

STATEMENT

by Assoc.Prof. Silviya Ivanova Filkova, PhD
Training sector "Rehabilitator", Medical College,
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For Donka Trifonova Sultanova's dissertation on the topic:

CHARACTERISTICS OF NURSING CARE IN PEDIATRIC WARDS AND INFECTION CONTROL

Scientific supervisors:

Assoc. Prof. Tsonko Paunov, PhD and Prof. Elena Zheleva, PhD

For the award of the educational and scientific degree "Doctor" in the field of higher education 7. Health and Sport, professional field 7.4. Public Health, in the scientific specialty " Nursing Care Management "

Details of the procedure

By order of the Rector of the Medical University "Prof. dr. Paraskev Stoyanov - Varna № P-109-251 of 01.08.2019 Donka Trifonova Sultanova is enrolled as a full-time doctoral student in the Doctoral Program in Health Care Management at the Department of Health Care, Branch - Sliven, Medical University - Varna for the acquisition of the degree of Doctor of Education in the field of higher education 7. Health and Sport, professional field 7.4. Public Health, in the scientific specialty of Health Care Management. On a Departmental Council of the Department of Health Care, Sliven Branch of Medical University Varna № 7 of 14.07.2022. the readiness for public defence of the PhD student was established and a proposal for the composition of the Scientific Jury was made.

I present this opinion as a member of the Scientific Jury, according to the Order of the Rector of Medical University - Varna № P-109-310 of 29.07.2022 for providing a procedure for the defense of a dissertation on " Characteristics of nursing care in pediatric ward and infection control", developed by Donka Trifonova Sultanova, doctoral student at the Department of Health Care. In accordance with Protocol No. 1/08.08.2022 of the first meeting of the Scientific Jury, I have been appointed to present an opinion on the dissertation.

The submitted set of materials on paper and electronic media has been prepared and presented in accordance with the Law on the Development of Academic Staff in the Republic of Bulgaria and the Regulations for the Development of Academic Staff of Medical University - Varna.

Biographical data and professional development of the applicant

After completing her higher education with a major in Nursing at the Medical University "Prof. dr. Paraskev Stoyanov" Varna, Branch - Sliven, in 2017" Donka Sultanova continues her professional development and training. In 2019, she obtained a Master's degree in Health Care Management at Trakia University - Stara Zagora.

Since August 2017 she has been working as a nurse at the Dr. Ivan Seliminski Hospital, in the Department of Pediatrics.

Her academic development began in 2019 and continues until now as a PhD student in full-time studies at the Branch - Sliven of the Medical University "Prof. dr. Paraskev Stoyanov" Varna, Department of Health Care.

Since 2019 Donka Sultanova is a full-time PhD student in the Doctoral Program in Health Care Management at the Medical University "Prof. dr. Paraskev Stoyanov" Varna, Department of Health Care.

Supervised classes in academic disciplines - conducts clinical practice with students of the specialty "Nurse" in the Children's Ward.

He has 4 scientific publications and one in print. He uses English and Russian.

Characteristics of the dissertation

The dissertation, developed by Donka Sultanova, is 137 pages long, with the standard structure for the professional field. It includes: Literature review (37 p.), Objective. tasks, methodology and organization of the study (3 p.), Results of own research and discussion (71 p.). Conclusions and contributions and references used (15 p.) and 2 appendixes. Illustrated with 91 figures, 1 table. The bibliographic reference contains 175 titles, of which 59 in Cyrillic and 116 in Latin.

Assessment of the relevance of the topic

Providing quality health care, preventing infectious morbidity and controlling infections for pediatric patients is a priority not only in health care systems worldwide, but also in our country.

Nosocomial infections are a significant problem, and their development can lead to disability and mortality in hospitalized patients and especially in children due to age-related physiological features. Infections associated with medical care also lead to extended hospital stays, which in turn are associated with additional financial costs.

All government policies and institutions are involved in developing infection prevention and control strategies and programmes that are as easily applicable as possible in healthcare settings, and minimising the risks of pathogen transmission, as the PhD student points out. Therefore, the relevance of the thesis cannot be questioned in my opinion.

In her dissertation Donka Sultanova draws our attention to the prevention and control of infections associated with medical care in children's wards and clinics is a process that requires high responsibility. Periodic training and provision of up-to-date information to health care professionals, stimulating and motivating medical and non-medical staff to combat these infections is required. It is appropriate to continuously update prevention and control programmes in accordance with the specific characteristics of paediatric patients.

A study of the specifics of health care in paediatric wards, the related organisation of infection control, and the attitudes and knowledge of staff regarding the control of nosocomial infections, which is the subject of the thesis, raises serious questions that pose a challenge to policy makers in health, social care and education. This makes the topic chosen by Donka Sultanova significant, topical, interesting and dissertable.

Literature review

Structurally, the literature review includes 4 parts devoted to different aspects of the problem under study:

The first part logically introduces the definition of concepts and characteristics of physiological and pathological features of childhood and age classifications. On the basis of researched literary sources the author has traced the periods of childhood from the moment of the child's birth to the end of adolescence.

The second part presents the organization of childhood healthcare. She commented on the United Nations Convention on the Rights of the Child, according to which a child is any person under the age of 18 unless, under the law applicable to the child, he or she attains the age of majority at an earlier age. It focuses on the impact of the standard of living on almost all aspects of health, with an emphasis on poor hygiene and malnutrition, which increase the risk of diseases, especially infectious ones. It presents the main factors affecting child survival, namely scarce health care, lower disease prevention, difficult access to health services, compromised care due to lack of trained doctors, health professionals, equipment, medicines, etc.

In the third part of the literature review, I find the requirements for the medical care of children thoroughly described, including the specifics of children health care. The medical standards in pediatrics and the prevalence of healthcare associated infections are also presented with emphasis on the specifics of infections, control measures and prevention in a pediatric ward.

The final section of the Literature Review summarizes the results of a study of the prevalence of nosocomial infections and requirements in the pediatric inpatient setting. In addition, the specifics and measures of infection control and prevention in pediatric wards are developed in detail. It is becoming clear that healthcare associated infections are a growing problem in modern medicine. Their impact includes prolonged hospital stays, long-term disability, increased resistance of microorganisms to antimicrobials, huge additional financial burden, high costs for patients and their families, and excessive death.

The literature review and bibliographic reference present a broad awareness of the topic at hand.

Survey methodology

In Chapter II Donka Sultanova has presented the aim, objectives, hypotheses and methodology of the dissertation.

The main objective is precisely and clearly stated: 'To investigate the specificities of healthcare in pediatric wards, the related organisation of infection control, and the awareness and attitudes of staff regarding the control of nosocomial infections'. It is developed in 5 correctly formulated tasks, the implementation of which reflects the research work carried out

by the PhD student. There are 4 working hypotheses. The methodology is presented in detail. The survey included 118 individuals, divided into three respondent groups:

Group I - 46 nurses providing health care in the pediatric structures of Dr. Ivan Seliminski Hospital, Sliven and St. Marina University Hospital, Varna.

Group II - 60 students from the 'Nurse' major, studying in the Sliven Affiliate at Prof. Dr. Paraskev Stoyanov Medical University - Varna.

Group III - 12 nurses working in the children's ward of Dr. Ivan Seliminski Hospital - Sliven.

The survey was conducted through two types of anonymous questionnaires in the cities of Sliven and Varna. The survey of health care professionals nurses and students was conducted in the pediatric wards where they work/conduct clinical practice. The study was carried out independently in the period 01.12.2021 - 31.05.2022.

The results of her own research and their discussion are presented in Chapter Three of the dissertation.

After the first survey - Questionnaire No. 1, which was conducted to assess the awareness of nurses, students and orderlies about the responsibility and implementation of activities for the prevention and control of nosocomial infections, the statutory medical standard, as well as the factors determining the risk of such infections. The results show that the relative proportion of awareness with a small preponderance is in favour of students as compared to nurses. More than half of the student respondents indicated full awareness of the factors determining the risk of nosocomial infections, and the relative proportion of nurses was half of the respondents. According to the doctoral student, these differences are not surprising as students receive adequate information during their theoretical training, which is relevant and accompanies the conduct of clinical practice in hospital care settings, and nurses actually possess basic knowledge of the issues, which in practice are probably not updated and are displaced by routine in the profession.

The second group of questions in the questionnaire aimed to check the level of awareness of nurses, students and orderlies about the precautions for prevention and control of nosocomial infections. It was found that in all three groups, the relative proportion of those informed did not exceed 50%, which confirms some knowledge, but it is not conclusive and this gives ground for a presumed risk at work. A small proportion - 6.6% of the students surveyed admitted that they had no knowledge of the issue, indicating likely gaps in the theoretical aspect and therefore also carrying some risk in practice.

The third group of questions aims to examine the extent to which precautions for the prevention and control of nosocomial infections are implemented in practice in the paediatric inpatient setting. Nearly half of the respondents from the health care professional and student groups and less than one-fifth of the paramedics stated that they were fully aware. It is noteworthy that the relative proportion of students takes precedence, which is in practice justified by the up-to-date information they receive in theory in parallel with clinical practice. Of interest is the contradiction between the sanitarians' responses, which probably stems from

the high relative proportion of those who claim to be familiar with standard precautions and the much lower relative proportion of those who actually know what these precautions involve and when they apply. This indicates that for this group of respondents they are probably informed but not enough.

The last questions of the survey aimed to verify the need for additional information on the problem: nosocomial infections in the pediatric ward. The results show that as those working in these wards, health care professionals and orderlies to varying degrees reported that their knowledge of the issue needed to be updated. The students probably consider that the theoretical training which is laid down in the training programme is fully comprehensive and well mastered by them.

Programmed interview in the form of Questionnaire No. 2, containing 10 questions aimed at health care professionals working in a children's ward and nursing students conducting clinical practice in a children's ward. The interview provides information in relation to the responsibilities of health care professionals and nursing students on the specifics related to the prevention and control of nosocomial infections specifically for pediatric wards. Nurses, from their position working on the wards, have a clearer view of the activities involved in limiting the risks of infection and therefore a more realistic view of the weaknesses in the organisation of work. While students, on the other hand, spend much less time in pediatric wards and are not sufficiently familiar with the overall organisation of events and measures to limit the risks of nosocomial infections.

Based on the results of the study, the analysis of the literature and the international experience, 12 conclusions are formulated, which in a synthesized form reflect the results of the study. The conclusions generally reflect the realization of the set objectives of the study. I would recommend Donka Sultanova to continue working on the chosen topic by preparing informative material in an appropriate form in a publication intended for medical specialists, which could be a useful end to the efforts made by the PhD student.

The contributions are formed in general terms. In connection with the dissertation the PhD student has submitted three publications in which she is the only author.

The structure of the abstract meets the generally accepted requirements. The content of the dissertation is fully and accurately reflected. The most significant results and relationships found are presented, as well as the conclusions, contributions and recommendations of the study.

My notes to the dissertation are indicated in the appropriate places in the opinion.

Conclusion: The presented dissertation "Characteristics of nursing care in pediatric ward and infection control" shows a thorough mastery of the studied subject by the doctoral student. I appreciate the importance and relevance of the topic of the dissertation. Donka Sultanova has chosen the topic of her dissertation not by chance, guided by her professional experience in the field of nursing. During the development of her dissertation, the PhD student demonstrated skills in applying the methodology of scientific research, which is one of the goals of doctoral training. The research carried out meets the set objectives.

On the basis of the above, I give my positive vote and propose to the distinguished members of the Scientific Jury to vote positively for the award of the degree of Doctor of Education and Science in the scientific specialty "Health Care Management" to Donka Trifonova Sultanova.

06.09.2022г.

Varna



Assoc.Prof. Shviya Filkova, PhD