REVIEW on the doctoral dissertation entitled:

POSTPONING PARENTHOOD – MIDWIFERY ROLE IN OVERCOMING THE FACTORS

by doctoral student: Teodora Yordanova Todorova

Asst. Prof. at the Department of Healthcare, Shumen Affiliate to the Medical University "Prof. Dr. P. Stoyanov" – Varna

submitted in partial fulfillment of the requirements for the PhD educational and scientific degree

in the field of higher education: 7. Healthcare and Sports, professional field 7.4. Public Health, in the specialty: Healthcare Management

Reviewer: Prof. Sonya Koleva Toncheva, PhD, DSc Director of Shumen Affiliate, MU – Varna

Member of the Scientific Council according to Order № P 109-125/ 16.02.2023 of the Rector of Medical University "Prof. Dr. P. Stoyanov" – Varna

Information about the procedure

Asst. Prof. Teodora Yordanova Todorova was enrolled as a full-time doctoral student for acquiring PhD educational and scientific degree in the field of higher education: 7. *Healthcare and Sports*, professional field 7.4. *Public Health*, in: *Healthcare Management* specialty, the Department of Healthcare at the FPH of the Medical University "Prof. Dr. P. Stoyanov" − Varna according to Order № P 109-125/16.02.2023 of the Rector of the Medical University "Prof. Dr. P. Stoyanov" − Varna.

Based on Art. 24, Para. 6 and Art. 30, Para. 3 of the RIDASRBA, Item 68, Para. 1 of the RDAS of MU − Varna and due to successfully passing the doctoral minimum exams and fulfilled individual plan, **Teodora Todorova** was dismissed with the right of defense with Order № P 109-125 of 16.02.2023 of the Rector of the Medical University "Prof. Dr. P. Stoyanov" − Varna.

Biographic data and career development of the doctoral student

Asst. Prof. Teodora Todorova was born in 1985 in Velingrad. Teodora Yordanova Todorova obtained her higher education degree in the Midwifery specialty at the Medical University – Plovdiv in 2009. After her graduation, from 2009 to 2017, she worked as a midwife at MHAT "Zdrave" – EOOD, Velingrad. During the same period, she was employed as a midwife at "Razvitie" Center for Social Inclusion, Velingrad, the Department of Social Counseling and Support, where she took part in the training of foster families in the field of newborn and infant care.

She graduated from the Medical University – Plovdiv in the "Healthcare Management" specialty and was awarded Master's educational and qualification degree in 2015. Her academic career began in 2018 when, after a competition, she started working as an assistant professor at the Department of Healthcare at Shumen Affiliate to the Medical University "Prof. Dr. P. Stoyanov" – Varna, where she is still working.

She takes part in the practical training of the midwifery students – as she conducts practical exercises, seminars and clinical practice. Asst. Prof. Todorova strives to expand her theoretical and practical background through participation in different forms of postgraduate training, which contributes to developing her research and teaching skills. Her research portfolio is comprised of over 30 trainings and courses related to her main scientific interests.

In 2022, Asst. Prof. Todorova acquired her specialty in "Public Health" at the Medical University "Prof. Dr. P. Stoyanov" – Varna.

Her main professional and scientific interests refer to the organization and management of midwifery care – aspects of the midwife's role and opportunities for autonomous midwifery practice, reproductive health prophylaxis, health education and enhancing health culture.

She is a member of prestigious professional organizations: Bulgarian Association of Healthcare Professionals, she holds a certificate; Bulgarian Association of Public Health, European Association of Public Health.

She has 9 scientific publications, participation in international and national forums. She actively involves her students in scientific studies and the results are jointly presented in forums and conferences – she is a methodological supervisor of students' scientific papers, studies and scientific announcements.

General characteristics of the dissertation work

The dissertation presented by Asst. Prof. Teodora Todorova was developed at the Department of Healthcare at the FPH of the Medical University – Varna, it is structured in five chapters and encompasses 182 pages. A total of 50 figures, 12 tables and 6 appendices are included in it. The reference list comprises 209 literary sources, 108 of which are in Cyrillic, 79 are in Latin, and 22 Internet sources. The work was discussed and referred for defense by extended Department Council at the Department of Healthcare of the Medical University "Prof. Dr. P. Stoyanov" – Varna on 17.01.2023.

Evaluation of the topicality of the research problem

Enhancing the qualification and professionalization of midwives in our country is a relevant problem, especially in the context of the European requirements for the training of "regulated professions". The acquisition of professional midwifery competencies and their effectiveness have been discussed in recent years in Bulgaria but there are no similar studies with a focus on delayed parenthood and the role of the midwife.

In this sense, the present dissertation work developed by Asst. Prof. Teodora Yordanova is really urgent and with indisputable scientific proof that delayed parenthood is a significant public health problem and the well-trained midwife can actively participate in overcoming its causes. The author's scientific efforts are extremely valuable in several aspects:

 An analytical overview of the opportunities for midwives to guide, advise and support couples to overcome barriers to postponing parenthood and the experience in other countries was presented.

- An author's Model of Midwifery Support Center for Future Parents (MSCFP) was devised to promote its activities in two directions:
 - ✓ **Health education** reproductive health prevention it aims to cover adolescents and young people from the onset of puberty at 11-12 years of age until its end at 18 years.
 - ✓ Working with couples with reproductive problems the team becomes acquainted with the case, analyzes the information and makes up a plan for the couple according to their identified needs.
- Self-developed auxiliary resources at the MSCFP were proposed: "Health Education"
 Notebook for students aged 11-14 and a Guidebook for Couples with Reproductive
 Problems.
- The analysis of the problems associated with delayed parenthood outlines the following aspects:
 - ✓ need for information and counseling in the field of sexual and reproductive health
 - enhancing the midwife's competencies about her role in overcoming the factors for postponing parenthood
 - ✓ autonomous midwifery practice

The proposed dissertation discusses important aspects of midwifery practice related to the opportunities for overcoming the causes of delayed parenthood, midwifery education at tertiary level and the postgraduate studies necessary for midwifery professionalization in her practice in different directions. Based on the national and international experience and the conducted empirical study, the doctoral student concludes that midwives can make a significant contribution to detecting and overcoming the causes of postponing parenthood among young people.

Literature review

Chapter I of the dissertation entitled "Literature review – topicality of the problem" includes the literature review in a total of 57 pages. The review encompasses six main rubrics: Historical overview of the family structure from the post-Liberation period until the beginning of the democratic transition period in Bulgaria; Cultural and religious beliefs about marriage among ethnic groups in Bulgaria; Significance of the problem of postponing parenhood in economically developed countries; Mean age at first birth in the countries with the least developed economy and pronounced poverty among the population; Significance of the problem of postponing parenthood in Bulgaria. In the rubric "Midwife's competencies in planning a pregnancy", at the end of the first chapter, the author draws important conclusions, relying on a number of authors, normative documents and her own experience, which further outline the areas of her authorship concepts.

This approach reveals the author's originality, as the problem under consideration needs constant discussion in our country and search for introducing innovative practices, which along with the traditional methods will enable midwifery university educationalists to take into account the specifics in the preparation of this kind of specialists. According to the author,

university education prepares the specialists for quick adaptation to different work processes and guarantees quality autonomous midwifery care.

For the development of the literature review, the doctoral student has relied on a sufficient number of literary sources, which she skillfully analyzes and demonstrates in-depth knowledge of other authors' opinion on the chosen topic. The structure of the literature review and the stylistic layout demonstrate Asst. Prof. Todorova's skill in working with literary sources and expressing her own opinion on the dissertation topic.

Research study structure

Chapter II represents the study methodology, which is precisely developed in detail. The aim and the research thesis are successfully stated. Overall, 7 objectives and 3 working hypotheses are precisely formulated.

The dissertation research follows the logical views of the author and was conducted in 5 stages in the period 2020-2023.

- In the first stage, analysis of scientific and methodological literature was conducted.
- In the **second stage**, the aim, the objectives, the methods were defined and a self-developed toolkit for conducting the research study was designed.
- In the **third stage**, an empirical study was carried out after review by the REC at MU Varna.
- In the **fourth stage**, statistical processing and analysis of the results were done.
- In the **fifth stage**, the conclusions, implications and recommendations were formulated. The study encompasses a **total of 405 respondents**, distributed in five groups:

First group: Patients, admitted to the Department of Pregnancy Pathology and the Maternity Department in the cities of Varna, Shumen, Plovdiv and Veliko Tarnovo;

Second group: Patients, (female/ male) of the Reproductive Medicine Centers (RMC);

Third group: Experts – obstetrician-gynecologists, embryologists and senior midwives/nurses; *Fourth group:* Regular midwives/nurses;

The survey of the second, third and fourth group was conducted in the Reproductive Medicine Centers in Varna, Shumen, Plovdiv, Sofia and Tutrakan;

Fifth group: Student-mothers from the Nursing and Midwifery specialties (I, II, III and IV-year), studying at the affiliates of the Medical University – Varna – Shumen, Veliko Tarnovo and Sliven.

The Inclusion criteria for the study were precisely defined.

The author applied a variety of methods that guarantee the plausibility of the obtained results. The study toolkit is self-developed and guarantees reliability of the applied methods. Appropriate statistical methods were employed to process the primary sociological information.

Results

The dissertation is the first large-scale, focused, in-depth, comprehensive, complex study of the midwifery role in addressing the causes of delayed parenthood. The dissertation presents the author's in-depth research study results. The results are logically structured and the practically applicable aspects are presented in Chapters III and IV. This attitude proves Asst.

Prof. Todorova's ability to propose, based on the successfully confirmed theoretical results, practical approaches to their implementation.

Chapter III entitled "Self-conducted study results" represents comprehensive information about the socio-demographic characteristics of the studied groups. The level of reproductive health awareness and the confidence in midwives are determined as well as the clinical and socio-economic factors for delayed parenthood. The challenges for them at the Reproductive Medicine Centers (RMC) are also analyzed.

Knowing midwifery practice well, the author dedicated a significant part of the study to the midwife's competences in overcoming the causes for delayed parenthood, the motivation and demotivation of senior and regular midwives/nurses at RMC.

The attitudes and perspectives of the Nursing and Midwifery student-mothers specialties about reproductive health prevention (RHP) were also investigated.

I really appreciate the correctly conducted in-depth interview, which proves the demand for a broader discussion among professional circles when it comes to the search for approaches to enhancing the quality of higher medical education and midwifery practice, which can help women to give birth to healthy children at the right time.

Chapter IV is entitled "Practical approaches to overcoming delayed parenthood as reproductive health prevention". Based on the obtained results, the demand for the midwife's involvement in the work of antenatal care services, the formation of sexual culture among students, according to their age characteristics and family planning among couples willing to have their own children, the suggested Midwifery Center is an original and innovative approach for the country that offers an organizational framework of the midwife's professional role in the solution of age-specific problems. The midwife is a resource of the health system that, through the acquired competence and professional skills, has the expertise and can influence important life issues concerning responsible parenthood at the right time for the woman. The proposed Midwifery Center represents Asst. Prof. T. Yordanova's view on the fact that in order to overcome delayed parenthood it is necessary to deal with it since early school age by discussing suitable for the age topics until the moment when the young woman and her partner plan to become parents. To achieve the aim, Asst. Prof. Todorova developed educational auxiliary resources to facilitate midwifery practice at the Midwifery Center - "Health Education" Notebook (for 11-14-year-old students) and the more beneficial "Guidebook for Couples with Reproductive Problems", intended to help these couples.

I appreciate the proposed educational materials at the Midwifery Center, which can be useful for enhancing young people's reproductive culture.

The suggested Model of Midwifery Center devised by the author makes this part of the dissertation logically complete and adds value to the importance of the research problem.

I recommend that, at a later stage, the opinion of experts and midwives about the structure and the services at the Center be examined.

The main conclusions are drawn in *Chapter V*, based on the conducted research and analysis of the obtained results. The author has drawn 7conclusions with emphasis on the most significant study results. The conclusions are well-formulated, precise, in compliance with the objectives and in the proper scientific style. Based on these conclusions, proposals and recommendations are made to the MES, the NHIF, the medical universities and BAHP.

Evaluation of the implications

The author makes suggestions and recommendations in the dissertation, which shows Asst. Prof. Todorova's ability to find a solution to the addressed, and analyzed various aspects of the midwifery role in overcoming such an important contemporary problem, delayed parenthood. The study results can be presented at a round table through the interested parties or through the BAHP platform in an online conference in the presence of midwives and school nurses.

The implications in the dissertation reflect relatively objectively the real achievements of the author. Based on the drawn conclusions and the obtained study results, the following implications with theoretical and practically applicable nature are outlined.

With theoretically cognitive implementation:

- 1. Literature review was provided regarding the demographic characteristics in Bulgaria, namely the birth rate.
- 2. The factors leading to delayed parenthood among men and women at childbearing age were investigated.
- 3. The theoretical aspect justifies the need for further additional enhancement of competences of midwives employed at school health offices and fertility clinics.
- 4. The midwife's attitudes, readiness and motivation to implement autonomous midwifery practice were studied.

With practically applicable implementation:

- 1. Health education information brochures for 11-14-year-olds and a Guidebook for couples with reproductive problems were developed.
- 2. An innovative model for the provision of autonomous midwifery care through organized training and consultative activities MSCFP was devised.
- 3. The Model of MSCFP is economically effective in overcoming the medical and social factors for delayed parenthood.
- 4. The functioning of MSCFP in the country will contribute to adding prestige to the midwifery profession.

The abstract comprehensively reiterates the most essential moments of the dissertation presented in a total of 77 pages.

The author's research portfolio currently includes a total of 3 scientific works - 2 from conference participations with printed full-text reports in conference proceedings in our country and 1 article in a specialized journal edition related to the dissertation were realized in 2019 and 2021. With the presented publication activity, **Asst. Prof. Todorova** has fulfilled the criteria for ESD "Doctor". *I recommend* that the author should increase her publication activity and publish the obtained results in specialized national and international scientific journals, so that they become available to a larger audience of educators and researchers in the field of healthcare.

Asst. Prof. **T. Todorova** fully meets the requirements adopted by MU – Varna for the award of PhD educational and scientific degree through the developed dissertation work, which is sufficient in volume, and can be regarded as a contemporary scientific work with essential theoretical and practical implications. In no way do the critical remarks diminish the merits of the presented dissertation.

Personal Impressions

I believe that it is important to share my personal impressions. I have known Asst. Prof. Teodora Todorova since the moment she came to Shumen Affiliate to look for a job and showed willingness to pursue her scientific career. She had consciously made her choice to continue her education, to enter a competition and be a university teacher at Shumen Affiliate to MU – Varna. Open in personality, correct and careful in her relationships with colleagues showed her inclination to follow her dream, and I think I also managed to maintain her motivation for teaching. Asst. Prof. Todorova manifests herself as a modern-thinking teacher with clear desire to apply innovations in her work and to pass on her experience and enthusiasm to her students, who have chosen midwifery as their career and who will shape the future of midwifery care.

In conclusion: On the basis of professional development, scientific and educational achievements, and in accordance with the criteria of the Act on Development of the Academic Staff in the Republic of Bulgaria, the Regulations to it and the Regulations on the Development of the Academic Staff at MU "Prof. Dr. P. Stoyanov" – Varna, give me grounds to my positive vote and convincedly propose to the respected Scientific Council that the doctoral student Asst. Prof. Teodora Yordanova acquire PhD educational and scientific degree in "Healthcare Management" scientific specialty for the needs of the Department of Healthcare, Shumen Affiliate to MU – Varna.

07.04.2023

Review by:

Prof. Sonya Toncheva, PhD, DSc