

# REVIEW

С.А. Д.А. Тенев" / Свищов  
Вх. № 93 ДД-23 / 18.08.2023

of the dissertation for the award of the degree of Doctor of Education and Science in the Doctoral Programme "Finance, Money Circulation, Credit and Insurance (Insurance and Social Security)" at the Academy of Economics "D. A. Tsenov" – Svishtov

Author of the review:

*Prof. Margarita Yordanova Bogdanova, PhD, Academy of Economics "D. A. Tsenov" – Svishtov, Department of Strategic Planning*

Dissertation Topic:

*Organizational and managerial challenges for medical institutions in the conditions of pandemic of COVID-19 (on the example of Multi profile hospital for active treatment „Heart and Brain“ EAD – Pleven)*

Author: *Lyuba Martinova Miteva*

Research supervisors:

*Assoc. Prof. Nikolay Ninov, PhD – Academy of Economics "D. A. Tsenov" – Svishtov, Republic of Bulgaria*

*Prof. Ryszard Pukala, PhD – The Bronislaw Markiewicz State Higher School of Technology and Economics, Jarosław, Poland*

Grounds for submitting the review:

*Order № 475/ 01.06.2023 of the Rector of Academy of Economics "D. A. Tsenov" – Svishtov for opening a procedure and determining the composition of the scientific jury for the defense of a dissertation*

## 1. Information about the PhD student

The author of the dissertation submitted for review - Lyuba Martinova Miteva was trained in the doctoral program "Finance, Money Circulation, Credit and Insurance (Insurance and Social Security)" at the Department of Insurance and Social Security at the Academy of Economics "D. A. Tsenov" – Svishtov.

She graduated in Insurance and Social Security (B.Sc.) and two master's programs at the Academy of Economics "D. A. Tsenov" – Svishtov – "Health Management" and "Human Resources Management".

She completed her secondary education at Geo Milev High School in Pleven. At present, she is working at the Multiprofile Hospital for Active

Treatment "Heart and Brain" EAD - Pleven. She is currently working as an employee in the Human Resources Department.

## 2. General characteristics of the submitted dissertation

Lyuba Miteva's dissertation focuses on a relatively new, topical topic - organizational and managerial challenges facing medical institutions during the Covid-19 pandemic.

The relevance of the topic is undeniable due to the serious problems in the management of medical institutions, especially in an environment of high pressure on the health system. As noted by the author, these problems are generally related to the need to manage risk in a completely new environment - when traditional and emerging risks combine to challenge the sustainability of all health facility management systems and their management strategies.

At the same time, there are tools that can be used to overcome these problems and it is in this context that **development goal** of the paper is formulated: *to demonstrate the need for a strong risk management program. Compliance with the steps of identification, monitoring, assessment, and prevention against the existing risks to the health care institution's activity, and the strict implementation of the identified actions, could transform any threat to the health care organization into a positive and generate added value for it.*

As an **object** of research, the PhD student points out the private Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven, as a part of the current national system of hospital medical care in the Republic of Bulgaria.

**The subject** of the study is the organizational and managerial challenges faced by medical institutions in the country in the conditions of pandemic COVID-19 and the need to implement a risk management program (on the example of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven).

**The thesis** of the dissertation study, logically linked to the other attributes of the study, states that *the pandemic of COVID-19 provokes the management of hospital medical care facilities in the country in the direction of - rethinking the strategies of the medical institutions and, in particular, the risk management programs underlying their risk management. The implementation of these programs is a key management tool and a practice-tested method of counteracting any healthcare organization (in this case - Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven) that is exposed to unprecedented risk pressure of similar pandemic proportions. Only the*



*proactive and systematic implementation of risk management programs in the hospital could result positively in ensuring the safety, life, and health of patients and staff, as well as the organization's assets, market share, accreditation, reimbursement levels, brand value, and reputation in the community.*

The research thesis thus defined is detailed in the working hypotheses proved in the course of the study.

Nine tasks have been formulated, whose implementation corresponds to the research framework of the thesis. These include a review of the literature and of policy and regulatory documents in the subject area (Tasks 1, 2, and 3), observation and critical analysis of practice in hospital nursing (Tasks 4 and 5), empirical research in the study site, conclusions and recommendations (Tasks 6, 7, 8 and 9). The tasks correspond to the individual paragraphs in the study, which facilitates the reader and conveys a sense of orderliness of thought and consistency of task completion.

The research methods applied in the dissertation are described in detail - sociological method and more specifically survey method; comparative method; documentary method; method of analysis and synthesis; method of expert evaluation; method of observation; method of modeling; statistical methods.

There are also limitations in the work, which concern 1) the choice of the studied medical institutions - Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven and University Hospital "Dr. George Stransky", accepted as leaders between private and public hospitals for inpatient medical care on the territory of the Pleven region; 2) the scope of respondents in the survey, which are only from Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven due to the nature of the study.

The thesis is 240 pages long, including 218 pages of main text, including references, and 22 pages of appendices. Structurally, the thesis contains a list of abbreviations used, an introduction, an outline consisting of 3 chapters, a conclusion, a list of references used, publications of the author on the topic of the thesis, appendices, and a declaration of reliability and originality of the thesis. A sufficiently large number of literature sources related to the topic of the dissertation - 78 in total - in Bulgarian and English has been processed.

The volume of the dissertation, the visual means - a total of 69 figures and 24 tables- and the processed scientific literature meet the requirements for this kind of scientific research.

### **3. Assessment of the dissertation format and content**

**Chapter One** is devoted to the treatment facility-risk management-pandemic relationship of COVID-19.

The characteristics, place, and importance of the hospital (as an institution) in modern health systems, the concept of risk management of a medical institution in the context of new public health projections, and the application of risk management in the context of a COVID-19 pandemic are consistently elucidated.

The author traces the discussion in the literature regarding the importance of different groups of factors that determine the conditions of functioning of health systems. Special emphasis is placed on the rapid development of external factors in the industry - digitalization and the overall development of technology, new standards in medicine, modern service concepts, the profile of competition in the sector, etc. These are considered alongside the internal factors and their integration with external conditions. I am particularly impressed by the holistic approach chosen by the author in the analysis, whereby a 'big picture' vision of hospital management is sought.

The concept of risk management is explored in great depth, with basic definitions, the development of the concept, assessment methodology, and the planning aspect of organizational risk management.

The logical conclusion of chapter one is with the third paragraph, which inserts the topic of COVID-19, in line with the subject of the study. It is a good impression that the author does not succumb to populist rhetoric on such a fertile topic, but presents: 1) the general framework of organizational requirements - as a combination of requirements for health facilities - in general, and then the additional WHO requirements for quality systems published during the pandemic; 2) practical solutions for risk management in health facilities during the COVID-19 pandemic. The author comments on the application of the algorithm, which has established itself as the standard for crisis management, "to try to help hospitals anticipate the unpredictable."

Obviously, some of the author's conclusions are the result of direct observations, but even these fit within the chosen framework of analysis without deviating from it.

Particularly important are the conclusions concerning the principles of governance that have been shown to work (and are clearly distinguished from those that do not), as well as the values that have found confirmation in the conditions of the crisis.

At the end of chapter one, key summaries are drawn out that build on rather than repeat texts. A guiding line is the lessons from the crisis that can be used to improve hospital management and the wider health system.



**Chapter Two** debates the main organizational and managerial challenges facing the country's health facilities in the context of a COVID-19 pandemic. The first paragraph discusses issues related to the legislative framework, the specificities and characteristics of hospital medical care facilities in Bulgaria, and the strengths and weaknesses of public and privately owned medical care facilities. The author correctly refers to his work published in the Annual Almanac of Doctoral Research (2019). In addition to statistical information, the dissertation also presents the author's position on key structural, financial, methodological (related to performance measurement), and other issues of the healthcare system, including policies that are not quite adequate to the environment. Some important asymmetries between public and private hospitals are also highlighted.

The second paragraph focuses on the challenges facing hospital care in Bulgaria during the COVID-19 pandemic. Data on various indicators describing the crisis are analyzed in turn - number of people affected at different stages, financial indicators, including regional breakdown, and by hospital groups (public, municipal, and private). This gives the reader an idea of the overall picture of the healthcare services business and the emerging trend of a sustained rate of year-on-year growth in the supply and demand of healthcare services.

The policy of paying additional subsidies to incentivize medical professionals during the pandemic, whereby municipal hospitals are disadvantaged at the expense of government hospitals, is also critically assessed. Hence, the conclusion of inefficient allocation and disbursement of funds for additional subsidies.

A logical continuation of the study is the comparison of hospital facilities in Pleven - 13 in total. An analysis of balance sheet items and income statement dynamics of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven and Dr. Georgi Strensky University Hospital EAD in Pleven Region (2018-2021) was also made to seek an answer to the question: how did the COVID-19 pandemic affect the activities of the leaders among hospitals in Pleven Region.

The summary of chapter two once again highlights key findings and clearly states the intention of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven to become a leader at the district level, including in financial indicators ("repositioning").

**Chapter Three** presents the results of a diagnostic analysis of the organization and management of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven during the COVID-19 pandemic.

The first paragraph is devoted to the key policy guidelines for COVID-19 risk management at the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven and, in particular, to the impact of the COVID-19 pandemic on the hospital's operations, necessitating bed transformations, ward closures, the construction of a modern COVID-19 intensive care unit, etc.

The second paragraph details the steps in the implementation of the updated Risk and Capacity Management Programme of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven during the COVID-19 pandemic. They go through 1) Analysis and identification of possible points of risk to the quality of services provided; 2) Identification of risk assessment elements; 3) Risk calculation; 4) Risk assessment and management; 5) Description of measures to be taken; 7) Revision of risk assessment; 8) Actions to manage risks and opportunities.

Guidelines for future development of the "Risk and Opportunity Management Programme" of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven are also developed in a separate sub-paragraph. Thus, risk management is put on a permanent basis by considering a number of challenging scenarios and respectively providing adequate management measures.

The last paragraph presents the results of a survey on the impact of COVID-19 on the activities of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven. Structured in this way, the survey adds to the objective picture of the COVID crisis by bringing in the personal opinion of one of the key stakeholders - the staff of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven. The parameters of the study are presented in detail - objectives, tasks, scope, timing, question groups, etc.

The main thesis of the survey is the confirmation of the idea that the key to ensuring the continuity and high quality of healthcare services, as well as the safety of patients and medical professionals, is the proactive way of defining and managing risks in hospital medical institutions, namely - risk management. The survey was generated in Google Forms. A preliminary analysis was made of the required number of surveys (184) that would ensure the reliability and representativeness of the results. A random non-replicated sampling method was selected. The resulting sample was structured according to personnel categories in order to reproduce as much as possible the structure of the general population, which will allow generalizing the conclusions of the study. A Likert scale (1 to 5) was applied to evaluate the responses of the respondents.

A descriptive analysis of the survey results was performed, and univariate distributions were described. In the first section, such are respondents' structure,



attitudes to teamwork, over time, a system for reporting mistakes made in the work process, and an assessment of the resources required. In the second section, assessments of respondents' relationship with supervisor/mentor in relation to work allocation, coordination, etc. are included. The third section describes the reported adverse events or errors, and the fourth section describes the awareness of the Risk and Opportunity Management Program (the risk management program) of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven. The fifth section examines the impact of COVID-19 on the activities of the staff of Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven. The last-sixth section is about the professional experience of respondents.

Analyses and results from several bivariate distributions are presented - to test hypotheses, chi-square tests are applied and correlation coefficients of intercorrelation between selected statements from respondents are calculated. All calculations were correctly performed. The overall conclusions are presented at the end of chapter three, as they summarize the results and provide a basis for confirming the research thesis - related to risk management as a guaranteeing tool for achieving continuity and high quality of healthcare services, as well as safety of patients and medical professionals.

Emphasis is placed on staff understanding and accepting risk management as an internal (to the organization) necessity, rather than one brought in and imposed from outside for administrative reasons. This approach, linked to the so-called organic nature of risk management, is important for its successful implementation and admiration is due to the author for drawing attention to this issue in the survey.

In the conclusion, a recapitulation of the results and conclusions reached in the dissertation is made and the proof of the research thesis of the dissertation is confirmed once again.

The scientific, linguistic, and stylistic editing are sound. There are no significant deviations, repetitions, or logical contradictions. The rules of scientific ethics in the citation of literary sources are observed. The candidate shows a good command of the specific terminology of the dissertation topic, deeply enters into the technology of the approaches and methods of analysis used and successfully copes with the difficult task of combining several methods to realize the planned tasks of the study. Thus, she demonstrates competence in defining a research problem, developing and verifying hypotheses, evaluating research results, outlining problems that are unresolved or insufficiently addressed in practice, and future steps to overcome them.

#### **4. Scientific and applied contributions of the thesis**

I accept the author's main points of contribution. They present briefly and even too modestly the achievements of the work. They boil down to the following:

First. Generalizations and systematizations have been made concerning the meaningful characteristics of the modern management of the medical institution and, more specifically, of risk management, and hence the detailed presentation of the algorithm and specifics of the preparation of a risk management plan in the health care organization/enterprise.

Second. The organizational and management challenges faced by healthcare institutions in the context of a COVID-19 pandemic are investigated and dependencies in this regard are identified.

Third. An assessment of the development and status of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven, in the context of the COVID-19 pandemic as a direct result of the adopted organizational behavior and hospital risk management policy by its management team.

Fourth. In order to ascertain the effective implementation of the Risk and Opportunity Management Program, a survey instrument targeting the staff of the largest private medical institution in the territory of the Pleven region was piloted with the elicitation of representative data from respondents using verbal-graphic models.

Fifth. On the basis of the analysis of the results of the implementation of the "Risk and Opportunity Management Program" of the Multiprofile Hospital for Active Treatment "Heart and Brain" EAD - Pleven, specific guidelines for the future updating of the same in order to ensure the continuity of operations, prevent the insolvency and bankruptcy of the organization, secure the expectations of the shareholders-owners of the company, and all other stakeholders in society.

I find that the scientific and applied contributions thus outlined are significant for theory and especially for practice. They contribute to deepening the analyses in the field of hospital management (including in times of crisis), to clarify problematic issues and are an argued basis for future policies and instruments in the subject area of the research.

#### **5. Evaluation of dissertation publications**

The PhD student presents 3 publications on the topic of the dissertation, including 1 article and two papers from national conferences. All publications



are independent. This is evidence that the author's theses have reached the wider scientific community.

With the list thus presented, the PhD student proves that he/she meets the minimum national requirements by scoring 30 points (out of the required 30) in Area 3. Social, Economic and Legal Sciences, PH 3.8. Economics, according to the Academic Staff Development Act in the Republic of Bulgaria.

## **6. Evaluation of the abstract**

The abstract accurately and completely reflects the work. It is developed according to the requirements, contains all the necessary requisites, and presents the main issues in a broad form. It contributes to the acquisition of a complete picture of the scientific value and practical applicability of the results achieved in the context of the author's proven research thesis.

## **7. Critical comments, questions, and recommendations on the thesis.**

I have no substantive criticisms of the Ph. There are some technical flaws, but they are not worth commenting on.

I have one standard recommendation for PhD students at the dissertation defense stage - to increase publications, including in journals with impact factor /impact rank. The topic is fertile, the PhD student has the experience, is clearly motivated, and has the potential for much more success.

## **8. Summary conclusion and statement**

The dissertation submitted for review is an actual and significant independent scientific research with theoretical generalizations and practical contributions. The author has planned and implemented a research methodology that is adequate to the problems described and the conclusions are correctly presented.

On this basis, I give a categorical positive evaluation to the dissertation and propose the scientific jury award Lyuba Martinova Miteva the degree of Doctor of Education and Science in the professional field 3.8. Economics, doctoral programme "Finance, Money Circulation, Credit and Insurance (Insurance and Social Security)" at the Academy of Economics "D. A. Tsenov" – Svishtov.

Svishtov, 11.07.2023

Author of the review: .....

(Prof. Margarita Bogdanova, PhD)

The signature was deleted on the basis  
of Article 4, Paragraph 1 of Regulation  
679/2016.