STATEMENT

By Assoc. Prof. Anna Petrova Georgieva, Doctor of Public Health Department of Health Care, Faculty of Public Health, Medical University Varna Internal member of a scientific jury

on the dissertation of Donka Panayotova Nikolova

on REHABILITATION CARE FOR OVERCOMING LONELINESS IN ADULTS AND THE ELDERLY

for awarding the educational and scientific degree Doctor in the field of higher education 7. Healthcare and Sports, Professional field 7.4. Public Health, Scientific speciality: Health Care Management

Data on the Procedure

I present this statement in my capacity as a member of the Scientific Jury, determined by Order № P-109-482 of 18 November 2021 of the Rector of Medical University - Varna, allowing a procedure for defence of a dissertation on Rehabilitation Care for overcoming Loneliness in Adults and the Elderly prepared by Donka Panayotova Nikolova, postgraduate student at Department of Health Care. According to Minutes No 1 / 29.11.2021 of the first meeting of the Scientific Jury I have been appointed to present a statement on the dissertation.

By order of the Rector of Medical University - Varna No P-100-35 of 28 January 2019 Donka Panayotova Nikolova is enrolled as a postgraduate student in an independent form of study at Department of Health Care for obtaining educational and scientific degree Doctor in the field of higher education 7. Healthcare and Sports, Professional field 7.4. Public Health, scientific speciality Health Care Management. A record proving successfully passed examination for covering the doctoral minimum in the speciality Health Care Management based on Order No P-109-110 of 20 February 2020 and a record proving successfully passed examination for covering the doctoral minimum in a foreign language, according to Order No P-109-286 of 26 June 2020, were presented, Based on a decision of the department council of Department of Health Care on the readiness for public defence and proposal for a Scientific Jury, by Record No 238 of 8 November 2021, Donka Panayotova Nikolova was given the right to defence, according to Order of the Rector of MU-Varna No P-109-482 of 18 November 2021.

The presented administrative documents and materials have been prepared and presented in strict compliance with the Development of Academic Staff in the Republic of Bulgaria Act and its Rules of Procedure, and with the Regulations for Development of Academic Staff of Medical University - Varna.

Biographical Data and Career Development of the Postgraduate Student

In 1989, Donka Panayotova graduated the Institute of Health Staff Training Dr. P. Beshev - town of Pleven, speciality Rehabilitation Therapist. In 2006, she was awarded educational and qualification degree Bachelor in Psychology, and in 2007 - educational and qualification degree Master in Applied Psychology at Varna Free University Chernorizets Hrabar - city of Varna. In 2017, Donka Panayotova was awarded educational and qualification degree Bachelor at Prof. Dr. Paraskev Stoyanov Medical University and in 2018 - educational and qualification degree Master in Health Care Management again at Medical University Prof. Dr. Paraskev Stoyanov. By Order No P-106-86 of 24 February 2021, she started training in the speciality Public Health at Medical University - Varna.

Donka Nikolova began her professional career in 1989 as a Rehabilitation Therapist in a therapeutic gymnastics hall at Physiotherapy Department of 5th polyclinic in the city of Varna. When performing its activities, Donka Nikolova implements rehabilitation treatment and prevention programmes for patients with various pathologies and level of disability. On 20 July 1990, she began to work at Sana sanatorium of Construction Troops General Directorate in Druzhba resort - city of Varna, as a rehabilitation therapist, and in 2001 - in Medical and Psychological Centre of Varna Free University Chernorizets Hrabar. On 1 July 2011, the postgraduate student began to work as a psychologist in Radost Centre for Social Rehabilitation and Integration of Children with Special Educational Needs at Joy for our Children Foundation - city of Varna. Since 2013, Donka Nikolova has held the position of Director of the above centre.

Donka Nikolova started her academic career in 2015 as an assistant in Rehabilitation Therapist Training Sector of Medical College at Prof. Dr. Paraskev Stoyanov Medical University - Varna. She teaches Kinesitherapy in Internal Diseases, Kinesitherapy in Surgery, Kinesitherapy in Geriatrics, Kinesitherapy in Rheumatology, Therapeutic Massage, Zonetherapy and Remedial Gymnastics.

The numerous publications of Donka Nikolova and her participations in scientific forums and in various forms of continuing education prove her continued pursuit of professional and scientific development and improvement. The postgraduate student is interested in the problems of elderly, their physical and psychological health in the aging process, in the possibilities for comprehensive rehabilitation in terms of healthy longevity, and in overcoming chronic conditions and psychological and emotional problems through old age. She is a member of Bulgarian Association of Physiotherapists.

Relevance of the topic

The relevance of the presented dissertation is determined by the challenges that need to be addressed as regards the growing share of aging population in our country. One of these problems is loneliness, which is becoming a sustainable characteristic of the elderly, being a social group. This, in turn, highlights the need for finding working mechanisms to overcome loneliness in old age.

This comprehensive rehabilitation at this age, focused on the biological, mental and social aspect of the problem, provides real opportunities to improve life satisfaction. Ergotherapy and art therapy have the potential to take a leading role in improving and overcoming emotional and functional problems that affect the quality of life of the elderly.

All of the foregoing defines the topic of rehabilitation care for overcoming loneliness in the elderly and adults, discussed in the dissertation, as particularly relevant and significant.

Understanding of the Problem

Donka Panayotova Nikolova's theoretical reasoning stems from a detailed analysis of 168 bibliographic sources, with 53 of them being in Cyrillic and 115 in Latin. The studied literary material is evaluated critically and creatively, as a result of which an in-depth analysis of the theoretical considerations is made. All this leads to the conclusion that the postgraduate student has wide scientific awareness, competence and in-depth scientific knowledge of the problem in which she has research interest.

Characteristics and Evaluation of the Dissertation and Contributions

The dissertation consists of a total of 158 pages.

The content of the dissertation includes: introduction, three chapters, references and 7 appendixes. The text is illustrated with 94 figures and 8 tables. The individual chapters of the study are chronologically related and meet the structural and content requirements for such a scientific work. The content of the work presents the author as a scientist who can carry out research activities, draw conclusions and make reasoned proposals with scientific and applied value.

The introduction justifies and supports by evidence the selected topic's relevance.

The first chapter of the dissertation has a conceptual and theoretical nature and is an extensive review of the researched issues, presented on 40 pages. It is logically structured and systematised and demonstrates in-depth theoretical knowledge of the developed topic and skills for independent research of the postgraduate student. The presentation is made in an accessible and concise manner, using high scientific language.

The socio-demographic and health profile of the elderly is presented. The different types of social services provided to the elderly and their regulations are considered and defined. Loneliness, social isolation and social communication are analysed and outlined as a significant issue of current concern for the elderly and adults. Practical approaches to overcoming loneliness and the provision of rehabilitation care to users of the social service "nursing-care facility" have been studied.

The conclusions on the extensive review justify the objectives and tasks of the dissertation.

The second chapter of the dissertation presents the objective, tasks, materials and methodology of the study.

The research aims to study and establish the impact of specific rehabilitation care to overcome / reduce the feeling of loneliness in the elderly and adults by conducting an experiment.

The objective and tasks are precisely and clearly defined, and are aimed at solving the main research problem. The working hypotheses, subject, object, scope and organisation of the research are formulated. The experiment design and research tools are precisely detailed. The selected and applied methods of data collection, processing and statistical analysis are relevant to the set research objectives and prove the professionalism and scientific competence of the author.

The third chapter presents the results and analysis of the survey conducted among the elderly and adults on the main aspects of the research problem - their health and social status and social communication. The degree of loneliness of the respondents is evaluated, using the

most widely used scale (The University of California Los Angeles Loneliness Scale (UCLA Loneliness Scale, Version 3). The Satisfaction With Life Scale is used to measure satisfaction with life of the respondents (The Satisfaction With Life Scale, SWLS, Diener et al., 1985).

The research results outline the users of the social service "nursing-care facility" as a vulnerable group, which needs support and assistance in the daily life activities, due to it's low level of independence and insufficient financial security. More than half of the respondents experience medium feeling of loneliness, and every fourth respondent experience high feeling of loneliness

The comprehensive methodology From the Past to the Present developed by the postgraduate student to overcome / reduce the feeling of loneliness and to increase the level of life satisfaction in the elderly and adults is of particular value and of contributing nature. As a result of the experiment and after using this methodology, significant differences between the experimental group (EG) and control group (CG) are clearly observed in terms of the feeling of loneliness among users of the social service "nursing-care facility" - the participants in the experimental group experienced reduced feeling of loneliness. The level of satisfaction of all respondents of the EG increased significantly (almost twice) after the application of the comprehensive methodology. In contrast, the percentage of those who maintained their levels of satisfaction and are "slightly satisfied" before and after the survey prevailed among the respondents of the CG.

The results of the pilot study conducted in a retirement home prove that the methodology proposed by the postgraduate student to reduce the feeling of loneliness and to improve life satisfaction in the elderly and adults has the potential for wider application. It could be used by both users of social services in specialised institutions, and by the elderly from centres of social rehabilitation and integration, day care centres and retirement communities as a form of social integration of the "elderly".

The presented results and their discussion fully meet the tasks and hypothesis set by the postgraduate student's objective. The obtained data and its discussion are presented precisely, with rich graphic / tabular illustration and, where applicable, is statistically sound. All this proves the graduate student's ability to handle the data of the study, to reflect them correctly, to apply appropriate methods of analysis and to interpret thoroughly the results.

The conclusions are skilfully drawn and are directly related to the research objective, tasks and working hypotheses. They reflect correctly in a synthesised form the scientific research results.

The contributions of the dissertation are presented in seven points. Three of them are of theoretical significance and four of them have practical and applied nature.

I agree with the main contributions of theoretical, practical and applied nature indicated in the dissertation.

The recommendations made are valuable and properly directed - to higher medical schools, which provide training in the specialities Rehabilitation Therapist, Medical Rehabilitation and Ergotherapy, Ergotherapy, Psychology, and Social Activities and to the Municipality of Varna, Social Activities Directorate.

The references used in the dissertation include 168 literature sources, with 53 of them being in Cyrillic and 115 in Latin.

The seven **appendixes** include all tools used in the course of the study, and the comprehensive methodology From the Past to the Present developed by the postgraduate student, with the exercises included therein.

The presented author's summary meets the regulatory requirements. It accurately and clearly outlines the content of the dissertation.

In connection with the dissertation topic 5 scientific publications have been made. One of them is presented in the form of report at a Scientific Conference with international participation "Aging, Health and Geriatric Care", which was held in 2017 in the city of Stara Zagora.

I have no critical comments on the presented dissertation. It contains significant theoretical and practical contributions. The overall work of Donka Nikolova proves her ability to carry out independent scientific work.

Regarding the recommendation for application of the comprehensive methodology From the Past to the Present to reduce the feeling of loneliness in the elderly and adults and to encourage the formation of multidisciplinary teams to work with the elderly and adults, **I** hereby propose that the recommendations be addressed to both the Municipality of Varna and to the other municipalities in the Republic of Bulgaria and their Social Activities Directorates.

Given the growing relevance of the presented issues and the opportunity to further develop, expand and promote the research results, I recommend that Donka Nikolova's dissertation be publish as a monograph.

Personal Impressions

My personal impressions of Donka Nikolova were gained from my contacts with her in connection with her presentation as a postgraduate student at Department of Health Care. She has important personal qualities, such as responsibility, correctness, motivation and determination. In addition, the knowledge, skills and high professionalism of Donka Nikolova make her well-established specialist and educated researcher with significant theoretical knowledge in the relevant field, who successfully applies the research methods when conducting research.

Conclusion

Donka Nikolova's dissertation is relevant and innovative. It is characterised as a comprehensive, in-depth academic study of an established problem, which meets the requirements for an independent scientific work, according to the provisions of Development of Academic Staff in the Republic of Bulgaria Act and its Rules of Procedure, and the Regulations for Development of Academic Staff of Medical University - Varna.

In conclusion, bearing in mind the merits of the presented dissertation and taking into account the undisputed authorship and the proposed contributions, I give my positive vote and invite the honourable members of the Scientific Jury to vote positively for awarding Donka Panayotova Nikolova with the educational and scientific degree Doctor in the scientific speciality Health Care Management, field of higher education 7. Health and Sports, professional field 7.4. Public Health.

25 January 2021 City of Varna The statement is prepared by: Assoc. Prof. Anna Georgieva, Doctor of Public Health

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