

STATEMENT

**BY ASSOC. PROF. KRISTINA PETROVA ZAHARIEVA, PhD
"ANGEL KUNCHEV" UNIVERSITY OF RUSE**

**Faculty of "Public Health and Health Care,"
Department of "Medical and Clinical - Diagnostic Activities",**

**of Katya Genova Mollova's dissertation work
on topic**

**THE IMPACT OF INTERACTIVE TECHNOLOGIES ON THE FORMATION OF
PROFESSIONAL COMPETENCES IN STUDENTS OF THE REHABILITATION
THERAPIST SPECIALTY**

Research Supervisor:

Associate Professor Silvia Filkova, PhD

For the awarding of the educational and scientific degree "Doctor" in the field of higher education:
7. Health care and sports, professional direction, 7.4. Public health and scientific specialty: Health
care management.

Procedure

By order of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov", Varna No. P-109-293, dated 13/07/2022, Katya Genova Mollova is enrolled as a Doctoral student in an independent form of study in the Doctoral Program "Health Care Management" at the Department of "Health Care", Branch Sliven to Medical University, Varna for the attainment of an educational and scientific degree of "Doctor" in the field of higher education: 7. Health care and sports, professional direction, 7.4. Public Health, in Doctoral Program "Health Care Management".

I present this opinion in my capacity as a member of the Scientific Jury, selected and voted by the Academic Council of the Medical University, Varna (Protocol No. 79/12. 12. 2023) and appointed in accordance with the Order of the Rector of the Medical University of Varna, No. R-109- 557 of 14.12.2023 to facilitate a procedure for the defence of a dissertation work on the topic "The Impact of Interactive Technologies on the Formation of Professional Competences in Students of the Rehabilitation Therapist Specialty" developed by Katya Mollova, Doctoral student at the Department of Health Care, Sliven branch of Medical University, Varna. In accordance with Protocol No. 1/22.12.2023 of the first meeting of the Scientific Jury, I am appointed to present an opinion on the dissertation work.

The presented set of materials on paper and electronic media have been prepared in accordance with the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations on the Development of the Academic Staff of Medical University - Varna.

The dissertation work was discussed and proposed for the defence of the Departmental Council in the Department of "Health Care" at the Sliven Branch of the Medical University, Varna on 18.10.2023.

Education and training

After completing her initial medical education in the specialty "Rehabilitation Therapist" at the Semi-Higher Medical Institute in Plovdiv in 1995, Katya Mollova continued her professional development and training. In 1999, she obtained a Bachelor's degree in "Health Care" at the Faculty of Medicine, Higher Medical Institute, Plovdiv and a Master's degree in 2009 in "Health Care Management" at the Faculty of Public Health, Medical University, Sofia.

Professional development

From 1995 to 2010, she worked at the Medical College, Trakia University, Stara Zagora as a Lecturer; since 2010 she has been a Senior Lecturer at the Medical College, Trakia University and from 2017 to 2019 she was the Deputy Director of the Medical College, Trakia University, Stara Zagora.

Katya Mollova's *academic development* began in 1995 and continues to this day. From 13.07.2022, Katya Genova Mollova is enrolled as a Doctoral student in an independent form of study in the Doctoral program in "Health Care Management" at the "Health Care" Department, Sliven Branch of the Medical University "Prof. Dr. Paraskev Stoyanov", Varna. She conducts classes on the disciplines of Kinesiotherapy, Therapeutic Massage, Clinical Practice and Freely chosen discipline of Eastern massage techniques. The Doctoral student has 64 scientific publications, of which 3 are in connection with the dissertation work, she uses English and Russian.

She participated in the "Erasmus+" program at the Medical College Utena, University of Lithuania, 2016; Gotse Delchev University, Stip, R. Macedonia, 2017 and the Medical faculty, Kliment Ohridski University, Bitolya, R. Macedonia, 2018 and in 16 projects.

She is a member of the Bulgarian Association of Health Care Professionals and the Association of Physiotherapists in Bulgaria.

Characteristics of the dissertation work

The dissertation work developed by Katya Mollova is 144 pages long, including 26 tables, 28 figures and 5 appendices with the standard structure for the professional field: introduction, first chapter is Literature review; second chapter is Purpose, Tasks, Methodology and Organization of the study; third chapter is Results of own studies; fourth chapter is Interactive model, Methodology for conducting a didactic experiment; Conclusion, Outcomes, Recommendations, Contributions; Bibliography and Appendices. The content corresponds to the topic and reflects the results of the conducted research by the doctoral student. The bibliographic reference contains 175 titles, of which 111 in Cyrillic, 59 in Latin and 5 Internet addresses. The theoretical reasoning of the doctoral student is a consequence of the detailed research and analysis of the bibliographic sources.

Relevance of the topic

Katya Mollova's dissertation engages with the current, essential and significant problem related to revealing the significance of interactive technologies for the formation of professional skills and competencies of students of the rehabilitation therapist specialty during their studies at medical colleges and departments. The work examines the acquisition of professional competencies in order to master safe approaches and adequately adapt to the innovative technologies applied in the rehabilitation process. Effectively implemented rehabilitation techniques are of crucial importance for the rapid recovery, resocialization and improvement of the patients' quality of life. This makes the selected topic relevant, of interest and of dissertation-worthy standard.

The introduction presents the social, scientific and practical significance of the researched problem.

The **Literature review is presented in the first chapter** and structurally includes 7 parts dedicated to different aspects of the studied research problem.

The *first part* of the Literature review introduces the definition and characterization of the concept of competence. Based on the researched and analysed literary sources, the author thoroughly examines different approaches to their interpretation, the types of competences, the competence approach and the professional competences which tend to acquire more and more practical significance over time.

The *second part* analyses the general characteristics of the "Rehabilitation Therapist" specialty. Emphasis is placed on the essential skills for work in various sectors related to the provision of care and services in terms of prevention, prophylaxis and treatment of patients: multi-profile and specialised rehabilitation hospitals and clinics, rehabilitation centres, diagnostic-consultation centres, spas and health resorts, social homes for children and adults, hospices, gyms and beauty centres. The opportunities for realization, acquisition of additional qualifications and continuation of studies in higher educational degrees are presented.

In the *third part* of the Literature review, the peculiarities of the educational process in medical colleges like preparing modern health care professionals are described in depth. The didactic organization of the learning process - learning goals, content, technology and assessment – has been examined. Emphasis is placed on the goal of the educational process, i.e. to guarantee a high academic level and quality training, contributing to the professional development of future health professionals - rehabilitation therapists.

The *fourth part* of the Literature review analyses the organizational forms and methods of practical training in medical colleges. The organizational forms of training are presented and thoroughly analysed - forms of theoretical training (lectures, seminars), forms of practical training (training practical classes, training clinical practice, summer and pre-graduate internship) and training methods (verbal - narrative, talk, lecture) exposition, explanation, instruction; visual - illustrations, demonstrations; practical - exercise). The prevalent teaching methods are also examined - lectures, discussion, dialogue, review, debate, demonstration, independent work and the "work in small groups" method.

The Literature review in the *fifth part* presents the main characteristics of traditional and alternative education: in the traditional form, the student is largely dependent on the source of knowledge, and while the alternative form requires the active participation of the students in the learning process; the role of the lecturer in the formation of the professional competences of the students of the “Rehabilitation Therapist” specialty during the educational process has been analysed.

The *sixth part* of the Literature review analyses interactive training methods, modern needs and requirements for the professional training of rehabilitation therapists to practice the profession.

The *seventh part* is dedicated to an in-depth analysis of the control and assessment of the acquired knowledge, skills and competences in all forms of the educational process - to be objective, to provide appropriate feedback, to be subject to control and assessment and the lecturer’s involvement in the education of the students, clinical mentors.

The Literature review and the Bibliographic references testify to the high level of awareness of the doctoral student on the issues under consideration.

Methodology and organization of the study

In the second chapter, Katya Mollova presents the Purpose, Tasks, Working hypotheses and Methodology of the dissertation work. The main goal is precisely and clearly formulated: "To create a science-based model for conducting educational and practical classes in kinesiotherapy and therapeutic massage through interactive methods and means to optimize the training and form sustainable professional competences among students of the “Rehabilitation Therapist” specialty. The achievement of the goal is connected with the realization of eight (8) correctly formulated tasks, the implementation of which reflects the research work conducted by the doctoral student. There are 3 working hypotheses. The methodology is presented in detail. The survey includes 308 respondents, divided into three groups:

First group - 85 students from the “Rehabilitation Therapist” specialty, Medical college, Stara Zagora, 80 from the Medical college, Varna and 55 from the Medical college, Plovdiv;

Second group - 10 lecturers in the “Rehabilitation Therapist” specialty from Medical college, Stara Zagora, 10 from Medical college, Varna and 10 from Medical college, Plovdiv;

Third group – 58 mentors from clinical training bases from the city of Stara Zagora and the region and the city of Varna.

Documentary, sociological and statistical methods were used in the study. To achieve the research goals and solve the formulated tasks, four primary research type questionnaires are attached - a survey of the opinion of: students of the "Rehabilitation therapist" specialty regarding the application of interactive technologies (questionnaire №1); the lecturers from the “Rehabilitation Therapist” specialty regarding the place of interactive methods in training (questionnaire №2); mentors from the clinical bases, regarding the application of interactive technologies in the process of forming professional competencies of the future rehabilitation therapists (questionnaire №3) and of the students of the “Rehabilitation Therapist” specialty after the didactic experiment (questionnaire №4).

The surveys were conducted in the period January - June 2023, after approval by the Committee on Ethics of Scientific Research at the Medical University, Varna under Decision No. 123/15.12.2022. The research was carried out after receiving a Declaration for consent from the directors of Medical college, Stara Zagora, Medical college, Varna and Medical college, Plovdiv and the managers of the medical institutions where the survey was conducted; an informed consent was drawn up for the study participants, containing detailed data on the essence of the study with guaranteed anonymity. The study was conducted in three stages (Preparatory stage - organization of the study; Application of the didactic experiment - actual study; Analysis and discussion of the results).

In the *third chapter*, the Doctoral student presents the results of her own research and their discussion. The main characteristics of the respondents (number, age, gender) as well as the research model are examined, the particular extent of the problem in practice is revealed, and the results obtained through the primary research are provided. A thorough analysis of the results follows. Theoretical, mathematical and statistical processing of empirical data and the interpretation is presented.

The essence and structure of the "Practical Training Interactive Model" are presented in the *fourth chapter* of the dissertation. The organization and planning of the practical training classes, the interactive teaching methods included in the interactive model, the positive aspects of the application of the model when conducting the practical training classes and the methodology for conducting a didactic experiment during the practical training classes have been thoroughly analysed.

The contributions of the dissertation can be formulated as:

Contributions of a theoretical-cognitive nature

An in-depth study of normative documents, Bulgarian and foreign literary sources has been conducted, an in-depth analysis has been achieved revealing the influence of interactive technologies on the formation of the professional competences of the students of the "Rehabilitation Therapist" specialty.

The importance of interactive technologies in the conditions of practical training for the formation of professional competences among the students of the "Rehabilitation Therapist" specialty is emphasized.

The opinions of students, teachers and practicing rehabilitators have been analysed with regards to the prerequisites and conditions under which interactive learning contributes to the formation of professional competencies in future rehabilitators and to increasing their academic motivation.

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Recommendation to Katya Mollova: to continue working on the selected topic by preparing informational materials presented in an appropriate form (informational brochures, posters, seminars), intended both for students, lecturers and medical specialists from the clinical bases, who will contribute both to the formation and improvement of their professional competences.

In connection with the dissertation work, the doctoral student presented three publications, one of which she co-authored.

The abstract meets the generally accepted requirements in terms of structure. The content of the dissertation is reflected fully and accurately. The most significant results and established dependencies, conclusions, contributions, and recommendations of the study are presented.

Conclusion

The presented dissertation work "The Impact of Interactive Technologies on the Formation of Professional Competences in Students of the Rehabilitation Therapist Specialty" demonstrates a thorough scientific expertise of the researched topic by the doctoral student. I appreciate the relevance of the topic of the dissertation work. The choice of the topic of the dissertation work is not accidental, but it is the result of the long-term professional experience and purposeful work of the doctoral student Katya Mollova.

When developing the dissertation work, the doctoral student demonstrates the ability to apply research methodologies at scientific level, which is one of the goals of the doctoral education. The conducted research corresponds to the set academic tasks.

The thesis proposed for defence titled "The Impact of Interactive Technologies on the Formation of Professional Competences in Students of Rehabilitation Therapist Specialty" is the result of the long-term purposeful work of *Katya Mollova* as lecturer and researcher.

In consideration of the aforementioned, I cast my positive vote and advocate to the esteemed members of the Scientific Jury to vote positively for awarding the educational and scientific degree of "Doctor" in the scientific specialty "Health Care Management" to *Katya Genova Mollova*.

01.02.2024
Ruse, Bulgaria

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2016/679

Assoc. Prof. Kristina Zaharieva, PhD