#### STATEMENT

From Assist. Prof. Emiliya Petrova Georgieva, PhD
Deputy Director of the Medical College, "Career Development, Quality and Accreditation"

Medical college – Varna with

Medical university Prof. Dr. Paraskev Stoyanov

**Subject:** procedure for the defence of a dissertation thesis and awarding of the degree of Doctor of Education and Science to Donka Trifonova Sultanova, PhD student in full-time study in the doctoral programme "Nursing Care Management" in the field of higher education 7. Health and Sport, professional field 7.4 Public Health, at the Medical University - Varna, Sliven Affiliate, on the topic "Characteristics of nursing care in pediatric ward and infection control".

Scientific supervisors: Assoc. Tsonko Paunov, Ph

Prof. Elena Zheleva, Ph

#### 1.Dissertation data

The dissertation of Donka Trifonova Sultanova contains 137 standard pages, the text is illustrated with 91 figures and 2 annexes. The reference list contains 175 sources, 59 of which in Cyrillic and 116 in Latin. The thesis is structured in three chapters, as follows: introduction, literature review, methodology of the study, results and discussion related to the peculiarities of health care in a children's ward and infection control, conclusions, contributions, appendixes, bibliography and publications related to the thesis. The individual chapters of the paper are chronologically linked and meet the structural and content requirements for such type of scientific work. In the appendix there is a questionnaire independently developed by the doctoral student as a methodological toolkit to study the problem through the opinion of nurses, students of the specialty "Nurse" and orderlies in order to investigate the degree of competence regarding the prevention and control of nosocomial infections in pediatric wards. A programmed interview with health care professionals and nursing students was developed to clarify the responsibilities of health care professionals and students and the specifics related to the prevention and control of nosocomial infections specifically for pediatric wards. There are 3 published scholarly publications, thematically related to the dissertation work, one of which was published in an international conference.

## 2. Relevance of the thesis

The provision of quality health care in children's wards, the reduction of mortality, the prevention of infectious morbidity and the control of infections are of particular importance and engage the attention and efforts of all countries, and are embedded not only in health facilities and in various organizations, but also as an overall government policy. Nosocomial infections are a problem that affects healthcare at all levels and threatens the health of both patients and healthcare providers. A large part of the prevention of nosocomial infections is also related to the training of staff - medical and support staff. Periodic updating of knowledge on nosocomial infections is a guarantee for quality health care delivery. Pediatric wards and clinics are identified as being at risk for the development of nosocomial infections. All working people - medical and non-medical

professionals, as well as trainees in paediatric structures - are obliged to comply with the established standards and mandatory precautions and to ensure that infections related to the care of children do not develop.

The relevance of Donka Trifonova Sultanova's dissertation is supported by the available state policies and institutions involved in the development of strategies and programs for tackling, prevention and control of infections, which are easily applicable in health care facilities and minimize the risks of transmission of pathogens. The rules and measures for the prevention and control of nosocomial infections are included in the medical standards, which contain recommendations for the effective management of this problem and with which health professionals are obliged to comply.

# 3. Awareness of the problem

The 30-page literature review includes 175 literature sources, most of which have been published in the last 10 years. It is structured in three main sections, which chronologically follow the main tasks of the problem researched by the PhD student. A general characterization of healthcare in childhood and the prevalence of healthcare-associated infections in the pediatric inpatient setting is made. The features of childhood (physiological, pathological) and the main periods of child development are considered. The paper examines the organization of childhood healthcare in Bulgaria, Europe and the world, and the role of global organizations such as WHO, UN, USAID, etc. The requirements for the medical care of children related to the specifics of health care in children's health care regulated in the medical standard of pediatrics are systematized. Statistical data from world-renowned databases on the prevalence of healthcare-associated infections and nosocomial infections are presented. An analysis of the specifics of infections in a children's ward has been done and has actually been shown to be one of the highest risk in terms of HAIs. The specifics, measures and control of infections in a paediatric ward are regulated through regulations and compliance with these will reduce the risk of HAI occurring in paediatric wards and the implementation of HAI surveillance depends on the level of awareness of patients and healthcare professionals. The PhD student points out guidelines and best practices regarding infection prevention in a pediatric ward related to various factors. Donka Sultanova demonstrates good literary awareness, analytical abilities to put the right accents on the current issues related to the fight against HAI. In conclusion, her synthesis of the literature sources shows a thorough knowledge of the problem, the current legal framework, good professional and terminological competence.

# 4. Survey methodology

The main aim and objectives are specifically formulated and reflect the precise research work carried out by Donka Sultanova. The PhD student used a wide range of methods, which are adequate, to achieve the goal. The structure and content of the developed toolkit are subordinated to the specificity of the information collected from the respective group of respondents. Proposes optimization in the activity and structure of implementation of measures regarding the control of nosocomial infections. The methods are selected and described in detail. Documentary, survey and statistical methods were used. A high degree of correspondence was achieved between the five tasks, the number of respondents surveyed and the results obtained. The survey instruments were

developed and included a questionnaire to explore the opinions of nurses, nursing students and orderlies on the level of competence related to the prevention and control of nosocomial infections in pediatric wards. It aims to check the level of awareness of nurses, students and orderlies about the problem of HAIs, and whether they are aware and use precautions to prevent and control HAIs. A programmed interview with health care professionals and nursing students was developed to clarify the responsibilities of health care professionals and nursing students regarding specifics related to prevention and control of HAIs specifically for pediatric wards.

### 5. Results and discussion

The results of Donka Sultanova's own research are presented in the third chapter of the dissertation. They are grouped in thematic sections following the chronology of the five tasks. The significance of the study was determined by the respondents included, divided into three groups: nurses, orderlies and nursing students. It was onducted in different hospital wards directly related to the research objective. The level of competence and awareness regarding the prevention and control of nosocomial infections in paediatric wards was analysed. The results obtained from the responses of the respondents provide original scientific information on: the need for additional information on the problem of nosocomial infections in the pediatric ward; the extent of implementation of precautions for prevention and control of nosocomial infections in pediatric inpatient settings; the level of awareness among attendants in the children's ward.

The results obtained from the analysis on the level of awareness and training of medical and non-medical staff in a paediatric ward regarding nosocomial infections and their routes of spread have a contribution. Theoretical contribution is made by the developed model for the study and optimization of the control of nosocomial infections in a pediatric ward. The model for ongoing review and updating of the knowledge of specialists working in a paediatric ward regarding nosocomial infections has made a scientifically informative contribution.

I believe that the presented dissertation is significant for the results obtained in the field of nosocomial infections and the peculiarities of health care in a pediatric ward. The analysis of the respondents' answers reveals the existing problems and barriers related to the prevention and control of HAIs, which are specifically and complexly interpreted. The main findings are thematically systematized, accurately reflecting the results obtained from the study.

The dissertation is written in good language, precise in terminology.

The content and the quality of the abstract meet the requirements of the Regulations of the Medical University - Varna, reflecting adequately and reliably the main results of the study.

The dissertation is a personal work of the doctoral candidate, and I take the formulated contributions and obtained results as her personal merit.

In conclusion, I consider that the dissertation work presented by Donka Trifonova Sultanova on the topic "Characteristics of nursing care in pediatric ward and infection control " in terms of relevance of the problem, precision of the methodology, quality of the obtained results and scientific contributions meets the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Staff of MU "Prof. dr. P. Stoyanov" Varna.

In this regard, I will vote positively for awarding Donka Trifonova Sultanova the degree of Doctor of Education in the field of higher education 7. Health and Sport, in the professional field 7.4 Public Health and the scientific specialty "Nursing Care Management".

03.10.2022.

Drafted the statement:

Assist. Prof. Emiliya Petrova Georgieva, PhD