

STATEMENT

By prof. Stoyanka Tzvyatkova Zheleva-Popova,
Scientific specialty: „Social medicine and Organization of Health care and Pharmacy”
Member of Scientific jury, following an order of the Rector of Medical university
- Varna № P-109-342 / 09.10.2019.

Re. Dissertation work on the topic "The Ownership of Patient Information in the Context of Big Data" under the procedure for obtaining the Educational and Scientific degree "Doctor" - field of Higher education 7. „Health care and Sport“, Professional direction 7.4. „Public Health”, Scientific specialty “Management of Public Health” of Martin Ognyanov Mirchev, doctoral student in independent form of study.

Supervisor: Prof. dr Albena Kerekovska, Ph.D.

Procedure details

By order of the Rector of the Medical University-Varna № R-109-458 / 17.07.2018 assistant professor Martin Ognyanov Mirchev has been enrolled as a doctoral student in independent form of study in the Department of Social medicine and Health care Organization - Scientific specialty “Management of Public Health”. A protocol for successfully passing the doctoral exam from November 6, 2018 is presented. On the basis of a decision of the Council of the Department of Social Medicine and Health Care Organization, for the readiness for public defense and a proposal for a Scientific Jury, by Order of the Rector of the Medical University-Varna № R-109-342/09.10.2019, ass. Martin Mirchev was directed to a public defense.

Biographical data and career development of the candidate

Ass. Martin Ognyanov Mirchev acquired in 2010 Bachelor's Degree in Philosophy, and in 2008 Master's Degree in History of Philosophy at Sofia University " St. Kliment Ohridski". In 2015, he graduated as a Master in Law from Varna Free University. Upgraded the Master's Program in Public Health, 2018.

His academic career began in 2014 as a part-time lecturer at the Department of Social Medicine and Health Care Organization - MU-Varna. Since 2015 - a full-time assistant in the same department. The teaching activity of ass. Mirchev includes medical ethics classes with medical and dental students (Bulgarian and English language), as well with students in specialties health care management and public health protection and control.

He has excellent computer skills, fluent in English.

The dissertation, developed by Martin Mirchev, is in volume of 257 pages and is structured in 5 main parts - Literature Review, Material and Methods, Results and Discussion, Conclusion, Contributions. 4 figures, 11 tables and 2 annexes illustrated

the work. The bibliographic reference contains 359 sources, 4 of which are in Cyrillic and 355 in Latin.

Actuality of the topic. The massive increase in healthcare data sets and the associated increased expectations for their beneficial impact on health care quality poses a number of challenges - access, control, ownership of information. Interpreting them from a legislative, ethical and public health point of view, as well as their place in the context of “Big Data”, becomes a actual topic in which this dissertation fits. These issues have serious theoretical as well as practical aspects, and the author clearly give proof of this.

The literature review shows the author’s potentiality to work with scientific literature and his acquaintance with, the subject in question. The literature review focuses on three subjects: the history of the information revolution and “Big Data”; defining “Big Data” and their importance in healthcare; ownership of patient information in the specific context and the terminology was introduced.

The material and methodology are presented in detail. The author formulates 8 tasks, consistent with the defined purpose and helping to achieve it. The application of a wide range of research approaches makes a good impression:

- Scoping review;
- Documentary method - documentary analysis of normative acts and documents;
- Philosophical analysis;
- Ethical analysis.

Their application is well-grounded according to the specificity of the problem under consideration.

The content of the main chapter Analysis (Results and Discussion) is structured into four sections in the sequence of methods pointed above:

- Determining the scope of available scientific literature on the ownership of patient information in the context of Big data - the author presents the results of his own research. 27 publications from the period 2014-2019, selected through scoping review, were examined in detail. The section concludes with findings concluding that there is a research deficit in the area in question, a lack of consensus on ethical and legislative proposals.
- The second section looks at the place of patient information in the context of the Big Data in Health care. A series of issues related to security, confidentiality, trust, access right, ownership of patient information are discussed. I highly appreciate the interpretation on topics concerning patient information such as ownership, access, supervision. Based on an analysis of the Bulgarian legislation and a comparison between the US and European regulations in the field of medical informatics, it is noted that the ownership issue remains outside the legal regulation. It cites a report by the American Medical Informatics Association, which states that "the focus should be on access to data and control, not ownership of the data itself."

- Summarizing that the issue under consideration is unsolvable through a purely empirical approach, the Mirchev seeks out the philosophical (and, particularly, ethical) justification that he presents in the next two sections included in the Analysis (Results and Discussion) of the dissertation. The author makes his philosophical argumentation using basic philosophical approaches: ontological, epistemological, axiological and anthropological. Summarizing that the issue of the ownership of patient information is primarily a matter of ethical discussion, ass. Mirchev implements it through the prism of basic principles in medical ethics. The analysis is meant to answer as to whether the idea of ownership of medical information complies with ethical principles: autonomy, harm, well-being and justice.

I deem that the competent research work fulfills the purpose and tasks set out in the dissertation. The conclusions drawn correctly and in a synthesized form reflect the results of the study and respond to the pre-established hypotheses - the results provide evidence for rejection of two and confirmation of the other two hypotheses.

Note: The text could be refined with a view to its accuracy and clarity.

The reference for the **contributions** classified as scientific-theoretical and practical-applied is presented on pages 251 and 252 of the dissertation. I would highlight the following contributions:

Original contributions:

1. For the first time in the Bulgarian scientific literature the issue of the ownership of patient information in the context of Big Data has been considered.
2. A philosophical analysis of the concept of ownership of patient information has been carried out through the application of philosophical techniques.
3. An ethical analysis of the concept of ownership of patient information was performed based on the principles of medical ethics.
4. An approach for the regulation of patient information is proposed with suggested potential solutions.

Contribution enriching theory and practice:

1. The importance of Big Data for Healthcare has been analyzed, as well as the related challenges, risks, benefits.

In connection with the dissertation, ac. Мирчев presented **four publications and two participations in scientific forums**, one of which abroad. The articles have been published in „Scripta Scientifica Salutis Publicae“, „Social medicine“, Suppl. of „European Journal of Public Health“, “Ethics Research”. I deem that these publications really represent the author’s achievements and promote them to the scientific community.

The abstract summarizes authentically the content of the dissertation. It has a volume of 73 standard pages and consists of sections that present the structure and content of the dissertation.

Conclusion

The dissertation is innovative in its topic, developed on the basis of a complex methodology, allowing a multifaceted examining of the research problem, presented in a completed form, answering the set goals and objectives.

In my personal experience, ass. Martin Mirchev is a responsible, hardworking, ambitious and ethical young colleague.

I give a positive assessment of the dissertation presented and my vote for the conferment on Assistant Professor Martin Ognyanov Mirchev the scientific and educational degree "Doctor" in the scientific specialty "Management of Public Health".

A handwritten signature in blue ink, appearing to be 'S. Popova', written over a light blue and white background.

Signature:

(Prof. Stoyanka Popova, MD)

14.11.2019