DOI: 10.2478/pielxxiw-2024-0002
© 2024 Author(s). This is an open access article distributed under the Creative Commons Attribution 4.0 licence (http://creativecommons.org/licenses/by/4.0/)

Top management education needs – A case study of public health system in Slovenia

Potrzeby w zakresie edukacji menedżerów najwyższego szczebla – studium przypadku publicznego systemu opieki zdrowotnej w Słowenii

Gorazd Laznik[1,A-L]

Faculty of Health Science, University of Novo mesto, Slovenia

CORRESPONDING AUTHOR:
Gorazd Laznik
Faculty of Health Science, University of Novo mesto
Na Loko 2, 8000, Novo mesto, Slovenia
e-mail: gorazd.laznik@uni-nm.si

A – Development of the concept and methodology of the study/Opracowanie koncepcji i metodologii badań; B – Query - a review and analysis of the literature/Kwerenda – przegląd i analiza literatury przedmiotu; C – Submission of the application to the appropriate Bioethics Committee/Złożenie wniosku do właściwej Komisji Biotycznej; D – Collection of research material/Gromadzenie materiału badawczego; E – Analysis of the research material/Analiza materiału badawczego; F – Preparation of draft version of manuscript/Przygotowanie roboczej wersji artykułu; G – Critical analysis of manuscript draft version/Analiza krytyczna roboczej wersji artykułu; H – Statistical analysis of the research material/Analiza statystyczna materiału badawczego; I – Interpretation of the performed statistical analysis/Interpretacja dokonanej analizy statystycznej; K – Technical preparation of manuscript in accordance with the journal regulations/Opracowanie techniczne artykułu zgodne z regulaminem czasopisma; L – Supervision of the research and preparation of the manuscript/Nadzór nad przebiegiem badań i przygotowaniem artykułu

STRESZCZENIE

POTRZEBY W ZAKRESIE EDUKACJI MENEDŻERÓW NAJWYŻSZEGO SZCZEBLA – STUDIUM PRZYPADKU PUBLICZNEGO SYSTEMU OPIEKI ZDROWOTNEJ W SŁOWENII

Cel pracy. Celem badania było zidentyfikowanie luki w istniejących treściach edukacyjnych w Słowenii, które pracownicy najwyższego szczebla kierownictwa publicznych instytucji opieki zdrowotnej nabyli podczas swojej edukacji oraz zaproponowanie nowego programu edukacyjnego w oparciu o analizę wyników.

Materiał i metody. Zastosowano ilościową metodę badawczą i opisową metodę pracy. Ankieta została wypełniona przez dyrektorów i asystentów dyrektorów ds. opieki zdrowotnej w publicznych instytucjach opieki zdrowotnej w Słowenii. Kwestionariusze ankiety wysłano do wszystkich pracowników najwyższego szczebla kierownictwa publicznych instytucji opieki zdrowotnej w Słowenii (N = 216). Do analizy statystycznej wykorzystano test chi-kwadrat i test $2\hat{I}$ Kullbacka.

Wyniki. Łącznie przeanalizowano 146 (67,6%) w pełni wypełnionych kwestionariuszy. Po zapoznaniu się z programami edukacyjnymi i potrzebami dodatkowej edukacji wyrażonymi przez respondentów zauważyliśmy, że w Słowenii nie ma programu, który obejmowałby wszystkie treści niezbędne do wysokiej jakości pracy na najwyższym szczeblu zarządzania. Możemy dodać, że pracownicy najwyższego szczebla kierowniczego instytucji zdrowia publicznego powinni być zobowiązani do uzyskania specjalnego wykształcenia.

Wnioski. Na podstawie opinii wyrażonych przez respondentów proponujemy wprowadzenie rocznego programu edukacyjnego, który obejmowałby tematy z zakresu ekonomii, prawodawstwa, zarządzania, medycyny i pielęgniarstwa.

Słowa kluczowe: edukacja, zarządzanie, szkolenia, instytucje zdrowia publicznego w Słowenii

ABSTRACT

TOP MANAGEMENT EDUCATION NEEDS – A CASE STUDY OF PUBLIC HEALTH SYSTEM IN SLOVENIA

Aim. The purpose of the research was to identify the gap in the existing educational content in Slovenia, which employees in the top management of public health institutions acquired during their education, and to propose a new educational program based on the analysis of the results.

Material and methods. Quantitative research method and descriptive work method were used. The survey was completed by directors, expert directors and assistant directors for health care in public health institutions in Slovenia. The survey was sent to all employees in the top management of public health institutions in Slovenia (N = 216). For statistic analysis we use chi-square test and Kullback's $2\hat{I}$ test.

Results. A total number of 146 (67.6%) fully completed questionnaires were analyzed. After reviewing the educational programs and the needs for additional education expressed by the respondents, we noted that there is no program in Slovenia that covers all the necessary content for quality work in top management. We can add that employees in the top management of public health institutions should be required to receive special education.

Conclusions. Based on the opinions expressed by the respondents, we propose the introduction of a one-year educational program that would include topics from economics, legislation, management, medicine and nursing.

Key words: education, management, training, public health institutions of Slovenia

sciendo

INTRODUCTION

Managers in the health sector are key to the successful functioning of the health system. In order to successfully manage medical staff and provide quality healthcare services, managers in healthcare must have excellent communication and management skills, however for the quality management of a public healthcare organization, at least basic knowledge in five areas is important, namely legislation, economics, management, medicine and nursing. Managers in the healthcare sector need to receive regular training, as healthcare processes and standards are constantly changing. The acquired knowledge enables them to monitor developments and provide quality health services to patients, while at the same time spending public money more efficiently [1]. Some of these functions clearly show deficiencies in specific skills, especially managerial skills.

Management, like some other disciplines, developed from practice, from the demand for higher productivity and coordination of the work process. The goal of good management is successful and high-quality business with a result that will satisfy investors or owners of organizations in both the private and public sector [1-6].

Both the private and the public sector need managers with specific theoretical and practical knowledge and skills to perform the management function [1].

When examining the personnel structure of employees in the top management of public healthcare institutions in Slovenia, we found that the top management most often consists of a business director, a professional director and an assistant director for nursing [1]. Employees in these positions [7] should be aware that they need additional knowledge of management and all areas related to the function. By reviewing the educational structure of all employees in the top management of public hospitals and health centers in Slovenia [1], the author notes that on 1 January 2020, 83 persons with ten different fields of education were employed in the position of director, of which 33 had a medical education (39. 8%) and only 4 (5%) had a degree in business sciences or management. Upon further analysis, we found that on this day in Slovenia, 26 public healthcare institutions had more than 251 employees, and nine institutions had more than 1000 employees, which gives management and leadership a completely different dimension, if we expect high-quality and successful work from top management.

On January 1st 2019, there were 83 public health institutions in Slovenia, of which 57 were public health centers and 26 hospitals of secondary and tertiary level of health care, which are included in the Public Health Service Network [8].

The healthcare system is complex and extensive, its success depends on how it functions as a whole, on „its operating policy, the wider environment and healthcare organizations, and within them, the administrators and managers and healthcare staff" [7].

The role of today's health manager [9] is to basically evolve together with the organization. It must move from providing care based on taking responsibility for care to responding to health reform, declining payments, while being cost-effective in business. The education of managers in healthcare organizations is important [10], because only in this way can they follow modern, dynamic changes in the environment and improve the quality of services in healthcare organizations.

Management in the public sector did not develop fast enough compared to the economic sector, and managerial skills were neglected, especially the function of management, which is especially important in healthcare due to constant contact with people, i.e. the human factor [11]. To this, the author adds, that by advancing up the managerial ladder, everyone needs more specific management skills and abilities. It also happens too often that managers become unsuccessful due to a lack of understanding and disregard for the importance of education and skills. Regular education [12] is crucial for the development of an individual's career, and its necessity is dictated by rapid economic and technological development, digital transformation, etc. [13]. Although the author does not speak specifically about the education of managers, she adds that education is one of the elements of society, which is among more essential in ensuring the competitiveness of both organizations and individuals.

After reviewing the syllabuses of various university faculties in the Republic of Slovenia, we found that there are many opportunities for education in individual fields, where we mean education in the fields of medicine, legislation, economics, nursing and management. This is, of course, good, but upon closer analysis of the individual study program, we found that we do not have a formal educational program that would cover and offer all the necessary knowledge or content in one program and enable the acquisition of competencies for high-quality management of a public health organization [1].

After examining all study programs in Slovenia that are at least slightly related to healthcare, or programs that are focused only on one of the five mentioned areas, there are only two programs that at least partially cover the desired content: 2nd degree study programs Management in Healthcare and social care, which is implemented by the Faculty of Health Sciences and the Faculty of Organizational Sciences of the University of Maribor, and the study program Education and Management in Healthcare, which is implemented by the Faculty of Health Sciences of the University of Novo Mesto. However, not all of the desired five areas are among the mandatory contents [1].

AIM

The purpose of the research is to define the gap in the offered educational content, which the top management employees have adopted during their education, and to prepare a proposal for a new educational program which, in addition to the necessary content, will also meet the financial, time and methodological expectations of the target group.

MATERIALS AND METHODS

We used a quantitative research method and a descriptive method of work. We included directors of public hospitals and public health centers in Slovenia, as well as their professional directors and assistant directors for nursing. According to the Ethical Commission of the University of Novo Mesto, the discussed topic did not contain any ethical dilemmas.

At the beginning of 2020, we sent the survey questionnaire, which was created on the basis of a review of the literature [5,7,14] to all 216 employees in the top management of public health institutions, and after four reminders, by the end of 2020 we obtained 146 fully completed survey questionnaires, which represents 67.6% of employees in the top management of public healthcare institutions on 1/1/2020. We found that 70 (85.4%) of all 82 assistant directors for nursing completed the questionnaire, as well as 21 (41; 2%) out of a total of 51 professional directors. Of the 32 directors who perform the function of business and professional director together, we received 13 (40.1%) completed questionnaires, and of the 51 business directors who only perform the function of business director, 39 (76.5%). Among all the respondents, the majority (63; 43.2%) have had between 21 and 30 years of total working experience, and as many as 79 (54.1%) of the respondents have been in a leading position for up to 10 years.

RESULTS AND DISCUSSION

Tab. 1. The importance of educational content for employees in the top management of public health institutions depending on the position

			The contents that are important for additional education are:				
			medicine	economics and procurement	legislation	health care	management
Job position	business director	f	8	35	27	4	10
		f %	20.5	89.7	69.2	10.3	25.6
	business and professional director	f	11	8	9	1	2
		f %	84.6	61.5	69.2	7.7	15.4
	professional director	f	20	4	8	0	1
		f %	95.2	19.0	38.1	0.0	4.8
	assistant director of nursing	f	13	21	41	61	7
		f %	19.7	31.8	62.1	92.4	10.6
Working time in a managerial position	Up to 10 years	f	30	37	50	41	11
		f %	20.5	25.3	34.2	28.1	7.5
	11-20 years	f	15	15	19	24	5
		f %	10.3	10.3	13.0	16.4	3.4
	21-30 years	f	6	13	10	1	3
		f %	4.1	8.9	6.8	0.7	2.1
	31-40 years	f	2	5	8	4	4
		f %	1.4	3.4	5.5	2.7	2.7
	together	f	53	70	87	70	23
		f %	36.3	47.9	59.6	47.9	15.8

Legend: f - frequency, f % - percentage
Source: Own resource, 2023

According to our results, all employees in the top management of public health institutions most often decide to study in fields with the content of legislation (87; 59.6%), and least often with the content of management (23; 15.8%), which, according to us, seems somewhat irresponsible due to extremely managerial orientation of the function. It is worrying that only 23.1% of business directors and business-professional directors are educated in the field of management, and most (43; 82.3%) in the field of economics and procurement. At the same time, when defining the importance of educational content, not a single age group emphasizes management courses (tab. 1).

At the same time, we were faced with the dilemma of whether there might be statistically significant differences between employees in different positions in top management in defining the importance of content and additional education. It turned out that, when defining additional education, there are statistically significant differences in the field of economics ($\chi^2 = 43.220$; df = 4; p = 0.000), legislation ($\chi^2 = 19.009$; df = 4; p = 0.041), medicine ($2\hat{I} = 61.280$; df = 4; p = 0.000) and nursing ($\chi^2 = 102.533$; df = 4; p = 0.000), and there were no statistically significant differences in the field of management ($2\hat{I} = 9.374$; df = 4; p = 0.052). It is therefore confirmed once again that employees in top management do not attach special importance to content from the field of management.

Furthermore, by analyzing the results, we wanted to define the suitability of education for the performance of such a responsible function. It turned out that as many as 58.2% (85) of all respondents indicated management education as the most suitable, and health care education as the least suitable (2; 1.4%). At this point, we also asked whether there are any statistically significant differences between different positions in top management regarding the definition of suitable education for a director. We checked the result with Kullback's $2\hat{I}$ test and found ($2\hat{I} = 28.522$; df = 20; p = 0.098) that all employees in top management define management education as the most suitable education, while they all neglect nursing education (tab. 2).

The individual contents that the new educational program should have by field were distributed fairly equally by the respondents, with an emphasis on management contents (83; 56.8%), while the least emphasis was placed on health care (19; 13%). They chose an educational program that would take place in several-week seminars and last a maximum of one year as the most suitable one (tab. 3).

The authors [15] in various studies publishing in professional journals between 2000 and 2012 wrote that, despite reviewing as many as 250 educational programs for healthcare management, they did not find a program that addressed both competence issues and teaching examples of good practices, thereby evaluating and improving the efficiency of the healthcare system.

Tab. 2. Suitability of education for the position of director of a public health institution

	Answer	f	f%
According to the current offer in the education system, the most suitable person for the position of director of a public health institution would be:	Education in the field of law	8	5 .5
	Education in the field of economics	16	11 .0
	Education in the field of medicine	21	14 .4
	Education in the field of management	85	58 .2
	Education in the field of nursing care	2	1 .4
	Other	14	9 .6

Legend: f - frequency, f % - percentage
Source: Own resource, 2023

Tab. 3. Respondents' definition of the content and the new educational program

Question	Answer	f	f%
In order for the educational program to meet the needs and knowledge needed by a manager in a public health institution, it should contain the following educational content (you can choose several contents):	Contents of legislation	39	26.7
	Contents of economics	50	34.2
	Contents of medicine	50	34.2
	Contents of management	83	56.8
	Contents of nursing	19	13.0
In your opinion, how should on-the-job training be implemented, which would be designed exclusively for managers in the top management of public healthcare institutions?	In multi-week seminars within 1 year - training upon assuming a managerial position	96	65.8
	In the form of a 2-year formal education - 2nd level - obtaining the title of Master of Health Management	32	21.9
	In the form of a 3-year formal education - 3rd level - obtaining the title of Doctor of Science in Health Management	12	8.2
	Other	6	4.1

Legend: f - frequency, f % - percentage
Source: Own resource, 2023

The results of the 2019 survey [7] also confirm the fact that managers in public health organizations have insufficient knowledge in the field of management and therefore, spend too much time performing this function, while a large proportion of these positions is occupied by doctors. The authors attribute the blame for the lack of knowledge in the field of management mainly to the deficient educational program or curriculum of the two medical faculties in Slovenia, which do not contain management content. Organizations, including the healthcare sector, are subject to market, technology and regulatory changes [16]. The authors continue that this requires enhanced and different knowledge. In the research, the two authors studied managers in public health care in Norway and found that such programs are not aimed at the management of public health organizations and do not support the development of practices and management of organizations.

Directors lack managerial competencies in the field of management and leadership [14]. The authors associate this with the neglect and too slow development of professional management in Slovenian health care and add that the research revealed the desire of directors to acquire competences in the fields of economics, management, business and leadership.

In research based on a review of the literature [17-20] in the developed world, the field of management in the health care system shows the same findings. For the healthcare sector, it is essential that managers know how to support the professional skills of their employees, encourage the entire staff to expand their knowledge base. In the top management of healthcare organizations, managers should have skills and knowledge in the areas of research, business and legislation, administration and resource management, knowledge of the healthcare environment and organization, interpersonal, communication qualities and relationship management, people and organization management, enabling and managing change, and professionalism . However, it is imperative [18] that such programs are prepared carefully, planned and based on market research. Currently, the offered programs are expensive both for the individual and for the national organization, but when introducing such a program, it is necessary to present the benefits to the general public and the government for the health system in the long term.

CONCLUSIONS

The lack of understanding of the importance and issues of quality management of public health institutions is becoming more pronounced day by day, which is reflected in business results and employee turnover, resulting in poorer quality of health services, i.e. poorer care for patients. Solving the aforementioned problem requires highly educated experts with interdisciplinary knowledge - basic knowledge of economics, legislation, medicine and nursing, as well as in-depth knowledge of management.

The findings of our research, which was focused on the Slovenian healthcare system, are almost identical, which is why we have prepared [1] a „training program" that will last a maximum of one year in the form of several-week seminars. It is designed to upgrade and expand the range of current knowledge, attitudes, professional values and skills that today's leading employees in public health institutions have acquired at the first, second or third level of education.

Due to the conditions of the National Agency for Higher Education, the education program will be included in the program of the Faculty of Health Sciences of the University of Novo Mesto in the 2025/2026 academic year as advanced training program named »Management in healthcare organizations«.

Acknowledgements

We are grateful to all participants who made this study possible.

ORCID

Gorazd Laznik https://orcid.org/0000-0003-3281-1150

REFERENCES

1. Laznik G. Model kurikuluma izobraževanja vodstvenih delavcev javnih zdravstvenih zavodov Slovenije (Doktorska disertacija). Novo mesto: Univerza v Novem mestu Fakulteta za zdravstvene vede; 2021.
2. Ivanko Š. Zgodovina organizacijske misli. Novo mesto: Fakulteta za organizacijske študije; 2015.
3. Kramar Zupan M. Menedžment vs. vodenje. Novo mesto: Fakulteta za poslovne in upravne vede; 2009.
4. Rozman R. Uvod v management v zdravstvenih organizacijah. Rozman VR, Kovač J, Filej B, Robida A (ur.). Management v zdravstvenih organizacijah Ljubljana: Lexpera, GV Založba; 2019, p. 63-115.
5. Starc J. Razvoj modela kurikuluma izobraževanja in usposabljanja slovenskih menedžerjev, zaposlenih v gospodarstvu (Doktorska disertacija). Kranj: Univerza v Mariboru, Fakulteta za organizacijske vede; 2008.
6. Rozman R, Kova J, Filej B, Robida A (ur.). Management v zdravstvenih organizacijah. Ljubljana: Lexpera, GV Založba.
7. Kovač J, Maze H. Raziskava managerskega dela v zdravstvenih organizacijah. [in:] Rozman R, Kovač J, Filej B, Robida A (Eds.). Management v zdravstvenih organizacijah Ljubljana: Lexpera, GV Založba; 2019, p. 45-60.
8. Mreža javne zdravstvene službe. Republika Slovenija. Retrieved from https://www.gov.si/teme/mreza-javne-zdravstvene-sluzbe/. 2019.
9. Madden, M. Soft-leadership competencies for today's healthcare finance executives. Healthcare financial management. 2015; 69(5): 42-45.
10. Jankelova N, Joniakova Z, Romanova A. The need for management education of healthcare management employees. International Journal of Health Planning and Management. 2022; 37(1): 301-317. Retrieved from https://doi.org/10.1002/hpm.3325.
11. Kramar Zupan M. Dejavniki uspešnosti menedžmenta sprememb v zdravstveni organizaciji. Revija za ekonomske in poslovne vede. 2020; 7(1): 3-24. Retrieved from https://fpuv.uni-nm.si/uploads/_custom/revija_eb/vol7no1/Revija_EB-2020_V7N1_1.pdf.
12. Blažič M. Pomen teorije inteligentne kariere za karierni razvoj menedžerjev. In J. Starc (Ed.), Izzivi globalizacije in družbeno-ekonomsko okolje EU. Zbornik prispevkov: mednarodna znanstvena konferenca. Novo mesto; 16. maj 2019, p. 7-23. Novo mesto: Univerza v Novem mestu Fakulteta za ekonomijo in informatiko, Univerza v Novem mestu Fakulteta za poslovne in upravne ved.
13. Jermaniš M. Izobraževalna politika Evropske unije na področju izobraževanja odraslih. Sodobna pedagogika. 2020; 71(137): 84-101.
14. Kramar Zupan M, Erjavec K. Kompetence in potrebe po izobraževanju direktorjev slovenskih bolnišnic. Didactica Slovenica – Pedagoška obzorja. 2020; 35(1), 114-131. Retrieved from http://www.pedagoska-obzorja.si/revija/Vsebine/PDF/DSPO_2020_35_01.pdf.
15. Careau E, Biba G, Brander R, et al. Health leadership education programs, best practices, and impact on learners' knowledge, skills, attitudes, and behaviors and system change: a literature review. J. Healthc. Leadersh. 2014; 6: 39-50. Retrieved from https://www.dovepress.com/getfile.php?fileID=19989.
16. Vold T, Haave HM. Relevance of Adult Higher Education on Knowledge Management in the Healthcare Sector. The Electronic Journal of Knowledge Management. 2020; 18(3): 236-254. Retrieved from https://doi.org/10.34190/EJKM.18.03.004.
17. Ayatollahi H, Zeraatkar K. Factors influencing the success of knowledge management process in health care organisations: a literature review. Health. Info. Libr. J. 2020; 37: 98-117. https://doi.org/10.1111/hir.12285.
18. Flaig J, Alam A, Huynh J, et al. Examining How Formal Leadership Development Programs Positively Influence Hospital Leaders' Individual Competencies and Organizational Outcomes – An Evidence-Based Literature Review. J. Healthc. Leadersh. 2020; 12: 69-83. https://doi.org/10.2147/JHL.S239676
19. Karsikas E, Meriläinen M, Tuomikoski AM, et al. Health care managers' competence in knowledge management: A scoping review. Journal of Nursing Management. 2022; 30(5): 1168-1187.
20. Kakemam E, Liang Z, Janati A, et al. Leadership and Management Competencies for Hospital Managers: A Systematic Review and Best-Fit Framework Synthesis. J. Healthc Leadersh. 2020; 12: 59-68. https://doi.org/10.2147/JHL.S265825.

Manuscript received: 07.06.2023
Manuscript accepted: 07.11.2023