OPINION

from

Assoc. Prof. Mariana Nikolova Dimitrova, Ph.D

Associate Professor at the Department of Nursing care, Faculty of Public Health at

Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

of a dissertation

MODERN APPROACHES IN THE CARE OF PATIENTS WITH EARLY REACTIONS TO RADIOTHERAPY

of Kalina Stoyanova Katrandzhieva

for the award of the educational and scientific degree "Doctor"
Field of higher education: 7. Health and Sport
Professional field: 7.4. Public Health
Doctoral Programme in Nursing Care Management

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

By Order No. R-109-118 of 15.02.2023 of the Rector of Medical University "Prof. Dr. Paraskev Stoyanov" - Varna was appointed to be a member of the Scientific Jury, and on the basis of Protocol No. 1/28.02.2023 was appointed to submit an opinion on the procedure for the acquisition of the degree of Doctor of Education and Science with candidate Kalina Stoyanova Katrandzhieva - PhD student in full-time form of study in the doctoral program "Nursing Care Management", professional field: 7.4. Public Health, enrolled by order № R-109-69/01.02.2019 at the Medical University "Prof. Dr. Paraskev Stoyanov", Faculty of Public Health, Department of Health Care.

All the necessary documents stipulated in the Academic Staff Development Act in the Republic of Bulgaria, its Regulations and the Regulations for Academic Staff Development at Medical University - Varna have been submitted.

Biographical data and career development

Kalina Stoyanova Katrandzhieva was born in 1968. She completed her medical education at Institute for the training of health personnel with secondary special education "Dr. Nencho Nikolaev" in Varna, majoring in "Nursing - general profile" in 1988. Later she obtained a semi-higher education at Medical College-Varna, in same specialty (1995). Pursuing the desire for development, he continued his education and in 2005 obtained a bachelor's degree in "Psychology" at VFU - Chernorizets Hrabar. A year later (2006), ECD "Master" in "Applied Psychology" at VFU - Chernorizets Hrabar, Varna. In the period: 2008 - 2010, he acquired a master's degree in "Nursing Care Management" at the Medical University of Varna.

The professional realization of Kalina Katranjieva began in 1988 in the Clinic of Cardiology with ICD of UMHAT "St. Marina" - Varna, as a nurse. After a competition held in

2015, until now, she holds the position of senior nurse in the Radiotherapy Clinic at the "St. Marina" UMHAT - Varna

Teaching courses: nursing care of patients with oncological diseases; palliative nursing care; educational (clinical) practice.

She has completed continuing professional education courses and participated in international and national conferences.

She is a member of the Bulgarian Association of Health Care Professionals. Fluent in English and Russian.

Descriptive characteristic of the thesis

In terms of its volume and structure, the presented development fully corresponds to the requirements for the formation of a dissertation for the acquisition of the educational and scientific degree "Doctor". The dissertation contains 158 pages and is illustrated with 48 figures, 5 tables and 5 annexes. The reference list includes 289 references, of which 27 in Cyrillic and 262 in Latin. The bibliography illustrates the author's wide knowledge and up-to-date awareness..

The dissertation is developed in theoretical and empirical plan. Structurally, the scientific work is presented in three chapters - literature review; methodology and organization of the study; results and discussion of questionnaire surveys among nurses working in radiotherapy facilities and patients regarding their quality of life, results of semi-structured interview conducted with expert physicians working in specialized radiotherapy centers, a Model of Nursing Care for Patients with Early Radiation Reactions; conclusions, recommendations and contributions are presented.

Assessment of the relevance of the topic

The topic of Kalina Katrandzhieva's dissertation "Contemporary approaches in the care of patients with early reactions to radiotherapy" is extremely relevant, useful and timely, given the rapid rate of spread of oncological diseases with a leading position among the causes of death worldwide. Oncology patients undergo a variety of treatments that require in-depth knowledge, ongoing education, and coordination of care between specialists. Radiotherapy for cancer is beneficial for the progression of the disease, but its side effects can negatively affect quality of life. The complexity of treatment, new developments and advances in technology require a change in the role of the nurse. Health professionals need to be aware of the common adverse effects of radiotherapy. The nurse, as part of the multidisciplinary team, works directly with the patient, which is an opportunity to detect early radiation reactions in patients undergoing radiotherapy. Timely follow-up of early radiation reactions will lead to prevention of possible complications and increase quality of life. Continuous upgrading of knowledge, practical experience and expansion of the nurse's functions is the key to achieving good results.

The conducted complex and in-depth scientific study outlines the main problems in patients undergoing radiotherapy and is the basis for the author to propose a Model of Nursing Care for patients with early radiation reactions.

Evaluation of the dissertation structure Literature review

The literature review begins with a descriptive presentation of radiotherapy as one of the main treatment modalities for patients with malignancies. Information on the incidence and dynamics of malignancies worldwide and in the country is presented. The main risk factors provoking the occurrence of skin reactions to radiotherapy are outlined. Side effects and incidence of early radiation reactions in patients undergoing radiotherapy are described in detail.

Special attention is paid to the quality of life in cancer patients undergoing radiotherapy and the preconditions for the occurrence of emotional distress. Best practices in health care and the nurse's place in the multidisciplinary team are explored. The key role of the nurse in providing multidisciplinary care for the treatment and follow-up of cancer patients is differentiated, with emphasis on their assessment and education, direct and supportive care, and their coordination and symptom management.

The thorough and in-depth theoretical study and analysis of current literature sources is a prerequisite for the PhD student to reach significant conclusions and generalizations for the empirical study. The logically structured literature review betrays the doctoral candidate's broad competences in the field of the problem under consideration.

Methodology of the study

Kalina Katrandzhieva has accurately formulated the aim of the study in detail: 'To study early radiation reactions in patients undergoing radiotherapy and to propose a model of health care that guarantees an increase in the quality of life of cancer patients'. In order to realize the stated goal, 7 specific tasks are identified as the basis for achieving the final objective. Three research hypotheses are formulated. The organization of the study is competently and correctly described and includes: subject, object, scope of the study, logical and technical units. The research design includes theoretical and empirical research. Inclusion and exclusion criteria for the study are defined. The stages of the research are presented in detail, reflecting specific activities, place of implementation, period of implementation. The toolkit has been developed professionally, reflecting international research experience and the views of the PhD student. A Semi-structured Interview Questionnaire and three versions of Questionnaires were developed for the needs of the quantitative research.

The applied research methods: documentary sociological, statistical are adequate to the set goal and objectives and allow establishing more complex dependencies.

The methodology fully meets the accepted scientific standards, inspires confidence in the reliability of the results obtained and is evidence of the preparation of the dissertation to carry out independent research work.

Results and discussion

The study included three groups of respondents: nurses working in radiotherapy facilities, patients undergoing radiotherapy and physicians working in radiotherapy facilities. A study was conducted to improve quality of life in patients undergoing radiotherapy by assessing and monitoring early radiation reactions. Assessment of early radiation reactions was performed in two ways: symptom assessment and assessment of skin and mucosal reactions.

The results of symptom assessment showed a strong correlation between pain type and carcinoma type.

The results of quality of life assessment in patients with head and neck cancer and breast cancer before and after therapy are presented. The FACT-H&N questionnaires used in patients with head and neck carcinoma and the FACT-B in patients with breast carcinoma from the FACIT organization support the thesis that radiotherapy negatively affects quality of life.

The main challenges and existing problems regarding the need to improve the professional competencies of nurses are outlined. The results of a survey of nurses, demonstrated knowledge of early and late reactions to radiotherapy, but recognised the need for periodic upgrading of professional competencies. The results indicate the willingness and motivation of nurses to upgrade their competencies to meet the ever-increasing demands of providing quality health care.

Results of a semi-structured interview conducted with expert physicians working in specialized radiotherapy centers are presented. Some of them (40%) were of the opinion that a comprehensive approach to care planning for patients undergoing radiotherapy is an important condition for improving their quality of life. The experts agreed that specialisation for the nurse in oncology and radiotherapy would have a positive impact on her professional competencies.

The precise statistical processing of the data and the analysis of the Bulgarian and international practice allows the PhD student to justify the need for the application of the Nursing Care Model in patients with early radiation reactions. The developed author's model of nursing care includes several main elements - patient, his family, nurse and all other members of the multidisciplinary team. Through it, the key role of the nurse as an important member of the radiotherapy team is emphasized. It reflects the author's concept of broadening the professional spectrum of activities to optimize individualized care.

The introduction of the tracking sheet and assessment of early radiation reactions in the radiotherapy clinic leads to an increase in the effectiveness of the treatment process, outlines the need for the active participation of the nurse in the development of an individual approach, in line with current global trends.

Of high scientific value are the authors' papers Practical advice for patients with skin and mucosal reactions; Practical advice for patients with lymphedema preventive approach and self-care; and Practical advice for patients with taste changes, nausea and vomiting. All aim to raise awareness and improve quality of life for patients with cancer of the pathology being followed.

The conclusions are clearly formulated, practically oriented, follow the set research objectives and logically follow from the obtained results.

I express my agreement with the doctoral student's self-assessment regarding the contributions of theoretical and practical-applied nature. Rational proposals have been made to responsible institutions.

The abstract has been prepared as required and reflects the most important points of the thesis. It is well presented with informative tables, figures and diagrams. Three scientific publications have been made in connection with the dissertation.

Personal experiences

I have known Kalina Katrandzhieva for approximately ten years, as a colleague and teacher. I highly appreciate her focus, responsibility, diligence and drive for improvement. Her

communication skills and high motivation for work are excellent traits that make her a good professional and researcher.

Conclusion

The dissertation presented by Kalina Katrandzhieva on the topic "Modern approaches in the care of patients with early reactions to radiation therapy" for the acquisition of the educational and scientific degree "Doctor" is a completed scientific project developed on a current topic, well structured and executed at a very good scientific level. The author's scientific achievements stand out for their originality and practical applicability.

The dissertation meets all the requirements of the Academic Staff Development Act in the Republic of Bulgaria (ASDA) and the Regulations for Academic Staff Development at MU - Varna.

The dissertation shows that Kalina Katrandjieva possesses theoretical training and professional skills, demonstrating qualities for independent scientific research.

The above mentioned merits and contributions of the dissertation work are the grounds to give a positive opinion and I confidently propose to the esteemed Scientific Jury to award the educational and scientific degree "Doctor" to Kalina Stoyanova Katrandzhieva in the specialty "Health Care Management" in the field of higher education 7. Health and Sport; professional field 7.4. Public Health

04.04.2023

Varna

Assoc. Prof. Mariana Nikolova Dimitrova, Ph.D..