

OPINION

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of a dissertation for awarding the educational and scientific degree 'doctor'
Professional field 7.4 "Public Health"
scientific specialty "Nursing Care Management"

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Form of doctoral studies: full-time doctoral studies

Department of Nursing Care, Faculty of Health Care, Medical University - Varna

Topic: MODERN APPROACHES IN THE CARE OF PATIENTS WITH EARLY
RADIATION REACTIONS

Scientific supervisor: Assoc. Prof. Katya Genova Eguruze, Ph.D.
Scientific consultant: Prof. Dr. Elitsa Encheva-Mitsova, Ph.D.

1. General presentation of the procedure and the PhD student

The submitted set of materials is in accordance with the Regulations for the Development of the Academic Staff of MU-Varna.

In 1988 Kalina Katrandzhieva graduated as a general nurse and started working as a general nurse at the University Hospital "St. Marina" Ltd in Varna in the Cardiology Department with ICD. From 2015 until now she has been working in the Radiotherapy Clinic of the same hospital. From 2008 until now she has been an assistant professor at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna, and since 2019 she has been a PhD student at the Department of Health Care. Since 2005 she has been a PhD holder of the Bachelor's degree in Psychology, and since 2006 - of the Master's degree in Applied Psychology from VFU "Chernorizets Hrabar". Since 2010 she has also obtained a Master's degree in Nursing Care Management from MU - Varna.

2. Topical relevance

The dissertation contains 158 pages and is illustrated with 46 figures, 5 tables and 5 annexes. The bibliographic list includes 289 references, of which 27 in Cyrillic, 262 in Latin.

The problem developed in the thesis is very topical, as the prevalence of cancer diseases among the population is increasing worldwide, and Bulgaria is no exception to this trend. Over thirty thousand new cases are diagnosed annually. Radiotherapy is the main method of treatment of oncological diseases, but despite the existing advantages of modern radiotherapeutic methods of skin sparing in 95% of patients a reaction occurs in varying degrees. The complexity of the treatment being delivered, new developments and advances in technology make the nurse's role in the process of caring for these patients crucial.

3. Knowledge of the problem

Kalina Katrandzhieva is familiar with the state of the problem in detail. The literature review is 39 pages long. In it, the doctoral student presents the essence and development of radiation therapy and its role in the treatment of mammary gland carcinoma and head and neck carcinoma. Special attention is paid to the instruments determining the quality of life of oncology patients. The impact of the diagnosis of "cancer" on all aspects of the patient's life - physical, mental, financial, social, etc. is considered. The role of the nurse in radiation treatment for oncological diseases is presented, emphasizing her main and constantly changing role. The doctoral student demonstrates an excellent knowledge of the modern concept of nursing development, which is aimed at building the habits and skills of the nurse to: conduct clinical supervision; analyzing the patient's condition and applying an individual approach in providing care. Contemporary approaches and multidisciplinary care for the treatment and follow-up of cancer patients are also examined, paying attention to the need for skills of health professionals, both direct and digital communication in all its variants.

Kalina Katrandzhieva emphasizes the role of the nurse as part of the multidisciplinary team, the need to comply with the rules of good health care practice and the application of an individual approach to the problems of patients undergoing radiotherapy.

4. Methodology of the study

The purpose of the study is clearly and precisely stated. To achieve it, a sufficient number of specific tasks are set, which are arranged in chronological order.

The study methodology includes:

Sociological methods:

- **Documental method** - the available national and international literature, documents and regulations concerning the problem of early radiation reactions in patients undergoing radiotherapy were studied.
- **Questionnaire method** – 1 questionnaire originally developed by the doctoral student, which reflects the main signs of observation for the respondents;
- **FACT-B (Functional Assessment of Cancer Therapy – Breast)** - to explore the views of breast cancer patients participating in the study;
- **FACT-H&N(Functional Assessment of Cancer Therapy-Head and Neck)** - to explore the views of head and neck cancer patients participating in the study
- **Semi-structured interview** – to survey the opinion of expert physicians working in specialized radiotherapy centers.
- **Observation** – conducted at the Radiotherapy Clinic of University Hospital "St. Marina" Ltd - Varna on the patients included in the study for the evaluation and follow-up of early radiation reactions, patients undergoing radiotherapy for a period of 6 months.

Statistical methods:

Data processing was performed using SPSS v. 20.0 for Windows, and the significance level of the results was taken as $p < 0.05$.

To analyze and interpret the data in order to reveal the observed phenomena and their interdependencies, the following were used: analysis of variance, comparative analyses and analysis of variance (ANOVA), risk assessment analysis, correlation analysis to assess the dependencies between the studied indicators.

The chosen research methodology allows to achieve the set goal and to obtain an adequate answer to the tasks solved in the dissertation.

5. Characteristics and evaluation of the thesis and contributions

The dissertation "Modern approaches in the care of patients with early reactions to radiotherapy" is structured according to the requirements for this type of scientific work.

In Chapter One, "Literature Review", the doctoral student examines the modern concepts of the role of the nurse as part of the multidisciplinary team in the implementation of radiotherapy. Emphasizes the need to create and follow individualized and evidence-based protocols, algorithms, and care models leading to improved quality of life for patients undergoing radiation therapy.

In the second chapter "Aim, tasks and methodology of the research" the methodology of the conducted research is developed in detail, including the goal, tasks, hypotheses, formulation and stages of the research.

In Chapter Three "Results and discussion" - in 6 subsections, the doctoral student presents the results of her studies. At the beginning, the doctoral student evaluates early radiation reactions in two directions: evaluation of symptoms and evaluation of skin and mucosal reactions. The initial evaluation is done before the start of radiotherapy and then once a week on 5 symptoms, which are objectively assessed by the nurse involved in the radiotherapy and by the patients and show their subjective response. This allows the comparative analysis to obtain objective results to support the management of nursing care and to actively involve patients in this process. The analysis of the results obtained from the comparative analysis of these symptoms in patients who also underwent chemotherapy is of interest. Kalina Katranjieva evaluates the quality of life of the respondents undergoing radiation therapy, which was carried out before and after the therapy and logically found that it negatively affected the quality of life of the patients participating in the study. The doctoral student also studies the opinion of the medical specialists involved in the radiation treatment. Most of the surveyed nurses expressed their willingness to participate in the follow-up of early radiation reactions and were aware of the need for additional qualification. The obtained results confirm the necessary multidisciplinary approach in the treatment and care of patients in the field of health care in our country. A significant proportion (70%) of health care professionals believe that if the nurse is involved in the follow-up of patients undergoing radiation treatment, this will help to personalize health care. Undoubtedly, this will lead to an increase in the quality of care provided and to satisfaction and a sense of reassurance in the patient and his relatives. The interviewed doctors are also of the opinion that the follow-up of early radiation reactions can be included in the duties of the nurse. The application of the developed and approved algorithm for the assessment of early radiation reactions in patients undergoing radiation therapy and the Model of nursing care in patients with early radiation

reactions are modern trends that would ensure patient-centered care and could prove to be an important condition for increasing the prestige of the profession of "Nurse".

Chapter Five "Conclusions, contributions and recommendations" - I agree with the 7 main conclusions drawn by the doctoral student at the end of the dissertation.

The recommendations made to the Medical Universities, Heads of Medical Institutions and Radiotherapy Structures and BAPHC are relevant and would improve the quality and efficiency of care for cancer patients.

I agree with the presented main contributions of the thesis of theoretical and practical-applied nature.

6. Assessment of publications and personal contribution of the PhD student

The PhD student has submitted 3 publications related to the dissertation. The overall work of Kalina Katrandjieva is a proof of her possibilities for independent scientific work. During the development of her dissertation, the doctoral candidate demonstrated consciousness, purposefulness and impartiality in conducting the research and observing the principles of scientific ethics.

After a thorough analysis of the dissertation under review, I have no critical comments to make about the doctoral student.

7. Abstract

The abstract is structured as required, contains 70 pages and reflects the main results achieved in the thesis.

CONCLUSIONS

The dissertation contains scientific, scientific and applied results that represent an original contribution to science and meet all the requirements of the Law for the Development of Academic Staff in the Republic of Bulgaria (LADAB), the Regulations for the Implementation of the LADAB and the Regulations of MU - Varna. The submitted materials and dissertation results fully comply with the specific requirements adopted in connection with the Regulations of MU - Varna for the application of the RAADB Act.

The dissertation shows that the PhD student Kalina Stoyanova Katrandzhieva possesses in-depth theoretical knowledge and professional skills in the scientific specialty "Nursing Care Management", demonstrating qualities and skills for independent scientific research.

Considering the above, I confidently give my positive evaluation for the conducted research, presented by the above reviewed dissertation, abstract, achieved results and contributions, and propose to the honorable scientific jury to award the educational and scientific degree "Doctor" to Kalina Stoyanova Katrandzhieva, PhD student in the doctoral program in "Nursing Care Management".

03.04.2023

Prepared the opinion:



(Assoc. Prof. Evgenia Kuncheva Dimitrova, Ph.D)