



To  
The chairman  
of the scientific jury,  
approved by Order No. R-842/15.03.2024  
the vice-rector of the NID  
of Medical University-Plovdiv

## OPINION

By prof. Svetlozar Spasov, M.D., Ph.D.

**internal member** of the National Academy of Medical Sciences from MU-Plovdiv  
**in connection** with the procedure for the defense of a dissertation work for awarding the educational and scientific degree "Doctor" in forensic medicine is the deontology of Dr. Kristina Atanasova Hadjieva with Research supervisor, Assoc. Prof. Dr. Pavel Todorov Timonov, Ph.D.

**on the topic** "Forensic analysis of violence against adults", presented for public defense before a scientific jury in field of higher education

7. "Health care and sports", professional direction

7.1. "Medicine", Doctoral program

in the scientific specialty "Forensic medicine and deontology" (accredited specialty by NAOA for MU-Plovdiv).

Grounds for presenting the opinion:

I present this opinion in my capacity as a member of the Scientific Jury, appointed by Order No. P-842/15.03.2024 of the Rector of the Medical University - Plovdiv.

By protocol No. 1/18.03.2024 of a meeting of the scientific jury, I have been designated as the Chairman of the Scientific Committee and I have been assigned to prepare and present, within a period of 26.03.2024, an opinion regarding the scientific work of Dr. Kristina Atanasova Hadjieva.

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

Dr. Kristina Atanasova Hadjieva was born on 02.05.1990 in the city of Plovdiv. She graduated from Medical University - Plovdiv in 2015.

From the middle of November 2016, she is an assistant at the Department of Forensic Medicine and Deontology of the Medical University of Plovdiv after winning a competition.

In 2019, he successfully passed the state exam for acquiring the specialty "Forensic Medicine and Deontology".

She is a member of the Bulgarian Society of Forensic Medicine, the Bulgarian Medical Union, and the Union of Scientists in Bulgaria.

In 2022, the dissertation work was approved for development by the Departmental Council and Dr. Hadjieva was enrolled as a doctoral student of independent preparation.

On 26.04.2023, the dissertation work was presented and discussed at the Departmental Council of Department of forensic medicine and deontology MU-Plovdiv, and a decision was made to deduct the doctoral student with the right to defense. Order No. R 1127/03.05.2023 was issued to the Rector of the MU - Plovdiv with the right to defend for a period of up to 1 (one) year. The doctoral student has completed the tasks referred to in his individual plan.

## **2. On the procedure and documentation**

The set of materials presented by the candidate in an electronic medium is in accordance with the requirements of the RASRB and the Regulations for the conditions and procedures for acquiring scientific degrees and holding academic positions of the MU-Plovdiv. The procedure was carried out in accordance with the requirements of the above-mentioned legal bases.

## **3. Relevance of the problem**

Violence in general is a major social, socially significant problem in modern society. The study of this phenomenon is of interest to various branches of science, including medical science, in particular forensic science. The Department of Forensic Medicine and Dentistry at MU-Plovdiv has traditions in this field. This research is part of the overall research. Elder abuse is a complex social and medical problem that is significant not only in our country but also around the world. In essence, there are age-specific manifestations, and it is a specific type of violence that affects an age group limited in its ability to defend itself. Dr. Kristina Hadjieva's dissertation explores a current and little-researched issue in medical and forensic practice. The dissertation work will also be important for comparative analysis with studies of violence in other age groups.

## **4. Descriptive characteristics of the dissertation work**

The dissertation is presented on 81 standard pages. There are also 22 figures and 24 tables in the text. The structure of the dissertation work is standard: introduction, literature review, own results, discussion, conclusions, references to scientific contributions, and bibliography. The individual parts are aligned with the research requirements of the dissertation class. They are adequate for the research problem.

### **4.1. Evaluation of the literature review**

The author refers to 81 sources - in Cyrillic and Latin. A comprehensive analysis of the current state of the issue has been made.

### **4.2. Goals and tasks**

The goal and tasks are formulated clearly and concretely. A goal has been set, and specific tasks have been formulated to achieve it.

### **4.3 Material and methods**

The methodology is adequate to the objectives of the study. To achieve the goal and tasks of the dissertation, the author conducted a statistical survey of adults over 65 years of age who suffered as a result of physical violence. 442 cases of physical violence against the elderly have been analyzed according to the material of the Department of forensic medicine University

Hospital "St. George" JSC-Plovdiv. Clearly defined exclusion criteria were used for case analysis. The applied statistical methods are adequate and relevant for each task.

#### **4.4. Discussion and conclusions**

The results of the conducted research are detailed in separate sections corresponding to the set tasks and are illustrated with 22 tables and 22 diagrams showing the data on physical violence. The analysis of the results presented shows that Dr. Hadjieva uses scientific approaches that give grounds for drawing a number of scientific conclusions and conclusions. They expand the volume of available information regarding knowledge and data in the forensic medical expert activity in Bulgaria. During the discussion of the results, the excellent awareness of the dissertation student and his ability to objectively analyze his own results are evident. A significant impression is made that the results are distributed and considered also in the context of gender distribution. The conclusions in the conclusion are clearly stated. They are written in optimal detail, not finding unanalyzed results. The contributions actually reflect Dr. Hadzhieva's results compared to literature data. The presented conclusions are very well presented and systematized, the author explains in detail and in depth the presence of grouped traumas, blood clots on the body of different ages, located in inaccessible and non-protruding parts of the body, in the neck area, non-protruding parts, which are strictly specific to this type of violence on the head and torso, specific traces of cigarette burns, traces of human bites, as well as data on neglect and lack of care for the elderly person, which he takes as highly indicative of physical abuse. Based on the obtained results, an algorithm was created for a forensic medical examination of an adult with suspicions of physical violence.

#### **4.5. Contributions**

Contributions of a scientifically applied nature have been reasonably derived from the dissertation work. Contributions of a confirmatory nature are also reported. The abstract correctly reflects the content of the dissertation work. It is prepared in a volume of 51 standard pages and is composed of parts that present the structure and content, exposition, contributions and publications of the dissertation work. In connection with the dissertation work, the doctoral student has submitted three publications in medical journals.

### **SUMMARY**

I believe that Dr. Kristina Hadjieva's dissertation is an independently prepared scientific product with clear practical contributions that make it relevant and valuable for any future research and analysis on the topic. The dissertation work presented by Dr. Hadjieva meets the requirements of ZARASRB, the Regulations for its application and the Regulations for the development of the academic staff of the Medical University - Plovdiv. It is well illustrated and demonstrates the possibilities of applying the algorithm for the forensic examination of an adult with suspicion of physical violence in forensic science and practice.

I appreciate the scientific and practical value of the presented dissertation work. therefore, I give a positive assessment and propose to the honorable Scientific Jury to award the educational

and scientific degree "Doctor" to Dr. Kristina Hadjieva in the scientific specialty "Forensic Medicine and Deontology" in the professional direction 7.1 "Medicine", from the field of higher education 7. "3tree protection and sport".

Signature:

  
