OPINION

from

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Subject: Dissertation work for awarding the educational and scientific degree "Doctor"

in the field of higher education 7. "Health care and sports", professional direction 7.1 "Medicine"

Dissertation topic: "The role of medical assistance in determining the medico-biological indicators of bodily injuries"

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By Order No. R-109-189/15.03.2023. of the Rector of the Medical University "Prof. Dr. P. Stoyanov" - Varna, I am assigned to be a member of the Scientific Jury, and with the Protocol of the first meeting in absentia, I was assigned to present a statement on the procedure for awarding the educational and scientific degree "Doctor" to Diana Gocheva Gospodinova, a doctoral student of an independent preparation in the Doctoral program in "Forensic Medicine" at the Medical University "Prof. Dr. P. Stoyanov" - Varna, Faculty of "Medicine", Department of "General and Clinical Pathology, Forensic Medicine and Deontology", in the field of higher education: 7. Health care and sports, professional direction: 7.1. Medicine

1. Brief data on the career development of the doctoral student

Diana Gospodinova completed her higher medical education in 1994 at the Stara Zagora Higher Medical Institute, and the following year (1995) she began a specialization in "forensic medicine" at the same higher education institution, which she successfully completed in 2001.

Her professional path began as a resident doctor in 1996 at the Kazanlak Municipal Hospital, where she worked until 2000. From 2002, she began working as a forensic doctor at the DCC "St. Marina" ltd., the city of Varna, and from 2011 to the present he works as a specialist doctor and a doctor-assistant in the UMBAL "St. Marina", Varna. Since 2013, Dr. Diana Gospodinova has been actively involved in the education of medical and dental students at the Medical University of Varna, conducting seminars in the discipline "Forensic Medicine and Deontology" and the elective course "Forensic Medicine in Clinical Practice". Her teaching work is enriched by her participation in a project at the Ministry of Education and Science - Student Practices I and II, within which extended practical training and profiling of students from medical specialties of the University of Varna was conducted.

Dr. Gospodinova showed her scientific interests when she started working at UMBAL "St. Marina", Varna, proof of which is her scientific publications and participation in scientific forums, visible from her profiles in the presented scientific databases. From 2021, Dr. Gospodinova is officially enrolled as a doctoral student in an independent form of study in the Doctoral program "Forensic Medicine" in the Department of "General and Clinical Pathology, Forensic Medicine and Deontology" of the University of Varna.

The accumulated experience and research material over the years allows her to complete his study plan at a good pace.

She is a member of the Bulgarian Society of Forensic Medicine and BMA, an expert at the Varna Court of Appeal. He actively uses Russian and English.

2. Significance and relevance of the topic

The topic of Dr. Diana Gospodinova's dissertation work "The role of medical assistance in determining the medico-biological indicators of bodily injuries" is extremely useful and timely in the context of the current forensic medical practice in determining the medico-biological qualification of bodily injuries in cases of medical assistance. Normative documents that regulate the actions of forensic medical experts are significantly behind in terms of content and volume from the modern development of medical theory and practical clinical possibilities.

In this sense, the topicality of the subject under consideration consists in the fact that it proves the need for urgent measures and gives specific proposals for the modernization and normative improvement of forensic medical expertise in Bulgaria.

3. Knowing the problem

The dissertation is presented in a total volume of 189 pages, of which 70 are devoted to a review of the scientific literature on the researched problem. Five appendices are presented to the main text, the work is illustrated with 30 tables, 30 figures and 3 photographs. The literature review is well structured, comprehensive, based on 190 sources, half of which are from the last ten years, and 94 are in Cyrillic. The book review illustrates the wide awareness and up-to-date awareness of the author.

In the literature review, an in-depth review of the emergence of contradictions between the development of medicine on the one hand and the regulatory framework in the section on bodily injuries, which are transferred to forensic medical practice and literature, is made. The result of these contradictions leads to today's situation, in which leading forensic medical experts in Bulgaria consistently give different, often mutually exclusive, instructions for the qualification of individual types of trauma.

In the literature review, the author has examined in great detail the existing forms of medical documentation in Bulgaria in order to assess the possibility of their use in assessing the objective state obtained as a result of trauma.

The demonstrated in-depth knowledge of the literature and expert practice have shaped the direction of the research search towards the possibilities of objectifying the nature, volume, duration of medical assistance and its relation to the illegal act of bodily injury as the main responsibility of medical experts and, in particular, forensic doctors.

With the dissertation work, the doctoral student aims to evaluate the role of medical assistance in determining the medico-biological qualification of bodily injuries and to propose criteria and an algorithm for its reflection in forensic medical expertise. Six research tasks and five working hypotheses are derived.

4. Research methodology

Two main methods were used in Dr. Deana Gospodinova's dissertation work:

- Historical analysis of the scientific literature on the problem.
- Own empirical study consisting of an expert forensic medical evaluation of the medical assistance provided to patients with various bodily injuries. Medical care is systematized into two groups: diagnostic and curative.

For the needs of the expert assessment, an original complex of indicators - "scale" - was developed, and the choice of indicators in it is dictated by the specific features of the forensic medical expertise in the interpretation of medical assistance.

The scale has two sections: diagnostic and treatment, each with five separate criteria, defined in four grades from 0 to 3. The maximum score is 15 for each of the two sections and 30 for the generalized version, respectively.

The scale was applied to evaluate the medical assistance provided in a total of 3280 forensic medical examinations based on written data for a period of six years from more than 5 regions in the country.

5. Characterization and evaluation of the results and contributions of the dissertation work

The results of the dissertation work and their discussion are well structured according to the tasks set. In separate sections, the results of the analysis of the proposed scale from the diagnostic part containing five signs - clinical examination, assessment by scale (TSS), paraclinical studies, imaging studies and apparatus studies are separated. Proposed, analyzed and deduced on the basis of rich practical material are five criteria for qualifying the medical activity - active resuscitation, hospital treatment, need for operative intervention, drug therapy as well as the application of rehabilitation and physiotherapy.

I highly appreciate the conclusion made in the dissertation, that the obtained results of the study of medical assistance from a forensic aspect complement the objectification of the physical disability as the degree of affected function and anatomical integrity and outline the main indicators of the algorithm of its reflection in the FME.

The conclusions are clearly formulated, practically oriented, follow the set research tasks and logically follow from the obtained results. Based on the results, suggestions/recommendations addressed to the relevant institutions and experts have been made.

The work has significant theoretical-cognitive and practical-applied contributions, some of which are original. The present dissertation is the first of its kind targeted and in-depth study of the diagnostic and treatment measures included in the expert judgment, carried out in patients with bodily injury. For the first time in our country, an attempt is being made to analyze the impact of medical assistance applied in cases of culpably caused disabilities. A contribution is also the proposed option for expanding the analysis of medico-biological indicators in the investigation, criminal and civil process, in accordance with the modern development of medicine and by using trauma assessment scales.

6. Evaluation of the publications and personal contribution of the doctoral student

In connection with her dissertation work, the doctoral student presents three full-text publications, which do not exhaust the list of her scientific works on the subject.

In two of the publications, Dr. Gospodinova is the first author, which proves her personal participation in the conducted research, the obtained results and contributions.

7. Abstract

The abstract is prepared according to the requirements and fully reflects the content of the dissertation work. It is well illustrated with informative tables and figures.

CONCLUSION

The presented dissertation is on a current topic, executed precisely with a complex methodology, provides new knowledge that contributes to the development of forensic theory and the objectivity of forensic expertise with significant theoretical and applied contributions of an original nature.

The dissertation meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for the Implementation of the LDASRB and the Regulations of the MU - Varna.

The dissertation shows that Dr. Diana Gospodinova possesses in-depth theoretical knowledge and professional skills, demonstrating qualities and skills for independent conduct of scientific research.

The above gives me reason to confidently give a positive assessment to the presented dissertation work and I propose to the respected scientific jury to award the educational and scientific degree "Doctor" to Dr. Diana Gocheva Gospodinova in the doctoral program in "Forensic Medicine" in the field of higher education 7. Healthcare and sports, professional direction 7.1. Medicine.

14.04.2023 г

Prepared the opinion:

Associate Professor Alexander Evlogiev Aleksandrov, Ph.D.