REVIEW

by Prof. Dr. Paraskeva Mancheva, MD, PhD, DSc, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna,

of the dissertation work of *Diana Gocheva Gospodinova* in the field of higher education 7. Healthcare and Sport, professional field, 7.1. Medicine, Specialty "Forensic Medicine", on the topic "The Role of Medical Assistance in Determining the Medico-Biological Qualification of Bodily Harm".

1. General presentation of the procedure

In accordance with Ordinance № 4085/14.12.2022 of the Rector of MU-Varna, I have been appointed as a member of the Scientific Jury to prepare a Review, regarding a scientific work in the doctoral program "Forensic Medicine". The set of materials on print/electronic medium, which I received within the given time limit, fully complies with the requirements for the procedure of acquiring Educational and Scientific Degree "Doctor", according to the Regulations at MU-Varna. During my elaborate familiarisation with the materials I did not establish any violations of the procedure for the awarding of Educational and Scientific Degree "Doctor".

2. Brief information on the career development of the doctoral student

Diana Gocheva Gospodinova was born on the 23rd of May 1969 in Stara Zagora. In 1994 she graduated Medicine at Medical University-Varna. Her professional career started at Municipal Hospital - Kazanluk as a resident doctor. She has consistently gathered experience in Forensic Medicine at the Diagnostic and Consulting Centre "St. Marina"- Varna and is a specialist-physician in Forensic Medicine at the Clinic of Forensic Medicine, UMHAT "St. Marina"- Varna since 2011.

Her academic career started in 2022/2023 as a part-time assistant at the Department of General and Clinical Pathology, Forensic Medicine and Deontology at Medical University - Varna. In 2021 she was enrolled as a doctoral student in an independent form of education in the doctoral program "Forensic Medicine" in the field of higher education 7. Healthcare and Sport, professional field 7.1 Medicine with a dissertation on the topic "The Role of Medical Assistance in Determining the Medico-Biological Qualification of Bodily Harm". In the following years she has consistently performed all activities, provided in the individual study plan, successfully passed all exams and received authorisation for dissertation defence in March 2023.

The commitment to the topic of the role of medical assistance in determining the medico-biological qualification of bodily harm becomes evident in the scientific

research of the doctoral student. In the last five years she has presented the results from her research at "100 rokov ustavu sudneho lekarstva", Bratislava (2019) and published two articles in Folia Societatis Medicine Legalis Slovacae (2019). Diana Gocheva Gospodinova is a member of the Bulgarian Medical Association and the Association "Bulgarian Society of Forensic Medicine" and is also an expert in the Appellate Court of Varna. She speaks English and Russian.

3. Relevance and significance of the dissertation work

The dissertation studies a relevant and significant problem in our country, related to the role of medical assistance in determining the medico-biological qualification of bodily harm. The topic is undoubtedly both relevant and dissertationable, as well as substantiated by the doctoral student through the goals and tasks, set in the research. The work is unique in its area, has made significant contributions to cognitive theory and practice, is of an original nature and fills a void in this field of scientific knowledge and practice.

4. Structure of the dissertation work, literature review, presentation of the research results

The dissertation work is presented in 189 pages in total. Its structure is logically constructed and includes: introduction, literature review, empirical research design (purpose, tasks, hypotheses, object, subject, material, research methods), results and discussion. The main conclusions are drawn, the contributions and recommendations are formulated. The grading scales, which are used in the study, are presented in five applications. The scientific research and its results are well illustrated in 30 tables, 30 figures and 3 pictures. The bibliography includes 190 sources, 94 of which in the Cyrillic alphabet and 96 in the Latin alphabet. The introduction reveals the nature of the examined problem, its relevance and social significance. The literature review is purposeful, thorough and well structured. The extensive and relevant awareness of the doctoral student have been demonstrated, as well as her ability to critically assess, summarise, systematise, thoroughly analyse and comparatively interpret scientific literature and legal acts in the scientific field. The dissertation studies the role of medical assistance in determining the medico-biological qualification of bodily harm. The literature review examines the nature and characteristics of bodily harm, the medical assistance in such cases, medical documentation as a material in pre-trial and judicial proceedings and the possibilities for assessment of trauma and post traumatic conditions through grading scales.

Based on the literature review the third chapter reasonably suggests a *design for the scientific research*. The methodology is adequately selected, according to the tasks. The methods include expertise document analysis, as well as grading scales for

medical assistance in bodily harm cases. The applied *statistical methods* are appropriately selected, according to the sought after relations. All this guarantees the reliability of the research results and the precise drawing of conclusions, which is an excellent attestation of Diana Gospodinova's research capabilities.

The dissertation work clearly defines the *object, subject* and *aim,* proposes three hypotheses and formulates the main tasks of the dissertation. *The purpose* of the presented work is clearly and precisely defined, based on the in-depth review of the literature and its identified unsolved problems. The *six main tasks* aim towards the achievement of the main goal - assessing the role of medical assistance in determining the medico-biological qualification of bodily harm and suggesting criteria and an algorithm for its impact in forensic expertise. They are logically consistent and fully encompass the essence of the problem. *The working hypotheses* are clearly formulated and in accordance with the tasks. The results from the study are presented and discussed in a separate chapter.

The end of the dissertation displays the *conclusions* and indicates the author's *contributions and recommendations*. The applied modern sources illustrate the author's very good literary awareness and relevant knowledge. A significant part of the cited literature has been published in the last 5 years.

8. Research results

The analysis of the results directs towards the necessity of modernisation of forensic practice in our country, which becomes ever more imperative and supposes a corresponding initiative from the possessors of specific knowledge in this scientific field and forensic pathologists in particular. The medical activity is based on and takes into account an extremely large volume of legal and ethical norms, the violation of which is defined as an offence, significantly heavier in comparison with particular cases of violation of the person. The possibility for change is in the periodic updating of legal and medical qualifications with the modernised development of medical science and practice, used in specific norms, conditions and capacities of the medical facility, providing medical assistance.

The doctoral student establishes that there isn't an existing algorithm which tracks and clarifies the process of diagnosis and treatment of patients with health, impaired by force. Majority of forensic expertises do not include the evaluation element of medical assistance - volume, specificity, complexity, qualification of the executors and a level of organisation as a whole. The expertises do not present a comparison between the severity of the trauma, the criticality of the victim's life, the available resource for overcoming the consequences and the health recovery. All of these initial conclusions confirm the statements on the lack of objective criteria, on which

the expert medical activity can be based. Because of this reason the activity itself becomes inappropriately accepted and evaluated.

The presented research results and their discussion are comprehensively presented and structured according to the tasks. The precision of the planning and the adept execution of the tasks are proof of the considerable theoretical and practical experience of the doctoral student in the field of social, economic and legal sciences.

9. Conclusions of the dissertation work

The conclusions are clearly formulated, follow the research tasks and logically derive from the obtained results. It is established that the medical activity is the main factor which positively affects the recovery and improvement of the patient's condition after the infliction of bodily harm, as well as an affected public resource, which is in no way taken into consideration when convicting socially dangerous acts.

10. Contributions of the dissertation work

The dissertation work provides significant contributions that enrich and modernise existing knowledge on this not so researched topic in our country. The dissertation work has made significant contributions to cognitive theory and practice. It is written in a scientific style, with precision in the exposition and interpretation, demonstrated throughout the work. The dissertation results can be used for the development of an algorithm for the impact of medical assistance in forensic expertises, concerning bodily harm. The final results are related to accepting consensus decisions, regarding the most common contradictions in forensic practice while interpreting bodily injuries, based on objective criteria, originating from medical activity.

11. Assessment of the abstract

The abstract is prepared, according to the requirements and fully reflects the contents of the dissertation work. It is developed in 62 pages with highly informative 23 figures and 27 tables. The abstract also includes a list of three publications, related to the topic of the dissertation.

12. Publications on the dissertation work's topic

Diana Gospodinova presents three full-text publications on the topic of the dissertation, the subject of which is entirely in the field of the problem, considered in the dissertation work. The articles are written in a wide author's collective, including the scientific supervisor.

13. Critical notes and recommendations

I do not have any critical notes, regarding the fulfilment of the goal through the solved tasks and the proved hypothesis. It is necessary for the doctoral student to present the results of the dissertation work in journals, referenced and indexed in a global database.

Conclusion

The topic of the dissertation work is relevant and significant, executed meticulously. The work itself is original, provides new knowledge, includes the doctoral student's research experience and significant theoretical, methodological and practical contributions. The dissertation fully meets the requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for Development of the Academic Staff of the Medical University of Varna.

The assessment of all the merits of the dissertation gives me reason to vote positively for the awarding of Educational and Scientific Degree "Doctor" to Diana Gocheva Gospodinova in the field of higher education 7. Healthcare and Sport, professional field 7.1. Medicine, Specialty "Forensic Medicine".

26.04.2023 Varna

Reviewer:

(Prof. Dr. Paraskeya Mancheva, MD, PhD, DSc)