### MANAGER QUALIFICATION AS CONDITION FOR QUALITY OF THE HEALTHCARE

### Kamelia Bogdanova

Medical University – Sofia, Bulgaria

**Abstract:** Healthcare management is based on the mobilization of human resources and the resources of the environment. Their effective use determines to a great extent the quality of care, which is a major factor for the sustainable development of the healthcare establishments. The healthcare management is performed by managers and they must have knowledge and skills to carry out management and administrative functions in the current social and economic conditions. The managers must have ability to mobilize human resources in line with patients' needs and in with improving the quality and efficiency of healthcare. The work organizational level in the ward, which determines the efficiency and quality of care, depends mainly on manager competence.

The paper presents results from investigation on quality of healthcare management. The aim of the study is investigation on healthcare management by analysis of the statistical relationships between manager qualification and factors that influence on health care quality.

Object of the study is healthcare management in six hospitals for active treatment. The research is based on direct individual survey and covers 120 senior nurses. Signs related to their social status, work organization, control of health activities, the role and place of the nurse in the treatment process have been investigated.

The analysis of the survey data is focused on characterization of nursing care in the hospital, professional training and competencies of nurses for quality care, nursing documentation and nursing file, causes of deterioration of the healthcare quality, satisfaction and motivation of nurses, applicability of single model for healthcare management with a relevant information product to the hospital information system.

The results were processed with SPSS v.19 statistical software. Qualitative and quantitative parameters for problem identification were used.

Improving the quality of healthcare and the sustainable development of human resources requires increasing the share of healthcare managers who hold postgraduate qualifications. This could be achieved by optimizing organization in health care facilities to provide greater opportunities in the context of the European lifelong learning principles, and by increasing the motivation of healthcare managers and professionals to develop their professional competences, having a clear career development perspective.

Important conditions for effectiveness and quality of the healthcare are the application of management methods and means and the use of technical forms and reports. The data obtained show that these conditions depend on educational degree and post-graduate qualification.

**Keywords**: nurse, manager, qualification, quality, healthcare.

#### INTRODUCTION

The development of medical science adds a new dimension to the nursing profession, which is expressed in differentiation of autonomous functions and responsibilities of the nurses in the complex of healthcare. In modern healthcare, nursing activities include not only charity for the sick and technical implementation of doctor appointments, but also collecting and analyzing information and decision doing it according to their competence. In conformity with that the requirements for the professional qualification of healthcare professionals are increased [2]; [3]. Their professional duties require constantly familiarization with the latest developments in practice and the implementation of measures to improve the quality of care in healthcare establishments.

The management of nursing care in different healthcare structures is carried out by managers who. They must have knowledge and skills to perform management and administrative functions [4]; [5]; [9]. The managers need to have qualities such as behavior and attitudes that are specific to healthcare management, and have to follow inherent nursing concepts [8]. Socio-economic conditions define the key role and importance of managers. Their skills in planning, organizing, directing and controlling financial, human and material resources determine the quality and effectiveness of healthcare [6]; [12], which is essential for the sustainable development of healthcare facilities in conditions of competition and market economy. All this is reflected in the modern educational system

where nurses are trained in universities by highly qualified teachers and have the opportunity to increase both their Bachelor's and Master's degrees, as well as opportunities for specialization in different fields [11]. The professional qualifications of healthcare professionals depend not only on their initial training at the educational establishments. To a large extent, it is determined by their training in healthcare facilities, continuing education and training [1]; [7]. The sustainable development of human resources with a focus on the specialization of medical staff and continuous training is among the main priorities of the National Health Strategy [10].

The aim of this study is investigation on healthcare management by analysis of the statistical relationships between manager qualification and factors that influence on health care quality.

#### MATERIAL AND METHODS

Object of the study is healthcare management in six hospitals for active treatment: "Dr. Stamen Iliev" Hospital, Montana; "Bratan Shukerov" Hospital, Smolyan; MBAL Targovishte AD, Targovishte; University Hospital "Prof. Dr. Paraskev Stoyanov AD, Lovech; "St. Pantaleimon AD, Yambol; "First City Hospital", Sofia.

The research is based on direct individual survey and covers 120 senior nurses. Signs related to their social status, work organization, control of health activities, the role and place of the nurse in the treatment process have been investigated.

The analysis of the survey data is focused on characterization of nursing care in the hospital, professional training and competencies of nurses for quality care, nursing documentation and nursing file, causes of deterioration of the healthcare quality, satisfaction and motivation of nurses, applicability of single model for healthcare management with a relevant information product to the hospital information system.

The results were processed with SPSS v.19 statistical software. Qualitative and quantitative parameters for problem identification were used. Frequency analysis of quality variables with absolute frequencies, relative frequencies, cumulative relative frequencies, variance analysis of quantitative variables - average value, standard deviation and average confidence interval has been done. A Chi-square test (Pearson Chi- Square, Likelihood Ratio, Linear-by-Linear Association) method is applied to search for a link between quality variables. A critical significance level of 0.05 was used. The null hypothesis is rejected at a value of  $p \le 0.05$ .

### RESULTS AND DISCISION

The results show that 70.83% of HEIs hold higher education. 25,83% of the respondents have a Master's degree in Healthcare Management, 27,50% is the relative share of the managers with bachelor's degree "Health Care", while 17,50% have a bachelor's degree in another specialty (Table 1). This is in conformity with the requirements of the Law on Healthcare Institutions, which clearly specifies the requirement for the education degree of healthcare managers. Healthcare management requires knowledge, skills and competences other than the knowledge and skills of healthcare professionals. The managers must have ability to mobilize human resources in line with patients' needs and in with improving the quality and efficiency of healthcare. The work organizational level in the ward, which determines the efficiency and quality of care, depends mainly on managers competence.

Table 1. Allocation of health care managers according to the educational level

Education	Number	Relative share [%]
Secondary special	7	5,83
Semi-Higher education	16	13,33
College	12	10,00
Higher - Bachelor	21	17,50
Higher - Bachelor ''Health Care''	33	27,50
Higher - Master "Healthcare Management"	31	25,83
Total	120	100,00

Only 5,83% of respondents indicated secondary special education, 13,33% - Semi-Higher education, and 10,00% graduated from college (Table 1). This fact is indicative for growing importance of the educational level for healthcare workers and the nurse motivation to career development in line with their qualification enhancement.

The data obtained, show that the distribution of healthcare managers according to post-graduate qualification is approximately equal. 53,33% of respondents have confirmed the presence of post-graduate qualification and 46,67% do not have it (Figure 1).

Improving the quality of healthcare and the sustainable development of human resources requires increasing the share of healthcare managers who hold postgraduate qualifications. This could be achieved by optimizing organization in health care facilities to provide greater opportunities in the context of the European lifelong learning principles, and by increasing the motivation of healthcare managers and professionals to develop their professional competences, having a clear career development perspective.

The results show that 72,50% of managers consider themselves to be fully prepared for healthcare management (Figure 2). 25,00% are perceived as partially prepared and 2,50% think they do not have the necessary qualifications and experience. It was found that nearly one-third of respondents (27,50%) are not fully confident about their competencies for effective healthcare management. This is in conformity with the relative distribution of health care managers according to their professional experience as managers (Table 2). The share of managers with relatively little experience in this position dominates - up to 12 years (59,17%), which can be explained by the high turnover of staff in the healthcare system.

The application of management methods and tools for the work organization in the ward and the use of technical datasheets and protocols are important factors determinant the management effectiveness and healthcare quality. The statistical treatment of the survey data shows a relation between educational level and postgraduate qualification of the managers.

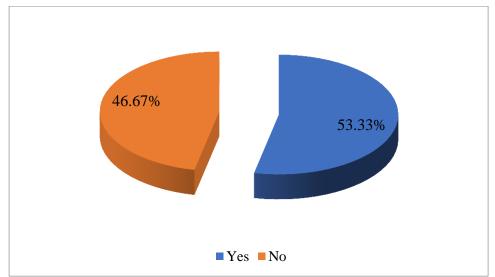


Figure 1. Allocation of healthcare managers according to presence of post-graduate qualification

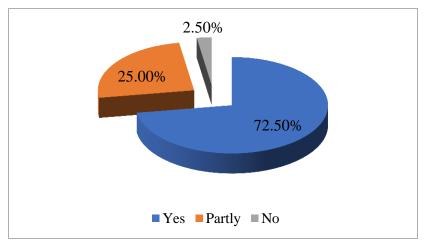
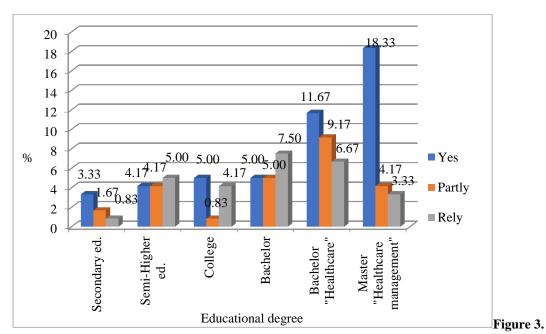


Figure 2. Efficiency of healthcare organization based on qualifications and experience in healthcare management

Table 2. Allocation of health care managers according to their professional experience as managers

Professional experience as	Number	Relative share
a manager, years  1 - 12	71	[%] 59,17
13 - 20	26	21,67
21 - 30	17	14,17
31 - 36	6	5,00
Total	120	100,00



Dependence between the application of management methods and resources and the level of education of healthcare managers (p = 0.034 < 0.05)

# KNOWLEDGE – International Journal Vol. 20.4

Bansko, December, 2017

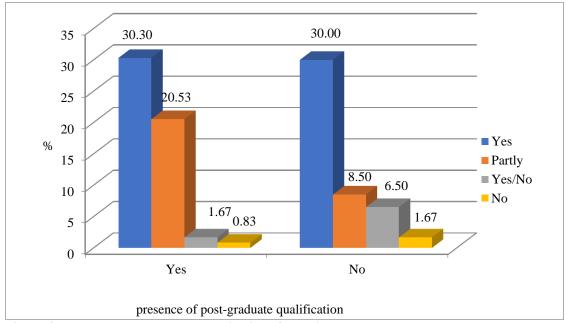


Figure 4. Dependence between the application of technical datasheets and protocols on health care and the availability of post-graduate qualifications of healthcare managers (p = 0.012 < 0.05)

The highest share of main and senior nurses which continuously use management methods and tools in work organization was established for managers holding Master's degree in "Healthcare Management" -18,33% (Figure 3). The share of managers who partly apply or only rely on management methods is 4,17% and 3,33% respectively. The ratio between managers who fully or partially apply technical datasheets and protocols is 30,30% to 20,53% for main and senior nurses with postgraduate qualifications and 30,00% for 8,50% for those without postgraduate qualification (Figure 4).

Differences have been found with regard to managers who respond indefinitely or do not use technical fishes and protocols. For the main and senior nurses with post-graduate qualification, their share is 1,67% and 0.83%, respectively. Significantly higher are those for non-postgraduate managers -6,50% and 1,67%, respectively.

All this confirms the necessity of conducting events and creating conditions for improving the qualification of healthcare managers and professionals in conformity with the current European practices of Continuity of Training as a tool to increase the quality and efficiency of healthcare and to ensure the sustainable development of healthcare establishments.

#### CONCLUSIONS

The analysis of the data obtained clearly shows the importance of education and post-graduate qualification for the formation of managerial skills in healthcare managers. The relationship of these indicators with the application of management methods and tools of organizing healthcare in the ward and the use of technical datasheets and protocols that are factors for effective management and quality of healthcare have been statistically proven.

Healthcare management is based on the mobilization of human resources and the resources of the environment. Their effective use determines to a great extent the quality of care, which is a major factor for the sustainable development of the healthcare establishments in the conditions of patient free choice, market economy and competition between hospitals. This necessitates a continuous improvement of the qualifications of healthcare managers by optimizing the organization in the healthcare establishments and providing greater opportunities for professional development.

#### REFERENCES

[1] Alexandrova, M., T. Popov. 2006. For some technologies and innovative approaches to ongoing nursing training. Pedagogical Education in Bulgaria. State and Trends. P. 440-444 (in Bulgarian).

## KNOWLEDGE – International Journal Vol. 20.4

### Bansko, December, 2017

- [2] Bikova, P., N. Vassileva, A. Terzieva. 2014. E-learning and its practical application in medicine. Thirty-first scientific and technological session. Sat. articles, TEMTO, p. 82-85 (in Bulgarian).
- [3] Bogdanova, K., D. Blagoeva, P. Kanthereva, S. Georgieva. 2014. The role of the nurse in prophylaxis of osteoporosis. Third Scientific Session of Medical College Varna. Varna Medical Forum. Volume 3, Appendix 4, pp. 11-15 (in Bulgarian).
- [4] Borisov, V. 2001. The health care specialist in the management process. C: Social Medicine. S., pp. 20-23 (in Bulgarian).
- [5] Chaneva, G., I. Stambolova. 2003. Nursing Care Management Concepts. C: Healthcare Management. S., Filvest, pp. 7-15.12. Field, A. 2006. Discovering statistics using SPSS. (2<sup>nd</sup> ed.). London, UK: Sage. 908 p. (in Bulgarian).
- [6] Dimitrov, Tz., D. Petkova, V. Vasileva, D. Shopov, M. Aleksandrova. 2013. About the quality of medical care in hospitals. Asclepius. International journal of history and philosophy of medicine. Sofia, Vol. VII(XXVI), 1, pp. 73 76 (in Bulgarian).
- [7] Dimitrov, Tz., D. Petkova, V. Vasileva, D. Shopov, M. Aleksandrova. 2013. Multi-factor impact on the quality of medical care in a hospital. Asclepius. International journal of history and philosophy of medicine. Sofia, Vol. VII(XXVI), 1, pp. 77 80 (in Bulgarian).
- [8] Formarier, M., G. Poirier-Coutansais, T. Psiuk. 1995. Les concepts organisateurs de la science leur application aux soins infirmiers, Recherché en soins infirmiers, N 43. 68-80 (in French).
- [9] Gladilov, S., A. Yanakieva, A. Vodenicharova. 2015. Marketing in healthcare. S., Princess Marinov Ltd. ISBN 978-954-8067-82-9. 220 p. (in Bulgarian).
- [10] National Health Strategy (2014-2020). 2013. MH. S., 81 pp. (in Bulgarian).
- [11] Ordinance on the Unified State Requirements for Higher Education in the "Nursing" and "Midwifery" specialties for Bachelor's degree, adopted by Decree of the Council of Ministers No 248 of 22.11.2005, amended. SG No. 88 of 09.11.2010.
- [12] Vodenicharov, Ts. 2011. Medical and managerial professionalism need for academic and expert support in the context of organizational change in healthcare. Health Policy and Management, No. 4, pp. 3-5 (in Bulgarian).