REVIEW

By Prof. Ivanka Kostova Stambolova, PhD

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Department of "Health Care"

Appointed to participate in a scientific jury by Order No. R - 109-118/15.02.2023

As an external member

on a dissertation for the award of an educational and scientific degree "Doctor"

Under the doctoral program "Health Care Management"
in the field of higher education 7. Healthcare and sport
professional field 7.4 Public Health

Author: Kalina Stoyanova Katrandzhieva
Form of doctoral studies: regular form
Department: "Nursing care" at the Faculty of "Public Health", MU-Varna,
Topic: "Modern approaches in the care of patients with early reactions to radiotherapy"
Scientific supervisors: Assoc. Prof. Katia Genova, PhD, Prof. Dr. Elitsa Encheva-Mitsova, PhD

1. General presentation of the procedure and the doctoral student

The presented set of materials in paper format is in accordance with the Procedure for the acquisition of the PhD "Doctor" in MU-Varna and the Regulations of MU-Varna from 29.10.2018 and includes all the specified documents.

The doctoral student attached three publications on the topic. The documents are arranged according to the requirements, clearly and properly.

2. Brief biographical data of the doctoral student

Kalina Stoyanova Katrandzhieva was born in the city of Varna in 1968. She graduated from the "Nursing" specialty, secondary-special education at "Dr. N. Nikolaev" - Varna (1988), and later acquired a semi-higher education in the same specialty at Medical College – Varna (1995). Immediately after graduation, she started working as a nurse in the Cardiology Clinic at University Hospital „St. Marina" - Varna, later in the Nuclear Medicine Clinic, and since 2015. In the Radiotherapy Clinic, where she is a senior nurse until now. In the period 2000-2005 Kalina

Kantarjndzhieva studied at Varna Free University "Chernorizets Hrabar" and successfully graduated with a bachelor's degree in psychology, and in 2006 and as a master in the same specialty. In 2010, Kalina Stoyanova Katrandzhieva successfully graduated from the second master's degree "Healt Care Management" at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna. Since 2019, she has been a full-time doctoral student in the Department of Health Care at the Faculty of Public Health, Medical University -Varna.

There are publications and participation in scientific forums. She is a member of Bulgarian Association of Health Care Professionals. Fluent in Russian and English - level B2/B1.

3. Actuality of the topic and appropriateness of the set goals and tasks

The topic that Kalina Stoyanova Katrandzhieva has chosen is extremely important and relevant. It affects a significant problem of medical care and care for patients with oncological diseases, the number of which is constantly increasing on a global and national scale and is already a serious challenge to public health care in our country, related to the growing requirements and technological possibilities for treatment and care in these patients.

4. Knowing the problem

The serious interest and motivation of the author, as well as in-depth scientific training and many years of professional experience, allow her to carry out a useful study of the problem. The collected and analyzed information, through the study, allows adequate actions and care to be taken to increase the quality of life in patients with early reactions to radiation therapy.

5. Research methodology

A proprietary study was conducted with two components – theoretical and empirical research. The theoretical research includes a systematic and in-depth theoretical analysis of publications in the period 1986-2021 - 289 literary sources. The goal is clearly and precisely formulated. Seven goal-oriented tasks are identified that are specific and realistic. The sample covered ensures representativeness of the results, consistent with the objective. The methods are competently and thoroughly described. The diverse and complementary methods used (documentary, survey, observation, expert evaluation and appropriate statistical methods) enable a thorough analysis and interpretation of the results and ensure their significance and credibility.

The participation of the doctoral student in the conducted research is leading. The standards and criteria for scientificity and ethics are complied with and comply with the requirements of: The Declaration of Helsinki on ethics in science and Bulgarian laws and regulations.

The statistical approaches in determining the sample as well as the overall statistical analysis of the results are precise.

6. Characterization and evaluation of the dissertation work

The dissertation contains 158 pages, including 5 tables, 46 figures, and five appendices. 289 literary sources are cited, of which 27 are in Cyrillic and 262 are in Latin.

The paper is structured as follows: introduction, three chapters, conclusions, recommendations and contributions; bibliography, appendices.

The literature review is within 46 pages, laid out and structured very well. The literature review shows the doctoral student's excellent knowledge of the subject, systematicity and wide scope of the issues under consideration. The in-depth review of literature on the subject of leading authors and documents in our country and abroad reveals the essence and significance of the studied problem. Based on the epidemiology of cancer in Bulgaria and the professional competences for exercising the nursing profession in the field of radiation therapy, the important role of the nurse in improving the quality of life of oncological patients is outlined. The development of medical science and technology in training and practice places new demands on these professionals as part of the radiation therapy team.

Citations made are properly labeled and described. A wide range of literary sources from the Bulgarian and especially from the world medical scientific literature on the subject was used.

The research methodology is described in chapter two. An own study was conducted with a representative sample of 108 people, divided into three logical units - nurses working in radiation treatment structures in the city of Varna, Burgas and Ruse, patients with head and neck carcinomas and breast cancer in Radiation therapy clinic at University Hospital "St. Marina" - Varna, as well as doctors from these settlements. The study is representative of the settlements indicated in the study. The goal is clearly and precisely formulated. Seven goal-relevant tasks are specified that are specific and realistic. The methods used are detailed and comprehensively described. The research was conducted in the period 2019-2022.

In chapter three "Results and discussion" the results of the research are presented. They are structured in Analysis of results of conducted monitoring of patients undergoing radiation treatment; Analysis of quality of life outcomes of breast cancer and head and neck cancer patients undergoing radiation therapy; Analysis of the opinion of nurses regarding the attitudes and possibilities to monitor early radiation reactions in these patients, as well as Expert evaluation by oncologists, regarding the role and place of the nurse in the multidisciplinary team caring for patients with early radiation reactions. All these analyzes are arranged systematically and richly illustrated, which facilitates their perception and conclusions. The author makes a competent analysis of the obtained results and a comparative analysis with the results of similar studies abroad. The discussion follows the logic of the study and reasoned comments on the results.

The results are presented in well-designed tables and charts that contain the statistics necessary to quickly perceive significant differences. I highly appreciate the style and language used by the author. The obtained results and their discussion fully correspond to the formulated hypothesis, goal and tasks of the doctoral student, and the analysis of the presented results gives the opportunity to logically reach the conclusions.

Seven general conclusions are formulated, which follow correctly and logically from the analysis of the results. I believe it could be more, given the empirical material and data collected. The conclusions are specific, but at the same time comprehensive and reflect the most important conclusions obtained from the research.

7. Contributions and significance of the development for science and practice

The contributions defined by the doctoral student are significant and correspond directly to the conclusions drawn.

Contributions of theoretical importance

1. For the first time in Bulgaria, a study of early radiation reactions in patients with head and neck carcinoma and mammary gland carcinoma was conducted with the participation of nurses.
2. The role and contribution of nurses in the assessment and follow-up of early radiation responses in patients with head and neck carcinoma and breast carcinoma are detailed.
3. The need for additional qualification of nurses in connection with their active participation in the follow-up and evaluation of patients undergoing radiation treatment has been proven.
4. An algorithm and model of nursing care for the assessment and follow-up of early radiation reactions in patients undergoing radiation therapy are theoretically justified and proposed.

Practical-applied contributions

1. A sheet has been developed and proposed for the assessment and follow-up of early radiation reactions of the skin and mucous membrane by the nurse, in order to improve the effectiveness of the treatment process.
2. A model of nursing care for patients with early radiation reactions has been developed with precise and clear guidelines.
3. A questionnaire was introduced to assess the quality of life of patients undergoing radiation treatment by the nurse, based on which an individual approach to patient care is created.

Assessment of dissertation publications

The candidate Kalina Katrandzhieva presents the following publications related to the dissertation:

1. Katrandzhieva K. Early skin reactions during radiotherapy. Nursing care planning. Management and Education, 2021, Vol 17 (1), p 7
2. Katrandzhieva K., Eguruze K. Evaluation of socioeconomic factors of radiotherapy in patients with oncological diseases. Health care, 2022, no. 4, 16-21
3. Katrandzhieva K., Eguruze K. Pain management in patients undergoing radiation therapy. Varna Medical Forum, Item 11, 2022, Online First, Page 6

The presented publications include the results obtained from the conducted research and the data from them are competently analyzed and commented on.

8. Personal participation of the doctoral student

The participation of the doctoral student in the preparation and realization of the scientific research is leading and was realized thanks to her initiative, communication and responsibility towards the work. The conclusions and contributions of the dissertation formulated by Kalina Katrandzhieva are both her personal merit and the competent guidance of her scientific supervisors.

9. Abstract

The abstract in terms of volume (70 pages) and content fully meets the requirements for preparing this type of work. Its content and layout fully reflect the entire dissertation work. The abstract meets the requirements regulated in the Regulations for the Development of the Academic Staff of the MU - Varna.

10. Critical notes and recommendations

I have no critical remarks about Kalina Katrandzhieva's dissertation work. I believe that the conclusions of the study could be extended due to the sufficient results reached. I accept that the sample size is relatively small, due to the specificity and prevalence of the diseases that are included in the study. In this regard, it could be specified that the study is representative of the issue only for the mentioned settlements.

The professional and organizational qualities of doctoral student Kalina Katrandzhieva, manifested in connection with the research, could be used in institutional, national and international scientific projects with students, teachers and professionals.

11. Recommendations for future use of dissertation contributions and results

I recommend Kalina Katrandzhieva to prepare a monographic work on the topic, in which she will present the results of her research to a wider audience. I recommend that the developed model and algorithms be published in printed publications so that they can be informed and used by a wide range of nurses throughout the country.

In conclusion:

As a member of the scientific jury of Kalina Stoyanova Katrandzhieva, I give a POSITIVE ASSESSMENT of the dissertation work and fully support the acquisition of the educational and scientific degree "doctor" by the candidate. I believe that the presented dissertation thesis on the topic: "Modern approaches in the care of patients with early reactions to radiation therapy" in terms of significance, adequacy of the methodology, quality of the results obtained and of the scientific contributions meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Development of the Academic Composite Medical University - Varna.

The presented materials and dissertation results fully correspond to the specific requirements of the Medical University - Varna for the acquisition of the doctorate degree.

The dissertation shows that the doctoral student Kalina Katrandzhieva possesses serious scientific knowledge and professional skills in the specialty "Health Care Management" as she demonstrates qualities and skills for planning, organizing and carrying out independent scientific research.

Due to the above, I confidently give my positive assessment of the conducted research, presented in the above-reviewed dissertation work, abstract, achieved results and contributions, and allow myself to propose to the respected scientific jury to award the educational and scientific degree "doctor" to Kalina Stoyanova Katrandzhieva in doctoral program in Health Care Management.

04.04.2023   Prof. Ivanka Kostova Stambolova, PhD