



Международно Висше Бизнес Училище
International Business School

REVIEW

BY PROF. TSVETELINA PETROVA-GOTOVA, PhD

Professional field 7.4. Public health, scientific specialty "Social medicine and organization of healthcare and pharmacy".

Department of Health Economics, Faculty of Public Health „Prof. Tzekomir Vodenitcharov, MD, PhD, Dsc“, Medical University of Sofia

Concerning: Presented dissertation for the acquisition of educational and scientific degree "Doctor" in field of higher education 3. „Social, economic and legal sciences“, professional field 3.8. „Economics“, scientific specialty (doctoral program) „Economics and Management (Industry)“

Grounds for presenting the review: member of the Scientific Jury, according to Order №23/01.02.2023 of the Rector of International Business School

Author of the dissertation: Andrian Georgiev Georgiev

Dissertation topic: Development of a management strategy model for increasing the knowledge and skills of the population of Bulgaria for providing first aid

I. Reference of the candidate

Andrian Georgiev Georgiev holds a Bachelor's degree in Informatics from the University of National and World Economy in Sofia and a Master's degree in Digital Marketing from the International Business School in Botevgrad. Since January 2021, he's been a doctoral candidate in an independent form of study at the International Business School, according to Order No. 2/06.01.2021 of the IBS' Rector.

Doctoral candidate Georgiev began his professional career in 2010 as a Manager of the Key Clients from Southeast Asia Department at Bright Marketing Research Ltd, and is currently the company's Business Development Vice President. Since 2014, he has also worked as a First Aid Instructor at Responsa Prevent and at FirstAidbg.com's First Aid School.

The PhD candidate demonstrates excellent communication and management skills.

The biographical data provided to the doctoral student follow his desire to develop and acquire new knowledge, skills and competencies.

II. General characteristics of the dissertation work

The topic of the dissertation is significant, relating current problems, as it concerns the protection of public health and that is well justified by the doctoral student.

The **relevance** of the topic is based on the fact, that the negative consequences of untimely, inadequate and delayed first aid (FA) have an extremely unfavorable impact both on the health and quality of life of the victims, as well as on the financial aspects of our health system for the subsequent treatment of the consequences. People's health status affects their degree of participation in social and working life and their productivity in the workplace. In this way, healthcare directly supports economic growth and is critical to poverty reduction while simultaneously contributing to sustainable economic and social development. It is well known that absences from work due to temporary and permanent incapacity generate not only direct medical costs, but also social costs for insurance institutions and employers.

The dissertation submitted for review by Andrian Georgiev Georgiev contains 173 pages, of which 17 pages are appendices. It is structured in an introduction, three chapters, a conclusion, 3 appendices, 38 tables, and 37 figures.

The doctoral candidate analyzes and systematizes a significant volume of literary sources that reflect his broad knowledge in the researched field. The bibliography shows that the dissertation is based on the use of 108 information sources, of which 41 are in Cyrillic, and 67 are in Latin. The literary sources are used correctly in the process of research of the issues, object of the dissertation research. An own critical interpretation of the theses presented in them was made. The rules for scientific ethics are observed.

The writing style is concise and understandable. The scientific language and the terminology correspond to the specifics of the researched problem. The wide range of methods used to collect and process the material complement each other, which allows the information obtained to be evaluated from different perspectives.

The obligatory elements for dissertation research - subject and object of the research, main scientific thesis, research goal and tasks are clearly and specifically stated.

The **object** of the dissertation empirical research is the availability of knowledge and attitudes in the Bulgarian society for the provision of FA. The **subject** of the study is the possibilities of forming knowledge and skills for performing FA among the Bulgarian society, and more specifically - the teachers from junior high school and high school courses of study and their distribution among students. The main **objective** of the dissertation is formulated clearly and precisely - the study of the knowledge and skills of the population to perform FA, by creating and approbating a conceptual model for their improvement. 3 research **tasks** are formulated, directing the author's attention to: situational analysis of the Bulgarian legislation in the field of performing FA and comparative benchmarking analysis of good practices from leading European countries; conducting an empirical study on the preparation and readiness of the population of Bulgaria to provide FA in the event of an accident or acute illness and development and approbation of a strategy model for increasing knowledge and skills for performing FA on the example of the specific target group.

I believe that the **thesis and working hypotheses** are defended in the dissertation research. A targeted independent study was made and guidelines were given to increase economic efficiency in various areas, to reduce health care costs, as well as to improve the quality of life of the population.

The research carried out is thorough and the essence of the researched issues is covered. The results are presented clearly, logically and comprehensibly.

III. Assessment of the achieved scientific and scientifically-applied results

In the dissertation submitted for review, the requirements to the scientifically applied researches are observed, as a result of which concrete results have been achieved. In general, the dissertation is characterized by precision, logical sequence, immersion of the research and desire to consider the problems in a complex, in their interrelation and dependence.

In the **introduction** of the dissertation is given a clear and precise statement of the initial positions of the author, from which he was guided in organizing and conducting the research work. It thoroughly and argumentatively reveals the relevance of the topic of the dissertation. The individual elements of the introduction are well presented.

In the **first chapter** of the dissertation, an analysis and assessment of the legislative and regulatory framework in Bulgaria, concerning the knowledge and skills of the population of Bulgaria to perform FA, is made. The terminological features are clarified and the main concepts are defined. The doctoral student notes, that the lack of clear scope, boundaries, recommendations and models for the development of FA in the Bulgarian legislation directly affects not only public health, and the quality of life, but also has a serious economic impact. Among the key issues, the complexity and inefficiency of the allocation of financial resources in the health sector, and in particular, those for emergency care, which do not benefit society, stand out.

The economic aspects and financing of emergency aid in Bulgaria are analyzed in detail, and a general overview of costs and the organization of the health system is made. As a result of the analyzed data, A. Georgiev comes to the conclusion, that the high health costs and the lack of financial protection of the lowest income households, represent a risk of impoverishment or deepening poverty of the above households.

At the end of this chapter, the doctoral candidate pays special attention to a comparative benchmarking analysis of good practices from leading European countries. As a result of the studies of good practices in providing FA in three of the most economically developed countries in Europe, a clear framework for specific questions that should be included in the questionnaire for conducting a study in Bulgaria is outlined. The doctoral student summarizes, that the use and adaptation of the good practices from the mentioned European countries is a strong tool for increasing the knowledge and skills of the society in Bulgaria to perform FA.

In the second chapter, a self-assessment of the population on the preparation and motivation for providing first aid was made using a semi-structured online questionnaire. The results of the study indicate that the main concern of people to provide first aid is the fear of harming the victim, due to lack of up-to-date knowledge

and availability of FA refresher courses. On this basis, the doctoral candidate outlines the weak points in the preparation for the performance of FA in Bulgaria.

Different managerial decision-making models are considered, the time frame is presented with the stages of developing the dissertation, according to the Gantt Chart model. For the purposes of the dissertation, the SMART goal setting approach is used as the most appropriate for defining goals as specific, measurable, acceptable and realistic.

Chapter two continues with an examination of the methodological tools for conducting the empirical research. The object and the subject of the research, which focuses on the attitude and preparation of the population for providing FA, are formulated. A. Georgiev pays special attention to the readiness and continuity of the population for the placement and use of an Automatic external defibrillator (AED) in public places.

Due to the lack of up-to-date data on the population's preparation for first aid in 2019, the doctoral candidate initiated an author's study called "The Society and First Aid".

In order to understand how the public's willingness to accept the idea of public AEDs has changed over the past two and a half years, the author conducted another similar survey in 2022, comparing the data obtained with the previous period. In this way, according to A. Georgiev, the organizations that are engaged in training the population in the field of FA will receive an adequate and realistic assessment of the situation in order to target their efforts in terms of periodicity, specificity, technique or specific method of training.

The method of empirical research chosen by the doctoral candidate (online questionnaire) aims to reach the maximum number of people in a short time, to have minimal costs and to have the possibility of rapid processing of partial data through the available software solutions that modern platforms for working with surveys offer. Its positive sides are also highlighted. Three types of indicators/questions – quantitative, qualitative and informative – have been selected for the construction and type of empirical research.

Chapter three is devoted to the results of the experimental study defining the model for increasing the FA knowledge and skills of the community.

With the help of the summarized and analyzed results of the author's national online survey conducted in 2019, the doctoral candidate makes a situational analysis and a snapshot of the public's attitudes towards the subject of performing FA. The lack of systematic efforts and concrete measures for overcoming the identified problems from the first study, the author re-surveys to ascertain the existence of the critical areas for intervention and the need to develop a strategy model. In order to ascertain, analyze and report the change in the behavior of the respondents, A. Georgiev used the same questionnaire in both waves of the survey.

A. Georgiev analyzes the results obtained based on a previous period (wave 1) by making comparison tables to see what is the rise or fall of the individual values in specific questions.

Based on the aggregated data from the two studies, the author proves his second working hypothesis of the thesis, namely that the low proportion of trained people in FA, as well as the absence of a system for monitoring and evaluation/self-assessment

of the level of knowledge and skills are the main factors responsible for the unsatisfactory self-assessment of the Bulgarian society for performing FA.

In the second part of chapter three, the dissertation examines the structure of a management strategy model - the CAF method (Common Assessment Framework), which, according to the Institute of Public Administration, is a quality management tool developed specifically for the public sector at the initiative of the European Public Administration Network. The proposed author's model tries to fill the established gap in legal and normative regulation, taking into account the real needs and wants of society. The main contribution of the model is the proposal to create an online tool for assessment and self-assessment of FA performance knowledge and skills. On the one hand, this will allow to organize an analysis and assessment of the level of knowledge, and on the other hand, it will serve as a basis for optimizing the quality of the training offered.

As a result of applying the management strategy model, we could note, this is an investment that justifies the costs of development on the one hand of the educational system in a way that is innovative, interactive and attractive and on the other hand - recognition of the performance of FA as an important part of the health system of Bulgaria.

The last part of chapter three, describes the testing and approval of the proposed method, which is carried out by means of a control sample. The aim of the doctoral student is to check to what extent people who are trained and go through the FA courses, perceive the topics studied. In this connection, A. Georgiev developed a special test, the purpose of which is to assess the theoretical preparation of the participants in the test phase, requiring the students to complete the test before and after the course.

The third chapter ends by clarifying the economic benefits, value and potential of FA training for reducing healthcare costs in the Bulgarian healthcare system. Determining the value of first aid training is the utility that an individual, health system or society can derive from acquiring first aid skills.

According to doctoral student FA training can be a very important element in the balanced equalization of costs of hospital treatment to pre-hospital care, which are currently in the ratio of 5:1 against an EU average of 1.5:1. I share the opinion of A. Georgiev regarding that, more in-depth analyzes of the cost-effectiveness of FA training and its targeting not only to the general population at random but also to specific groups that have a greater chance of being in a situation to exercise skills for FA are needed, performing FA in a specific condition.

In the **conclusion**, the doctoral candidate has made the necessary summaries and systematized the main conclusions and results of the complex research. In all parts of the dissertation research, the own presence and own handwriting of the doctoral candidate is clearly visible, which definitely shows qualities of constructiveness and logical consistency, ability to reveal, define and solve scientific and scientific-applied problems in the field of first aid and training of the population for adequate actions and performing cardiopulmonary resuscitation.

The methodological approaches, the contributing moments and the practical significance of the obtained results are presented.

IV. Assessment of the achieved scientific and scientifically-applied contributions

The four scientific and practical contributions of the doctoral candidate indicated in the reference are precisely defined and correspond to those shown in the dissertation. I take these points of contribution as a credit to the research and analytical capabilities demonstrated by the author.

The doctoral student has managed to achieve the set goals and objectives and to prove the research thesis.

The dissertation is an independent development with high scientific value and practical significance. The problem posed in it has the potential to develop both future research and practical application.

V. Assessment of the publications on the dissertation work

In connection with the topic of the dissertation, Andrian Georgiev has 4 publications, one of which is in an internationally referenced and indexed edition, and in the other 3 the doctoral candidate is an independent author. The publications are the personal work of the doctoral student and reflect different parts of the dissertation.

VI. Assessment of the author's summary

The abstract for the dissertation is presented in the required form and volume, correctly reflects the structure of the development and contains the most important results and conclusions of the study in a sufficient and synthesized form.

VII. Critical notes, recommendations and questions

The work presented to me is of high value and with many benefits for public health and the country's economy. The researched problem is poorly studied in Bulgaria and the studies carried out by the doctoral candidate are the first of their kind in terms of representativeness and national scope, and can serve as a basis for conducting policies in the field of health care and first aid.

I have no critical remarks and questions regarding the presentation of ideas and statements in the dissertation work. Based on the relevance of the topic and bearing in mind the need to popularize the research results, **I would recommend** Andrian Georgiev to continue publishing articles and reports on the researched topic.

I also take the liberty of suggesting that the dissertation work, after adequate structuring, be issued as a textbook or practical guide, which will be useful not only for teachers and advanced students, but also for students of public health and health management, and management of health care.

I expect that the management strategy model created by the doctoral candidate will arouse interest among experts both from the health care system and health management, as well as from the field of economics and management. Interested persons will be able to appreciate the usefulness of the developed model in the

complex approach for a more comprehensive improvement of the organization and management in the field of public health and health care in our country.

VIII. Summarized conclusion

The dissertation of Andrian Georgiev is a complete scientific work and is in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for competitions for the acquisition of scientific degrees and for holding academic positions at the International Business School.

The doctoral student demonstrates the ability to conduct independent research and has achieved theoretical and applied results, representing a contribution to science and practice. The proposed development is a serious research work, which deserves high appreciation. The dissertation written and the publications thereto enable the PhD student Andrian Georgiev to cover the minimum national requirements for acquisition of the education and scientific degree of "Doctor".

On the basis of the *indisputable scientific contributions and the essential scientifically applied significance* of the dissertation I express my **positive assessment** and propose to the respected members of the Scientific Jury to make a decision to **award** the "**Doctor**" educational and scientific degree to **Andrian Georgiev Georgiev** in the scientific specialty (doctoral program) "Economics and Management (Industry)" in professional field 3.8 "Economics".

Sofia
3.04.2023

Signature:

