

OPINION

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For the dissertation (PhD thesis) **“Multidisciplinary team care in prophylaxis of children’s eye health – a focus of the nurse’s professional activity”**

submitted by **Krasimira Ivanova Dimitrova**, PhD student in self-conducted form of study in scientific speciality **“Management of Health care”**, Professional Field 7.4 **“Public Health”**, in a Field of Hight Education 7 **“Healthcare and sports”**, credited by ordinance № P-109-226/09.07.2020.

I present this opinion in my capacity as a member of the Scientific Jury, appointed by Ordinance № P 109-497 / 22.11.2021 of the Rector of the Medical University “Prof. dr. Paraskev Stoyanov” prof. Valentin Ignatov, MD, PhD, in view of the Report with № 102-2907/05.11.2021 by Prof. Silvia Borisova Dimitrova, DsC - Head of the Department of Health Care, by decision of the Council of the Faculty of Public Health at the Medical University “Prof. Dr. Paraskev Stoyanov”- Varna under Protocol № 173 / 09.11.2021, for the procedure for awarding the educational and scientific degree “Doctor of Philosophy” by **Krasimira Ivanova Dimitrova**, PhD student in the Department of Health Care, Faculty of Public Health, Medical University – Varna, (*credited by ordinance № P-109-226/09.07.2020*), with scientific supervisors Assoc. Member of the Bulgarian Academy of Science Prof. Christina Grupcheva, MD, DSc and Prof. Silvia Borisova, DSc. According to the protocol №1/01.12.2021 from the first meeting of the Scientific Jury, I was appointed to prepare an opinion.

Biographical data and career development of the PhD student:

Krasimira Dimitrova is a graduate of the IV French Language School “Frederic Joliot-Curie” in Varna. During the period 1985-1987 she trained as a pediatric nurse in Medical College “Dr. Nencho Nikolaev” in Varna. She works as a pediatric nurse at the First Children's Clinic of the University Hospital “St. Marina” - Varna (1987-1989); as an anesthesiological and operating nurse (1996-2011) and as a staff nurse in the Eye Department of the Specialized Eye Hospital in Varna since 2012, where she still works. She is one of the few children’s orthoptic training specialists in the country.

In accordance with modern trends for lifelong learning and for acquiring higher educational and qualification degrees, she obtained a bachelor degree in Management of health care (MU – Varna 2006 - 2009) and also two master degrees – in Management of health care (MU – Pleven 2009-2010) and in Health management (Faculty of Public Health, MU – Varna 2017-2019). Krasimira Dimitrova participates in over 50 trainings of lifelong learning.

Krasimira Dimitrova develops her pedagogical skills as a part-time lecturer in the Department of Health Care, Faculty of Public Health, MU - Varna for students majoring in Nursing since 2011; for students majoring in “Medical Optician” in Medical College (MU – Varna) since 2013, conducts training in the discipline “Special care for people with eye problems”. She has been teaching exercises in the discipline “Nursing care for patients with eye and ear-nose and throat diseases” of students majoring in “Nurse” since 2020. She has been a lecturer at the Center for Professional Training of BAHPN for northeastern Bulgaria since 2017.

During the period 2008 – 2021 Krasimira Dimitrova has 21 participations with oral scientific presentations in Bulgarian and international scientific congress and conferences of health care professionals, of ophthalmological nurses and ophthalmologists.

Her publishing activity includes 19 publications in the field of ophthalmic health care and the development of nursing. She participates in the author's team of two textbooks on eye diseases, edited by Professor Grupcheva. Her clinical and research interests are focused on children's eye health, visual training for children preventive activities of the nurse and team management.

Krasimira Dimitrova is an active participant in the development of the professional nursing organization (BAHPN) in her capacity as Deputy Chairman and

Chairman of the Region of Varna, as well as a member of the National Management Board of the Bulgarian Association of Health Professionals in Nursing (2016 and on).

She has been a coordinator of the municipal prophylactic program for children's vision in Varna since 2012. She is a regular member of the Union of Scientists – Varna.

Krasimira Dimitrova was awarded of prize of the Rector of MU-Pleven (2010); National Award “Professional of the Year” of BAHPN; prize of the Rector of MU - Varna (2019); Award of the Mayor of the Municipality of Varna (2019). She speaks French (B2), English (B1) and Russian (A2).

General description of the dissertation: The dissertation consists of 184 pages. It is illustrated with 56 figures, 24 tables and 6 appendices. The bibliography contains 330 literary sources, of which 83 in Cyrillic and 247 in Latin.

Assessment of relevance and significance of the topic of the PhD thesis

The topic of the PhD thesis: “**Multidisciplinary team care in prophylaxis of children’s eye health – a focus of the nurse’s professional activity**” is in accordance with the profile of the PhD student and her long-term of experience in the field of prevention of children’s eye health. The problem developed in the dissertation is relevant in scientific field (theoretically substantiated and with practical application). This topicality is argued by the PhD student with skill and deep understanding, as the participation of the nurse in a multidisciplinary team for prevention of children’s eye health is a real opportunity for change and improvement in 4 domains: patient, team, nurse and nursing profession (vision and perspectives for development).

Structure of the dissertation: The dissertation is developed in 5 main parts: I. Literary review; II. Aim, tasks, material and methodology of the research; III. Analysis, discussion of the results and practical aspects of the research; IV. Multidisciplinary team care - good practice in the prevention of children’s eye health; V. Conclusions, recommendations, contributions. Following are summary, appendices, scientific publications and scientific communications (oral presentations) in connection with the dissertation, bibliography.

The literature review was written by Krasimira Dimitrova on 44 pages (24% of the dissertation), structured in six sections: 1. Nature, characteristics and composition of the multidisciplinary team with 4 subsections; 2. Visual screening; 3. Features and

development of the children's visual system. Child blindness with 3 subsections; 4. International experience in the prevention of children's eye health - comparative analysis; 5. Prevention of children's eye health in Bulgaria in 2 subsections; 6. Example of good traditions and practices in the field of prevention of children's eye health in the city of Varna. The used literature sources are sufficient in number, they are scientific publications of Bulgarian and foreign researchers and important national and international documents, cited in good faith in the review. The review is written in clear and understandable language and reflects a thorough knowledge of the issues discussed and skillful handling of scientific terminology. The way of presenting the literature review shows the author's ability to analytically present scientific information and to argue the relevance and importance of the topic of the dissertation, as well as the approach of scientific research.

Aim, tasks, material and methodology of the research: they are precisely defined on 10 pages of the dissertation. The aim of the dissertation is *“to study and analyze the activities for prevention of children's eye health, to identify attitudes and barriers to multidisciplinary team care and to define the functions of the nurse in the team”*. The aim is decomposed into nine tasks, clearly formulated and directly related to the achievement of the aim.

Three research hypotheses are presented in the own research: 1. Medical specialists express a positive attitude to participate in a multidisciplinary team for prevention of children's eye health. 2. Nurses participating in children's eye health preventive programs face objective barriers to fully participate in a multidisciplinary team (MDT). 3. Nurses are aware of their multifaceted professional functionality and importance in MDT.

Material and methodology are clearly justified and adequate, in accordance with the aims and tasks and are described precisely. The organization and stages of the study are described in details. The following methods are applied: 1. Sociological methods: documentary, historical, survey method - direct individual survey and standardized interview. The tools applied in the survey sociological method includes 3 questionnaires for the groups of respondents: for nurses, students and parents. The questionnaire for a standardized interview with experts - doctors working in ophthalmological practice is presented in detail. The applied tools in the own research are developed for the aim of

the scientific research; they are described in detail and attached to the dissertation. 2. Statistical methods: a set of statistical methods for analysis and interpretation of the obtained data are applied - descriptive and analytical statistics.

The scope, timing and place of the scientific observation are described in detail. The own study covered 400 respondents in 4 groups: 1. Parents of children (n = 150) up to 16 years of age from the city of Varna, who sought ophthalmological medical care for preventive examination; 2. Nurses (n = 50) performing health care for patients with eye problems in ophthalmological structures for outpatient and inpatient care in the country; 3. Experts - doctors specialists in ophthalmology (n = 50), practicing in ophthalmological structures for outpatient and inpatient medical care in Varna; 4. Students majoring in "Nursing", in "Medical Optician" and in "Optometry" (n = 150) at MU - Varna. The chosen approach in one's own research allows to achieve the set goal by obtaining an adequate answer to the tasks solved in the dissertation.

Analysis, discussion of results and practical aspects of research. This part of the dissertation covers 46 pages (25% of the volume of the dissertation), precisely arranged and illustrated, structured in **6 sections**. Each of the sections is extremely well structured, the results are presented in depth, discussed and summarized. The presentation of the results and their discussion reflects the ability of Krasimira Dimitrova to handle the data from the research, to apply the appropriate methods of analysis and to interpret in depth. This part of the dissertation deserves special attention and appreciation with its adequate structuring, logical coherence and consistency.

Multidisciplinary team care - good practice in the prevention of children's eye health is the next part, developed on 28 pages of the dissertation. Based on the scientific research, a **Model for providing a preventive environment for children's eye health, by applying multidisciplinary team care**, was presented. The model unites structures, human resources and information flows. At the heart of the model is the idea of broad-spectrum integration: professional, clinical, cultural and social. This part of the dissertation is extremely practical. To support the practical application of the model, PhD student has developed: generalized model for efficiency of MDT; main areas of ophthalmic care; essence of ophthalmological health care; skills and competencies of the modern nurse participating in the MDT for prevention of children's eye health; functions of the nurse in MDT; proposals for terms for follow-ups and the

content of prophylactic ophthalmological examination in healthy non-in-risk children in the period of early childhood; indications for referral to an eye specialist; curriculum for training in “Promotion of children's eye health”; “Record book of children’s eye health”.

Conclusions, recommendations, contributions.

The **conclusions** are presented in 10 points, and three additional conclusions from the research are presented. They are skillfully formulated and directly related to the research aim and tasks.

Krasimira Dimitrova presents **recommendations** as follows: to institutions in the field of health care for specific legislative changes, as well as to update the National Framework Agreement, to create of a “National Program for Prevention of Children’s Eye Health”, to develop of “National Recommendations for Prevention of Children’s Eye Health”, to increase the share of prevention costs in the formation of the NHIF budget; to the National Association of Municipalities in the Republic of Bulgaria for the introduction of annual regional preventive programs for children's eye health in all municipalities in the country; to the Bulgarian Association of Health Professionals in Nursing for stimulation and support of the professional development of nurses through the lifelong learning and assistance for the implementation of the “Qualifications Framework for Professional Development of Nurses”, developed by the National Council in quality.

The contributions are presented in two groups: original for the country (theoretically substantiated) and with practical application. The theoretically substantiated contributions are reduced to 6; the contributions with practical application are presented in 5 points. I accept the contributions from the dissertation in the way they are presented by the PhD student.

In connection with the dissertation Krasimira Dimitrova presents a **list of publications and participations** in scientific forums related to the dissertation, containing 5 titles, 4 of which she is a solo author.

Executive summary: The executive summary is written on 100 pages, structured according to the requirements and reflects the main results achieved in the dissertation.

I recommend the PhD student to continue her research in the field of the nurse's role in the prevention of children's eye health and to publish the results in a book.

CONCLUSION:

This is the first dissertation in the field of ophthalmological health care in the country. The first complex and in-depth study of the Bulgarian and international experience in the prevention of children's eye health from the perspective of the nurse's participation was made. The PhD thesis is an important prerequisite for redefining the role of the modern nurse in the field of preventive ophthalmopediatric care.

The dissertation contains theoretically substantiated, methodological and with practical application results, which represent an original contribution to science and **meet all requirements** of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its application and the Regulations of MU-Varna. The presented materials and dissertation results **fully comply** with the specific requirements, adopted in connection with the Regulations of MU - Varna for application of the Law on the Development of Academic Staff in the Republic of Bulgaria.

The dissertation shows that the PhD student Krasimira Dimitrova has **in-depth theoretical knowledge** and professional skills and **demonstrates qualities for independent research**.

In conclusion, with full conviction, I give a **positive assessment** to the research, presented by the above-reviewed dissertation, abstract, results and contributions.

I propose to the esteemed Scientific Jury to award the educational and scientific degree **“Doctor of Philosophy”** to **Krasimira Ivanova Dimitrova** in a PhD program in **“Health Care Management”**, professional field 7.4 **“Public Health”**, in a field of higher education 7. **Health and Sports**.

21.12.2021
Stara Zagora

Member of Scientific Jury, prepared the opinion:


Prof. Juliana Marinova, MD, PhD