

REVIEW

by Prof. Gergana Nenova, PhD, DSc

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1. Information about the procedure

According to the Faculty Council's decision of the Faculty of Public Health with Protocol № 246/20.06.2025 and Order № P-109-284 from 01.07.2025 of the Rector of Medical University "Prof. Dr. Paraskev Stoyanov" - Varna I have been appointed as a member of the Scientific Jury to prepare a review regarding a dissertation defence for the award of Educational and Scientific Degree "Doctor" within the doctoral programme "Healthcare Management", professional direction 7.4. Public Health, field of higher education 7. Healthcare and Sport to Zoya Kirilova Goranova, doctoral student in an independent form of education in Department "Nursing Care" at the Faculty of Public Health.

Based on the above-mentioned legal documents, all procedure requirements, the deadline for the submission of documents and the choice of Scientific Jury have been met.

2. Brief data about the doctoral candidate's career development and qualifications

Zoya Kirilova Goranova graduated at a secondary medical school for midwives and rehabilitators in 1973 in Sofia and acquired a "Midwife" speciality. She acquired an Educational and Qualification Degree "Bachelor" in the same specialty at the Medical College at Medical University - Sofia. She has been a Master of Healthcare Management at Medical University - Sofia since 2017. In July 2021 she started her doctorate in an independent form of education at Department "Nursing Care", Faculty of Public Health, Medical University - Varna. She was a therapist in a private practice from 1991 until 1999 - Chinese methods of treatment at the Center for Chinese Medicine with the participation of Chinese physicians, specialists in acupuncture, moxibustion, auriculotherapy, cupping therapy and other methods of treatment. Since 2005 until present she works as a therapist in a private practice in the Outpatient Clinic for Unconventional Methods for Beneficial Influence on the Individual Health where she performs diagnostics and therapy using the methods of Chinese Medicine. She has certificates for qualification in the field of Chinese Medicine. She is a member of scientific associations and professional organisations,

president of the Bulgarian Association for Acupuncture and Physiotherapy, which is part of the World Federation of Chinese Medicine Societies.

3. General description of the dissertation: It is developed in 198 standard pages, illustrated with 46 tables, 20 figures, 17 graphs and 8 applications. The used literature includes 236 literary sources, 19 of which in the Cyrillic alphabet, 162 in the Latin alphabet and 55 in Chinese characters. The work is structured in three chapters and follows the classic model: Introduction, Literature Review, Purpose, Tasks and Hypotheses, Subject, Object, Design of the Scientific Research, Methods, Results and Discussion, Contributions, Recommendations, Conclusion, Bibliography, Applications.

4. Relevance of the dissertation work. The dissertation “Pain Management in Gynaecological Practice” researches extremely important and relevant problems related to women’s health in childbearing age. The problems following the appearance of pain symptoms in gynaecological practice are a topic of discussion in modern society since pain is an indicator of various conditions and can affect the woman’s reproductive as well as pelvic health. Painful dysmenorrhea should not be accepted as a normal condition among women in childbearing age. The gynaecological practice’s current experience with different analgesic medications for symptom management can have adverse effects on other organs and systems. Despite the increasing interest in this issue there are few studies regarding the role and significance of unconventional health promotive activities and prevention opportunities. Acupuncture and moxibustion, as well as auriculotherapy, appear to be a promising non-pharmacological option for dysmenorrhea management.

Given all this, the topic of the dissertation submitted for review is relevant and its issues valuable and useful for optimising modern approaches for health promotion and prophylaxis of the female organism.

5. Evaluation of goals and methodology. The purpose of the dissertation is derived from the topic, formulated clearly and specifically: to research and evaluate the abilities of the Chinese methods of treatment - acupuncture, moxibustion and auriculotherapy, appropriate for pain syndrome management among patients with dysmenorrhea. The doctoral student has set nine tasks for the achievement of this purpose. This work presents two hypotheses: Hypothesis 1: the inclusion of acupuncture, moxibustion and auriculotherapy among patients with dysmenorrhea contributes to the overcoming of pain; Hypothesis 2: treatment with the methods of Chinese medicine among

patients with dysmenorrhea leads to change of their quality of life. The object and subject of the research, as well as the criteria for inclusion and exclusion from the study have been defined.

The research methodology is built on the combination of document and content analysis, clinical research methods, sociological and statistical methods. At the beginning and end of the research period we conducted the following: questionnaire for analgesics intake during the first three days of menstruation (once for the control group), verbal multidimensional scoring system for dysmenorrhea severity, visual analogue scale and questionnaire for quality of life assessment WHOQOL-BREF. I believe that the applied research methods are correct and applicable which allows the accurate reporting of results, comparison and analysis. With the development of this methodology the doctoral student demonstrates her ability to pose research problems, to develop hypotheses, to plan and conduct research to prove them.

6. Evaluation of the results. The work is structured in three chapters. The first chapter 'Literature review' considers all aspects of the problem: pain in gynaecology according to conventional and unconventional medicine, dysmenorrhea - meaning, classification, clinical manifestations, conventional methods for pain managements, pain according to the Chinese medicine theory, mechanism of acupuncture analgesia as well as dysmenorrhea through traditional Chinese medicine. This chapter presents the different types of pain encountered in gynaecological practice and studies the incidence of dysmenorrhea in scientific literature. The capabilities of conventional methods and unconventional medicine for pain management in gynaecology have been studied. The doctoral student pays attention to acupuncture analgesia which aims at a faster management of the pain and influence on the pain-causing factors. The end of the first chapter summarises information regarding the relief of pain symptoms with a combination of therapeutic methods, such as acupuncture, moxibustion, auriculotherapy, massage and herb recipes. Acupuncture appears as a main method of treatment for patients with gynaecological pathologies, because of its proven effectiveness in regards to pain relief.

When developing such works the interpretation of the applied scientific literature relevant to the considered pathology is of great importance. In this sense Zoya Goranova has analysed all information.

The second chapter presents the purpose of the dissertation, the tasks, subject and object and hypotheses. The research has been approved by the Research Ethics Committee and was conducted

during the period October 2022 - January 2024. The therapeutic procedures were performed in outpatient conditions in the Outpatient Clinic for Unconventional Methods for Beneficial Influence on the Individual Health - Sofia and the University Center for Eastern Medicine at Medical University "Prof. Dr. Paraskev Stoyanov" for a research period of 2 years. 44 persons distributed in 2 groups took part in the study: Group 1 ($\Gamma 1$) - 22 persons (treated with analgesics) and Group 2 ($\Gamma 2$) - 22 persons (treated with acupuncture, moxibustion and auriculotherapy).

The third chapter provides a short explanatory dictionary of the fundamental concepts of Traditional Chinese Medicine, the development of which is first of its kind in our country. The physiological characteristics and pathology of the female organism in childbearing age has been analysed according to the Chinese medicine theory. The doctoral student pays attention to the treatment principles according to Chinese medicine in gynaecological practice and dysmenorrhea in particular as well as treatment programme possibilities. Based on the analysis of the literature sources and clinical experience the doctoral student developed an experimental therapeutic prescription using the Traditional Chinese Medicine theoretic principles. She also developed an algorithm of treatment of four clinical cases, reported its effects and conducted a discussion.

The results obtained by the doctoral student suggest that the patients treated with the proposed methodology of acupuncture, moxibustion and auriculotherapy for a 6 month follow-up did not need analgesics for their menstruation. While analysing the verbal multidimensional scoring system for dysmenorrhea at the end of the research period doctoral student Zoya Goranova reports 100% painless menstruation among the patients in group 2. The statistical analysis of the scientific research confirms that the assessment for pain severity through VAS before and after each therapeutic course shows a positive tendency towards a rapid and lasting reduction in intensity with the accumulation of an optimal number of procedures. This solidly confirms that the method of treating dysmenorrhea with acupuncture, moxibustion and auriculotherapy is highly effective, as the discomfort progressively decreases with each course and is eventually controlled, significantly improving the woman's comfort and quality of life. The statistical evidence supports the treatment approach for pain management in gynaecology and serves as a basis for improving the quality of life of the suffering woman following the methodology applied by the doctoral student.

The acquired results from the research regarding the overall assessment of quality of life show a significant improvement of the quality of life among the persons in $\Gamma 2$ as a results of the

implemented experimental methodology. The increase in quality of life uniting the physical health, mental resilience, environmental factors and social relationships demonstrates a recovery of the patients' condition altogether and serves as a sign of a quality pain management in gynaecology. The discussion of the obtained values is correct and clearly shows the advantages of the author's methodology used in the study.

The conclusions, which are five in number, are appropriately formulated and derived from the results obtained in the course of the scientific research and fully correspond to the set tasks. The scientific contributions of a theoretical, methodological and practical nature are extremely valuable.

The recommendations are relevant and provide a basis for future developments and research in this direction.

7. The abstract reflects the most significant areas of the dissertation. In conjunction with the dissertation, four publications have been presented.

Conclusion

I deem that Zoya Kirilova Goranova's dissertation submitted for review meets the requirements of the Act on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations on Academic Staff Development at Medical University "Prof. Dr. Paraskev Stoyanov", Varna I give my overall positive assessment.

I propose to the esteemed Scientific Jury to award the Educational and Scientific Degree "Doctor" in the field of higher education 7. Healthcare and Sport, professional direction 7.4. Public Health, Speciality "Healthcare Management" to doctoral student Zoya Goranova.

August 2025

Review

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679

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