OPINION

by Prof. Dr. Juliana Krumova Marinova, PhD

on the presented dissertation work

"Management of pain syndrome in gynecological practice" by Zoya Kirilova Goranova

She is doctoral student in an independent form of study in the doctoral program "Healthcare Management" (enrolled by order No. R-109-304 / 16.07.2021), professional direction 7.4 "Public Health," a field of higher education 7. Health and Sports with scientific supervisors: Assoc. Prof. Valya Dimitrova, PhD, and Prof. Dr. Paraskeva Mancheva Draganova, DSc.

Based on Protocol No. 1/03.07.2025 of the meeting of the Scientific Jury, appointed by Order No. R 109-284/01.07.2025 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna, I have been assigned to prepare an opinion. The same has been prepared based on **the documents** submitted under the procedure, which are in full compliance with the requirements and are excellently arranged.

Doctoral student's career profile:

Zoya Kirilova Goranova graduated from secondary medical education with a specialty in "Midwifery" at the Medical School for Midwives and Rehabilitators, Sofia, in 1973. In 2008, she obtained a bachelor's degree in midwifery at the Medical College of the Medical University–Sofia. The Medical University of Sofia awarded her a master's degree in "Healthcare Management" in 2017.

From 1991 to the present, she has many years of experience as a therapist in Chinese methods of treatment, successively in the Center for Chinese Medicine with the participation of Chinese doctors—specialists in acupuncture, moxibustion, auricular therapy, cupping therapy, and other methods of treatment (1991–1999) and the Outpatient Clinic for Unconventional Methods for a Beneficial Impact on Individual Health (to date).

With the documents for the procedure, Zoya Goranova presents a list of qualification certificates containing seven in the field of traditional Chinese medicine (TCM) with an emphasis on acupuncture; all trainings were conducted at universities of Chinese medicine in China. In addition, trainings in the field of TCM have been conducted in other countries—Greece, Cyprus, Russia, and Latvia.

Zoya Goranova is an authorized teacher of Chinese medicine at the Jiangxi University of Chinese Medicine for Bulgaria, the Balkan Peninsula, and Cyprus.

She is a member of the "World Federation of Chinese Medicine Societies"—member of the Management Board (2003-2007), member of the Board of Directors, and member of the Education Board. She is the chairman of the "Bulgarian Association of Acupuncture Physiotherapists" and a member of the World Federation of Chinese Medicine Societies (WFCMS)—a member of the Board of Directors and the Education Board for Chinese Medicine.

She speaks Russian, English, and Chinese.

General description of the dissertation: The dissertation contains 198 pages, structured in three main chapters, illustrated with 46 tables, 20 figures, 17 graphs, and 8 appendices. The bibliographic list includes 236 literary sources, of which 19 are in Cyrillic, 162 in Latin, and 55 in Chinese characters. The dissertation has been discussed and directed for public defense by the departmental council of the Department of Health Care at the Medical University "Prof. Dr. P. Stoyanov" - Varna.

Relevance and significance of the topic of the dissertation: "Management of pain syndrome in gynecological practice": an interdisciplinary topic, in full accordance with the professional profile of the doctoral student as a midwife and therapist—methods of traditional Chinese medicine. The dissertation looks at how useful and helpful traditional Chinese medicine methods—like acupuncture, moxibustion, and auriculotherapy—can be for treating pain during menstruation. Zoya Goranova argues for the relevance of the topic in the introduction: there are few scientific studies tracking the role and importance of the above-mentioned means for the management of pain syndrome in dysmenorrhea. Their integration with other approaches, such as dietary changes, exercise, and stress management techniques, are elements of a holistic approach to the management of menstrual pain and contribute to women's health.

Chapter One. A literature review is written on 40 pages, structured in two main sections: 1. Pain in gynecological practice according to conventional medicine—dysmenorrhea and conventional management methods. 2. Pain in gynecological practice according to unconventional medicine, respectively. Chinese traditional medicine is developed in three subsections: a brief overview for outside the Asian region; pain according to the theory of Chinese medicine and the mechanism of acupuncture analgesia; and dysmenorrhea within the scope of Chinese traditional medicine. The review ends with a summary, maximally synthesizing its content. The review is written in clear and accessible language and reflects thorough knowledge of the issues discussed and skillful handling of scientific terminology.

The manner of presentation in the literature review shows the author's ability to analytically present scientific information and to argue the relevance and significance of the topic of the dissertation, as well as the approach of his own scientific research.

The second chapter outlines the purpose, tasks, and hypotheses of the study. The chapter delves into the subject, object, and design of the scientific research. The dissertation meticulously presents the research methods on 8 pages. The purpose is "to investigate and evaluate the possibilities of Chinese treatment methods-acupuncture, moxibustion, and auricular therapy—suitable for managing pain syndrome in patients with dysmenorrhea." The research tasks are presented in 9 points, directly related to achieving the goal, and clearly formulated. 2 research hypotheses are presented:1. The inclusion of acupuncture, moxibustion, and auricular therapy in patients with dysmenorrhea contributes to overcoming pain. 2. Treatment with the methods of Chinese medicine in patients with dysmenorrhea leads to a change in their quality of life. This subsection is followed by a consistent and in-depth description of the material and methodology applied in scientific research. They are clearly justified and adequate, respectively, for the set goals and tasks, and they are described in detail. The following are presented sequentially: The study focuses on how certain Chinese medicine methods can help manage pain in gynecological cases, and it involves 44 patients with pain who chose to participate, split into two groups based on the treatment methods used. The study took place over 2 years, from October 2022 to January 2024, after getting approval from the Research Ethics Committee at the Medical University-Varna, and was done in outpatient settings at the "Outpatient Clinic for Unconventional Methods for a Beneficial Impact on Individual Health" in Sofia and the University Center for Oriental Medicine at the Medical University "Prof. Dr. Paraskev Stoyanov."

The following is a detailed presentation of **the study design**. We provide a detailed description of the preliminary and main stages of the experimental work. We present the inclusion and exclusion criteria for the experiment's patients. Of those invited to participate in the study, 44 individuals were accepted, divided into two groups: group 1 (G1)—22 individuals treated with analgesics—and group 2 (G2)—22 individuals treated with acupuncture, moxibustion, and auricular therapy.

The following is a presentation of the applied **methods**: A. Document-content analysis; B. Clinical research methods—described in detail; C. Sociological methods: - questionnaire survey on the intake of analgesics; - a system for assessing dysmenorrhea by severity - visual analogue scale (VAS)—10 levels of pain intensity - a questionnaire for assessing the quality of life with WHO -QOL-BREF-26. D. The statistical methods are presented in detail and are

fully adequate for the study's purpose, tasks, and type of data, including parametric methods for hypothesis evaluation, analysis of variation, and graphic analysis. Statistical processing of the data was carried out with the software products IBM SPSS Statistics 23.0 and MS Excel 2010.

The tools in the scientific study are described in detail and applied to the dissertation work. In summary: The chosen research approach allows us to achieve the set goal by obtaining an adequate answer to the tasks solved in the dissertation work. The applied methodology is described in detail and with skill.

Chapter Three. Results and Discussion. This part of the dissertation covers 91 pages, precisely arranged and illustrated, structured in 4 sections: 1. Harmonization of terminology—theoretical analysis; 2. Analysis of the physiological features and pathology of the female organism in fertile age according to the theory of Chinese medicine—theoretical and practical analysis; 3. Compilation of the experimental treatment recipe according to the theoretical principles of Chinese traditional medicine—theoretical and practical analysis; 4. Own results of the scientific research, presented in 5 parts, corresponding to the tasks set in the dissertation work.

The results are presented sequentially and analytically, illustrated with tables and colored figures, as follows: 1. Descriptive statistics for the intake of analgesics for pain and assessment of dysmenorrhea by severity at the start of the study (for both groups); 2. Analysis of the verbal multidimensional system for assessing dysmenorrhea (for the experimental group); 3. Analysis of the results of the visual analogue scale for the intensity of the painful sensation before and after each course of treatment (6 courses); 4. Results of the analysis of variations regarding the number of procedures performed within the six courses of treatment; 5. Results of the assessment of QOL with the WHO-QOL-BREF-26 questionnaire; Summary: This part of the dissertation deserves special attention and high praise for its adequate structuring, logical coherence, and consistency of presentation.

The report includes conclusions, contributions, recommendations, and a summary. The conclusions are presented in 5 points, skillfully formulated and directly related to the research goal and tasks. The hypotheses raised in the own study are confirmed by the results. This is followed by a presentation of a conceptual model for training and optimizing the role of the midwife using Chinese treatment methods—acupuncture and moxibustion.

The contributions are presented in two groups: theoretical-methodological in 8 points and practical-applied contributions in 4 points. I accept the contributions from the dissertation work in the way in which the doctoral student presents them.

Recommendations in two directions follow, respectively for clinical practice and education.

The conclusion of the dissertation work is its maximum synthesis and reflects its relevance and innovation, as well as outlines the prospects for future scientific research in the field.

Abstract and scientific asset in connection with the dissertation work: The abstract is written on 92 pages, is structured according to the requirements, and reflects the main results achieved in the dissertation. It contains a list of publications and participation in scientific forums (4 titles of full-text publications with lead author Zoya Goranova and I participation in a scientific forum) in accordance with the requirements of the Regulations of MU-Varna for the implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDSRB).

Comprehensive assessment: I give a highly positive assessment of the dissertation work presented by Zoya Goranova. I congratulate the doctoral student and the scientific supervisors on the choice of the topic and the applied approach to scientific research.

CONCLUSION

The dissertation includes original scientific, theoretical, and practical findings that contribute to science and meet all the rules set by the Law on the Development of Academic Staff in the Republic of Bulgaria (LDSRB), the Regulations for the Implementation of the LDSRB, and the Regulations of MU-Varna. The presented materials and dissertation results fully comply with the requirements of the MU-Varna regulations for the implementation of the LDSRB. The dissertation shows that the doctoral student Zoya Kirilova Goranova possesses in-depth theoretical knowledge and professional skills and demonstrates qualities for the independent conduct of scientific research.

This gives me reason to confidently confirm my **positive assessment** of the conducted research, presented by the above-assessed dissertation, abstract, achieved results, contributions, and scientific assets.

I propose that the esteemed scientific jury award the educational and scientific degree "Doctor of Philosophy" (PhD) to Zoya Kirilova Goranova, who is enrolled in the doctoral program "Health Care Management," within the professional field 7.4 "Public Health," and the field of higher education 7. Health and Sports.

02.09.2025

Stara Zagora city

Prepared the op

Prof. Dr. Julian:

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

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