

STATEMENT

From Assoc. Prof. Dr. Eleonora Georgieva Dimitrova-Gospodinova, Head of Department of Oncology, MU "Prof. Dr. Paraskev Stoyanov" - Varna.

In compliance with Order of the Rector of MU-Varna № P-109-422 / 22.10.2020 I was elected as a member of the Scientific Jury, and on the basis of Protocol № 1 / 30.10.2020 I have been appointed to prepare a statement on the procedure for acquiring the educational and scientific degree "Doctor" in the scientific specialty "Oncology" with code 03.01.46., in the field of higher education "Health and Sports", professional field 7.1. "Medicine"

Statement

about a dissertation thesis entitled

"The relationship between distress and time perception in cancer patients"

Author Dr. Dragomir Svetozarov Stoyanov

Scientific supervisor Assoc. Prof. Dr. Nikolay Vladimirov Conev

1. Significance of the problem, formulation of the aim and objectives

Oncology is one of the fastest growing areas of medical science in recent decades. Diagnostic methods are being improved, many new therapeutic agents are being developed and put into practice, new drug combinations are being studied, and various predictive biomarkers are being discovered. This leads to the possibility of applying a personalized approach in the treatment of patients with cancer and achieving better therapeutic results, assessed by indicators such as overall survival, progression-free survival, objective response rate and others. Despite these advances, some problems related to the mental health and social functioning of patients with cancer, leading to the development of distress, become significant. Distress is a condition defined by the NCCN as a "multifactorial unpleasant emotional experience of a psychological, social, and / or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment." Distress can lead to worse results of the treatment through various mechanisms, which is why early detection and assessment of severity and the need for therapeutic interventions are essential.

The perception of time is highly subjective and depends on the person's current emotional state.

The PhD student's efforts were focused on finding and establishing a link between the perception of time and the levels of distress in cancer patients before initiation of systemic antineoplastic treatment.

This has determined the formulation of the aim and the eight objectives of the research presented in the dissertation.

2. Structure of the dissertation thesis

The presented dissertation contains 135 standard pages, it is illustrated with 24 figures and 6 tables. At the beginning, contents and used abbreviations are presented, which facilitates easier reading. The next chapters are: Introduction - 2 pages, Literature review - 54 pages, Aim and objectives - 1 page, Hypotheses - 1 page, Materials and methods - 6 pages, Results, Discussion and Summary - 35 pages, Conclusions - 2 pages, Contributions of the dissertation - 2 pages, Scientific publications and participations related to the topic of the dissertation - 2 pages, Appendices - 2 pages, References - 26 pages.

The structure of the dissertation is well balanced, the proportions between the separate chapters are preserved, it meets the requirements of the Law for development of the scientific staff of the Republic of Bulgaria.

3. Literature review quality

The doctoral student presents an in-depth literary analysis of a large amount of scientific information. He presents data on the epidemiology and risk factors for distress, its impact on patients and their relatives, as well as on medical professionals and the health system. Various screening methods are described, as well as standards for distress management and therapeutic interventions. Attention is paid to the "burnout" syndrome, which is present in 45-80% of oncologists. The second part of the literature review is devoted to the perception of time, cognitive models, measures related to time. Various tests for determining the perception of time are presented.

The literature review shows that there is a lack of enough research on the relationship between the subjective perception of time and distress.

The reviewed literature includes 309 sources, of which 307 in Latin and 2 in Cyrillic. More than 40% from them are from the past 10 years.

4. Methods and design of the scientific research

A prospective non-interventional study was conducted among 262 patients, who meet the formulated inclusion criteria and do not meet any of the exclusion criteria. The research was conducted in the period August 2016 - December 2017. Patients are stratified by demographics, marital status, disease stage, social status, type of cancer, etc. Methods for assessment of level of distress and perception of time are described. Methods for statistical analysis are presented.

5. Correspondence between the aim, the results and the conclusions

There is a correspondence between the set aim, the formulated objectives and the obtained results, summarized in the discussion and the conclusions. The doctoral student presents the results of his own research, illustrated with tables and figures on 38 pages. The most important formulated correlations are: 1) the levels of distress in patients with lung cancer and breast cancer are significantly higher than those in patients with colorectal cancer and cancers with other localizations, 2) women have significantly higher levels of distress, 3) patients at a young age (<62 years) have higher levels of distress, 4) there is no correlation between the levels of distress and PS of patients, their marital status, ethnicity, religion and stage of the disease, 5) fast time estimation correlates with the level of distress, gender and marital status, 6) there is no difference in the perception of time depending on age, ethnicity, religion, tumor location, stage of the disease and PS, 7) patients with fast estimation of time have significantly higher levels of distress, 8) patients with high and low distress can be distinguished depending on the perception of time.

6. Analysis of the conclusions and contributions

A total of 12 conclusions have been formulated, which reflect the obtained results. They are accurate, clear and specific.

I accept the stated contributions. For the first time worldwide, a link between the level of distress in cancer patients and the perception of time is sought and proven. For the first time in the world literature, correlations are sought between demographic, clinico-pathological characteristics of cancer patients, their levels of distress and the subjective perception of time. For the first time in Bulgaria, a study is being conducted on the levels of distress among cancer patients, presenting predictive markers for high levels of distress. For the first time, the prospective estimation of a one-minute time interval as an ultra-short screening test for distress has been proposed.

The doctoral student presents four scientific publications related to the dissertation, of which he is a co-author and two participations in international forums.

The abstract contains 72 pages and it includes the main chapters of the dissertation.

7. Conclusions

The dissertation work of Dr. Dragomir Svetozarov Stoyanov is an in-depth and precisely conducted research. The topic is contemporary and suitable for research. The applied methods are adequate for achieving the set aim and objectives, the results are convincing, the conclusions are clearly formulated. The contributions are significant, with theoretical and practical value.

The dissertation on the topic "The relationship between distress and time perception in cancer patients" meets the requirements for obtaining an educational and scientific degree "Doctor", meets the requirements of the Law for development of the scientific staff of the Republic of Bulgaria and the Regulations for its implementation.

Based on the above, I give a positive assessment of the dissertation of Dr. Dragomir Stoyanov and propose to the members of the esteemed Scientific Jury to be award him the educational and scientific degree "Doctor".


Assoc. Prof. Eleonora Georgieva Dimitrova-Gospodinova, MD, PhD