. Sample size comprise of 25% of employed medical staff at 11 surgery clinics at Clinical center Nis. Frequency analysis and Chi-square test were used as statistical analysis.

Key words: health managers, human resource skills, public sector

JEL classification: H0, O1, O5, I1, I2

# НОВЕ ВЕШТИНЕ УПРАВЉАЊА У СЕКТОРУ ЗДРАВСТВЕНЕ ЗАШТИТЕ

### Апстракт

У овом тренутку у здравственом сектору србије потреба за реформом је посебно висока у области управљања и организације здравствене заштите на свим нивоима. Данас је контекст државе изузетно тежак и мења се због брзог процеса реформи које су узроковани захтевима за приступање еу. Еу упозорава на слабости капацитета запослених у јавној управи / јавном сектору као једну од кључних области за побољиање. У овом раду су истражене вештине људских ресурса, вештине менаџера у здравственом сектору - клинички центар ниш - 11 клинике за хируршку ординацију - капацитета мљр-а за спровођење реформи у оквиру

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процеса. Циљ ове студије је био да се идентификују кључне менаџерске вештине засноване на мишљењу и ставовима медицинског особља који прате менаџерски оквир мљр. Прикупљање података вршено је путем теренске студије / упитника. Величина узорка чини 25% запослених медицинског особља на 11 хируршких ординација у клиничком центру ниш. Као статистичка анализа коришћена је фреквентна анализа и цхи-квадрат тест.

**Къучне речи:** здравствени менаџери, вештине људских ресурса, јавни сектор

#### Introduction

Over the recent years, medical practice in Serbia has evolved in scope and practice in terms of changing diseases patterns and social expectations. In addition, there is a growing sentiment especially among the general public and some health workers that most doctors are bad managers.

The relevance of exploring this topic in Serbia is underlined in the current situation in the country that is very complex and very challenging due to rapid accession process to EU. Besides that the annual EU accession reports alert on weaknesses in area of human resource capacities within the public administration/public sector, as one of very key components for its improvement (Progress report accompanying the document communication from the commission to the European parliament, the Council, 2014),.

Management as a concept for decades has attracted attention of scientists, researchers, and practitioners (Basic management models and theories associated with motivation and leadership and be able to apply them to practical situations and problems, 2015) Health management brings up the attention due to its sensitivity and complexity, and involving human and social factors (O'Rourke, Novak 2011). World trends in economy, security, technology, innovations reflects on health sector as well. New trends require changes and reforms in health sector and building up "new hospitals – of the future" (Rechel, 2009). New hospitals needs to be run by skillful managers. Therefore it became very important topic of research focusing on identification the needs of the future health managers, their knowledge and competences.

In parallel with the development of the general concept of management in Western countries (UK, Australia, Canada, USA) it was developed the concept of New Public Management (NPM) in 1980s placing the citizen in the centar of public sector administration and service provision. In Serbia its application started after the regime replacement (mild revolution) in 2000. NPM concept represents, 'borrowed from the private sector,' a set of management tools and techniques being used in the public sector (Subotić 2010) aiming to increase its efficiency and effectiveness. With technological development, the increase in the number of educated people, by raising awareness of the population, improvement of human rights, civil society, the stronger and expectations of individuals in health services are becoming larger, while the economic limits make it difficult for financial allocations per capita.

Health managers are expected to perform complex managerial duties in a complex situation caused by the economic instability, poor economy, low allocations for health, old - inherited models of health care and old health care institutions, mostly not-for-the-purpose-built (Gutić 2015). The position of Director/Manager of healthcare institution

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is defined by the Law on Health Protection, Article 131 - he is expected to 'organize and manage the work process, represent health institutions and is responsible for the legality of medical institutions" (Zakon o Zdravstvenoj zaštiti). Those skills are not thought neither trained within the full-time regular medical study curricula. Also, Article 132 of the same Act says: " director of medical institution may be a person who has a university degree in health profession or a university degree in other professions who have completed training in the field of health management ', which implies that being a medical doctor is the sufficient precondition for managerial position (knowledge and skills in management) while if not, then degree in health management is necessary. In practice, almost the absolute majority of physicians hold positions of directors without prior training in management. There is always dilemma whether a medical doctor should/ could be director of the clinic or not (Novak 2010), and what are the skills that health manager needs to gain in order to be a successful manager. During the formal medical study physicians do not receive education in the field of management and the question is whether it is important to be included into the regular curricula, and to what extent. A set of necessary or essential skills in this area is not yet generally adopted, but the necessity of acquiring managerial skills within academic education is considered a necessity in the complex situation of comprehensive reforms and demanding EU accession process.

This study aims to investigate views and opinions, of medical personnel at surgical clinics in KC Niš, on management in healthcare. The results would guide to the most important skills of managers from the perspective of those whose work should be managed in order to achieve the maximum of performance. The findings provide important information about the direction of formal and informal education of health management to focus on. Managerial skills have a direct impact on the successful management of health institutions (Stefane et al., 2006). Beside the direct indicators of their work, the most important performance indicators are those of health of population. This paper explores the skills of health managers at 11 surgical clinic Clinical Center Niš and their capacity for implementing sectoral reforms. The work will identify key managerial skills, based on the opinion and attitudes of medical staff, using the managerial framework of the World Health Organization's human resources (WHO global competency model, 2015). Data was collected through questionnaires in the field. The sample consisted of 30% of the medical staff at 11 surgical clinics in KC Niš. Statistical analysis includes frequency analysis and chi-square test.

### Methods

This descriptive analytical study was done in 2015. The research sample included medical doctors and nurses at eleven surgery clinics of Clinical Centar Nis a teaching hospital of University of Nis, Serbia. The research clinics were selected as one of two group of clinics that CC Nis comprise of (internal clinics group of medicine and surgery group of medicine). Sample size is 30% of employed medical staff on clinics. Respondents were selected randomly and included those who wanted to attend the study. The research tool was a questionnaire examining opinion and attitudes of medicals staff on management. It is closed questionnaire with some statements about managers followed by a 5-choice Liker scale answer including completely disagree, disagree, no idea, agree, and completely agree; and some questions with closed ended answers.

A questionnaire was designed based on the management theories and WHO framework on health management. It was designed by the multidisciplinary team of phycologist, sociologist, and 2 medical doctors, affiliated with different institutions such as Business school, Department for Sociology, Consultancy agency. The survey questions were not validated, but several were based on a previous Master theses study (xref).

In order to ensure the anonymity in the study, questionnaires with envelops were distributed to eleven surgery clinics of the Clinical center Nis (tertiary level healthcare institution) using a network of nurses. At the front page there was introduction with instructions. The questionnaire included three sections, one for getting personal information (demographics), the second one on opinion and attitude, and the third one, on skills in management. All eleven clinics agreed to attend the study. Finally, 169 valid questionnaires were collected from 220. For analyzing the collected data and confirming the hypothesis, we used the descriptive and analytical statistical methods. Data were analized in SPSS. For the descriptive statistics we had the tables of frequency distribution, percent, mean and standard deviation.

#### Results

Sample size was 30% of the employed medical staff at each clinic. Response rate was 77%. The characteristics of study respondents are summarized in Tables 1 to 5.

Clinic 1	to 11	Frequency	Percent	Valid Percent
Valid	1	16	9.5	9.5
	2	12	7.1	7.1
	3	19	11.2	11.2
	4	46	27.2	27.2
	5	14	8.3	8.3
	6	8	4.7	4.7
	7	12	7.1	7.1
	8	6	3.6	3.6
	9	13	7.7	7.7
	10	9	5.3	5.3
	11	14	8.3	8.3
	Total	169	100.0	100.0

Table 1. Distribution per clinic

Table 2. Demographic characteristics - age

Age		Frequency	Percent	V a l i d Percent
Valid	1	1	.6	.6
	2	43	25.4	25.7
	3	59	34.9	35.3

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	4	48	28.4	28.7
	5	16	9.5	9.6
	Total	167	98.8	100.0
Missing	System	2	1.2	
Total		169	100.0	

Table 3: Demographic characteristic - gender

Gender		Frequency	Percent	Valid Percent
Valid	1	32	18.9	19.2
	2	135	79.9	80.8
	Total	167	98.8	100.0
Missing	System	2	1.2	
Total		169	100.0	

Table 4: Demographic characteristic – working experience

Working experience		Frequency	Percent	Valid Percent
Valid	1	17	10.1	10.2
	2	48	28.4	28.7
	3	38	22.5	22.8
	4	27	16.0	16.2
	5	22	13.0	13.2
	6	13	7.7	7.8
	7	2	1.2	1.2
	Total	167	98.8	100.0
Missing	System	2	1.2	
Total		169	100.0	

Table 5: Distribution medical doctor and nurse

MD/Nurse		Frequency	Percent	Valid Percent
Valid	2	49	29.0	29.2
	4	119	70.4	70.8
	Total	168	99.4	100.0
Missing	System	1	.6	
Total		169	100.0	

Among the 169 respondents in this study, 80% were women and the others were men. More than one third were between 36 to 45 years old (40.5) and the last age group was for the people less than 26 (0.6). The least frequency for the work experience was between 31 to 35 years (1.2%) and the most amounts were between 6 to 15 years (28.4%).

Table 6: QA1 Are you familiar with the concept of "health management"?

		Frequency	Percent	Valid Percent
Valid	1 yes	88	52.1	56.1
	2 no	12	7.1	7.6
	3 partial.	57	33.7	36.3
	Total	157	92.9	100.0
Missing	System	12	7.1	
01	tal	169	100.0	

Table 7: QA2 Would you like to get introduced with?

		Frequency	Percent	Valid Percent
Valid	1 da	75	44.4	76.5
	2 ne	22	13.0	22.4
	3	1	.6	1.0
	Total	98	58.0	100.0
Missing	System	71	42.0	
Total		169	100.0	

Table 8: QA3 Are you familiar with the concept of "leadership"?

		Frequency	Percent	Valid Percent
Valid	1 da	58	34.3	68.2
	2 ne	27	16.0	31.8
	Total	85	50.3	100.0
Missing	System	84	49.7	
Total		169	100.0	

*Table 9: QA4 Would you like to get introduced with?* 

		Frequency	Percent	Valid Percent
Valid	1 da	20	11.8	57.1
	2 ne	14	8.3	40.0
	3	1	.6	2.9

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	Total	35	20.7	100.0
Missing	System	134	79.3	
Total		169	100.0	

Table 10: Q5 All medicals staff should be introduced with basics of health management. (1 – absolutely not agree, 5 – absolutely agree)

		Frequency	Percent	Valid Percent
Valid	1	9	5.3	7.9
1	2	24	14.2	21.1
1	3	14	8.3	12.3
1	4	31	18.3	27.2
	5	36	21.3	31.6
1	Total	114	67.5	100.0
Missing	System	55	32.5	
То	tal	169	100.0	

Q6 Director of clinic should be a medical doctor.

		Frequency	Percent	Valid Percent
Valid	1	17	10.1	14.9
	2	8	4.7	7.0
	3	11	6.5	9.6
	4	16	9.5	14.0
	5	62	36.7	54.4
	Total	114	67.5	100.0
Missing	System	55	32.5	
Total		169	100.0	

Q7 Director of clinic should be someone not of medical profession.

		Frequency	Percent	Valid Percent
Valid	1	65	38.5	60.7
	2	8	4.7	7.5
	3	11	6.5	10.3
	4	8	4.7	7.5
	5	15	8.9	14.0
	Total	107	63.3	100.0
Missing	System	62	36.7	
Total		169	100.0	

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Q8 A19 For successful running of the clinic director should have those skills:

	N	Minimum	Maximum	Mean	Std. Deviation
A19.1	86	0	5	4.76	.811
A19.2	97	0	5	4.82	.722
A19.3	86	0	5	4.69	.815
A19.4	88	1	5	4.69	.667
A19.5	92	1	5	4.73	.743
A19.6	86	1	5	4.65	.851
A19.7	84	1	5	4.73	.700
A19.8	83	1	5	4.66	.753
A19.9	89	1	5	4.64	.869
A19.10	85	1	5	4.87	.573
A19.11	18	0	5	4.67	1.188
Valid N (listwise)	13				

# Q9 A20 One person could not have all skills of good manager.

	N	Minimum	Maximum	Mean	Std. Deviation
A20	107	1	5	3.68	1.378
Valid N (listwise)	107				

# Q10 D2 Director position requires trening/education in the field of health management.

		Frequency	Percent	Valid Percent
Valid	1 da	113	66.9	77.4
	2 ne	33	19.5	22.6
	Total	146	86.4	100.0
Missing	System	23	13.6	
Total		169	100.0	

Q12 D91 Has data been used for problem solving? (never-1 rare - 2 often-3)

			А	Total	
			2	4	2
1.00		Count	13	15	28
	1.00	% within A5	29.5%	16.0%	20.3%
D0 1	2.00	Count	19	56	75
D9.1	2.00	% within A5	43.2%	59.6%	54.3%
	2.00	Count	12	23	35
	3.00	% within A5	27.3%	24.5%	25.4%
Total		Count	44	94	138
		% within A5	100.0%	100.0%	100.0%

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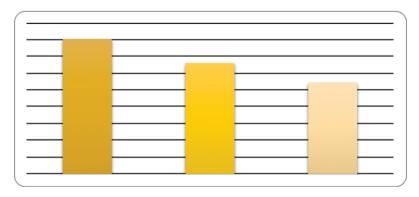
			Ą5		Total
			2	4	2
D9.2	1.00	Count	19	25	44
		% within A5	50.0%	28.7%	35.2%
	2.00	Count	16	45	61
İ		% within A5	42.1%	51.7%	48.8%
İ	3.00	Count	3	17	20
		% within A5	7.9%	19.5%	16.0%
Tot	tal	Count	38	87	125
		% within A5	100.0%	100.0%	100.0%

D9.2 Has data been used for awarding/punishment? (never-1 rare - 2 often-3)

#### Discussion

Data were collected on a sample of 30% of the medical staff (doctors and nurses) at surgical clinics CC Niš (institution of tertiary health care). The full sample consists of 169 medical staff in the following clinics: General Surgery, Minimally Invasive Surgery, Orthopedics, Urology, Neurosurgery, Cardiovascular Surgery, Plastic Surgery, ENT, Eye Clinic, GYN, Pediatric Surgery. The data collected refer to the views and opinions of the medical staff on health management, that indirectly reflect, following the theoretical WHO framework, what are key points in improving the human resources in the process of reform and change. Respondents answered 15 closed-ended questions.

Results show that only 1/3 of respondents know the meaning of "Health Management", while 2/3 does not know or partially know. The encouraging result is that a significant majority expressed interest and desire to learn more about it. Almost the identical result we get on question on "leadership in health". Employees have opinion that it is extremely important that every employee in the health sector has the basic information in the field of health management. Also, they expressed the manager need to be a doctor, but a "side" who would have 'more time to devote to business management".



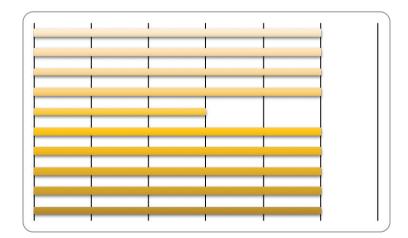
When stated that one man - the manager - cannot have all the necessary skills to successfully manage, respondents indicated surprisingly assertion uncertainty and

thus further demonstrate the necessity of introducing the concept of management and its dimension - teamwork. As expected, respondents recognize the need for professional training and additional formal and non-formal education in the field of health management, especially for the position 'director of the clinic'.

In open-ended question - which are key skills of a successful manager, singled out two: communication and planning. This result opens up a broader discussion of the formal education of doctors and potential measures for the improvement of programs and the acquisition of managerial skills. Questions on division of tasks and use of information for reward and punishment, those that determined disparity and the lack of 'system for data use', further confirms the lack of mechanisms for successful management.

Respondents answers, by ranking, on the question what is crucial for a good manager, clearly indicate that the experience and training in the profession gained low ranking, while the priority is given to skills of planning, forecasting, entrepreneurial spirit and modernization of the governance model. On the other hand, the answers about the problem issues in the organizational unit (OU) gave a different picture than the previous obtained – since the respondents indicate as very big problems the following four categories - the purchase of equipment, maintenance, financing and relations with the Fund (from the offered: Planning , organization of work, coordination of services, changing the structure of personnel, equipment procurement, maintenance, financing, labor discipline, interpersonal relationships, communication, relations with the Fund, relations with socio-political communities).

Ranking the most important abilities of a good manager in health care (based on the theoretical framework of the WHO, management theory and research), according to the respondents, has the following sequence and character: the ability to precisely define the objectives and tasks, initiative, vision, knowledge of modern management methods, accuracy, knowledge organization of health services, the ability to create a positive psychological atmosphere, qualifications and length of service. The innovation is the only one recognized as partially important.



The analysis of the results show that medical staff in surgical clinics KC Niš are not familiar enough with the concept and importance of management in health care,

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but there is clear view of their necessity and highly ranked necessity for acquisition of managerial skills.

Unfortunately, the current concept of education of future doctors and health managers does not include the acquisition of managerial skills, knowledge and competences, those subjects we can see in business studies. Trends rising from the current business environment and social change justify the need for it. Planed and intensive informal education or vocational extra-academic programs and study tours could bridge the gap.

The necessity of acquiring and possessing managerial skills, has been proved, also by the key players themselves.

### Conclusion

The results presented in this paper, as part of a broader empirical research, are practical contribution to research community in the field of health management in Serbia. Findings provide guidelines and direct to measures to be taken in improving the situation in this area. The results show that, despite some initiatives for the introduction of health management, there remains a large percentage of medical staff who are not familiar with the concept, but they are aware of its necessity.

Managerial skills, recognized by the medical staff at the surgical clinics CC Niš, as necessary for the management of the clinic (communication, planning, organization of work) are in compliance with all the theories of management. In this connection, it is necessary and recommended to introduce a rapid intervention programs and training, and establish centers for acquiring knowledge and skills in health management, or apply other mechanisms (study tours, learning best practices, transfer of know-how from the private sector, etc.). Professional profile of manager in health care must be defined by the set of skills and knowledge based on the recommendations of the EU and the principles of new public management.

The ultimate contribution of this research is the improvement of health care facilities, health service delivery, and efficiency of the health sector and the improvement of the health status of the population.

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