

To the Chairman of the Scientific Jury,
determined by Order N P-109-321 / 29.07.2021

of the Director of the Educational Activity Directorate and Order No. P-100-431 /
12.07.2021 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov" Varna

STANDPOINT

by Prof. Dr. Zhasmina Mihaylova Milanova, MD
Head of the Clinic of Medical Oncology at
Department of Hematology, Oncology, Pathology and Radiobiology,
Military Medical Academy, Sofia

Subject: Dissertation on "Comparative analysis between levels of distress, anxiety, depression, feelings of anger and need for help in patients with solid tumors and upcoming chemotherapy" by full-time PhD student Dr. Asen Ivanov Yanchev, for awarding the educational and scientific degree "DOCTOR" in professional field 7.1. Medicine, from the field of higher education 7. Health and sports, according to the doctoral program "Oncology".

Supervisor:

Assoc. Prof. Dr. Eleonora Dimitrova - Gospodinova, MD

I. Administrative evaluation

Dr. Asen Ivanov Yanchev, a specialist in the Clinic of Medical Oncology at the University Hospital "St. Marina" Varna and an assistant at the Department of Oncology at the Medical University of Varna, is enrolled in full-time doctoral studies at the Department of Propaedeutics of Internal Medicine, Faculty of Medicine, MU, Varna on 16.07.2018 with the topic "Screening and assessment of certain psycho-emotional conditions in cancer

patients" for a period of three years with supervisors Ch. Assistant Professor Dr. Eleonora Georgieva Dimitrova-Gospodinova, MD and Assoc. Prof. Ivan Stoyanov Alexandrov, MD with Order № R-109-443 / 16.07.2018 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

At the proposal of the Head of the Department of Oncology with a report with incoming number 102-17-51 / 12.07.2021 with a decision of the Faculty Council of the Faculty of Medicine at MU Varna and order № P-109-321 / 29.07.2021 of the Director Educational Activity Directorate and Order № P100-401 / 12.07.2021 of the Rector of the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna, the full-time PhD student Dr. Asen Ivanov Yanchev was expelled with the right to defense. A scientific jury consisting of five habilitated persons was selected and a date was set for an open meeting for the defense of the dissertation - October 6, 2021.

II Brief biographical data

Dr. Asen Ivanov Yanchev graduated as a doctor in 1990 at the Medical University "Prof. Dr. Paraskev Stoyanov ", Varna. He has worked consecutively as a resident doctor at the Regional Hospital - Dobrich / 1990-1992 /, as an assistant and chief assistant at the "Department of Propaedeutics of Internal Medicine" at MU, Varna / 1992-2021 /, as a resident doctor at SBALOZ "M. Markov "- clinical oncology, assistant at the Department of Oncology at MU-Varna / from 2015 - until now /. From 16.07.2018 he is a full-time PhD student in the specialty "Oncology" in the department of the same name.

Dr. Yanchev is the author of 3 full-text publications in Bulgarian in connection with the dissertation, two of which were published in the Journal of the Bulgarian Oncological Society and one in the Oncology Studio. He is also the author of three scientific papers on the dissertation in English in abstract form, all of which have been published in the Journal of Clinical Oncology.

Dr. Yanchev is a member of the Bulgarian Medical Association, the Bulgarian Scientific Oncology Society, the European Society of Medical Oncology (ESMO) and the American Society of Clinical Oncology, Molecular and Translational Imaging (ASCO).

III. Evaluation of the dissertation

1. Relevance of the topic

The NCCN's National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology defines distress as a multifactorial, unpleasant experience of psychological, spiritual, and / or physical origin that may interfere with the ability to cope with the cancer, its symptoms and its treatment "(NCCN, 2019).

III. Оценка на дисертационния труд

1. Актуалност на темата

Препоръките на NCCN (The National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology) за справяне с дистреса, определят дистреса като "мултифакторно, неприятно преживяване с психологически, духовен и/или физически произход, което може да интерферира с възможността за справяне със злокачествената болест, нейните симптоми и нейното лечение" (NCCN, 2019). And while about 7% of the general population can experience distress at any time, in cancer patients the levels of distress vary from 25% to 60% during the disease (Zabora, BrintzenhofeSzoc, J Adv Pract Oncol 2019, Curbow, Hooker, & Piantadosi, 2001). It should be borne in mind that 58% of cancer patients associate distress with depression and 34% report anxiety as a cause of distress (Yabroff et al., 2016).

Screening for distress at the beginning of antitumor drug treatment is timely and necessary because it allows the identification of at-risk patients who may somatize anxiety. The fact is that 30% of the symptoms of nausea and vomiting during chemotherapy are due to somatized anxiety. In this sense, the study of Dr. Yanchev is extremely important and relevant.

On the other hand, although in our country medical oncology was recognized as a specialty in 2007, this specialty is not studied in medical universities. In Alma Mater-UMBAL Alexandrovska, for example, there are three exercises and three lectures on medical oncology in one week, together with nuclear medicine and radiation therapy.

This leads to insufficient knowledge of Bulgarian doctors in the specialty. On the other hand, there is no significant change in public attitudes towards cancer. Stigmatizing cancer patients continues to be a problem. In this sense, the study of the consequences of stigmatization in the society of cancer patients is timely and makes the topic of Dr. Yanchev relevant.

2. General characteristics of work

The dissertation is designed in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, namely - it is developed on 79 standard pages - of which: "Introduction" - 3 pages, "Literary Review" - 32 pages, "Purpose, tasks and stages of the study" - 2 pages, "Materials and methods" - 2 pages, "Results" - 25 pages, "Discussion" - 5 pages, "Contributions of scientific work" - 1 page, "References" - 4 pages.

The dissertation is illustrated with 20 tables and 19 figures. The bibliographic list contains 97 literary sources, of which 3 in Bulgarian and 94 foreign.

The scientific work of the PhD student Dr. Yanchev is properly structured as a sequence and volume of sections. The longer overview / 32 pages / and the shorter results section / 25 pages / make a negative impression.

It also makes a negative impression that in the five-page discussion, only two pages are devoted to discussing the results of the study.

The dissertation has a good visualization with appropriately selected graphic means - figures and tables.

The abstract contains 59 pages and fully corresponds to the text of the dissertation.

3. Purpose, tasks and methodology of the research

The aim of the dissertation is clearly formulated and feasible:

"To screen and identify distress and psychoemotional categories of depression, anxiety, anger and need for help and their correlation in cancer patients with upcoming chemotherapy for the first time, through the use of validated emotional thermometers"

The set 4 tasks are logically related to the goal and give grounds to assume that by mastering and applying the methodology of scientific research, they will be successfully solved. The design of the dissertation research correctly describes the inclusion and exclusion criteria, as well as the stages of the research.

The stages of requesting NCCN survey tools are not specified. These research methods are historical and documentary. Seven methods for statistical data processing are presented in detail.

4. Results

The results were obtained from the examination of 225 patients with proven oncological disease and referred for treatment to the CMO of UMHAT "St. Marina" Varna.

The study is non-interventional and scientific. The study covers the period 2016-2017 with follow-up to 2018.

The results obtained are original and are the result of the research work of the doctoral student.

The results are structured in six subsections as follows - the first five sections include analysis of the results of the measured categories of emotional thermometers such as- Analysis of the measured stress levels; Analysis of measured anxiety levels; Analysis of measured levels of depression; Analysis of measured levels of anger; Analysis of the measured levels of need for help. The sixth section is devoted to the analysis of correlations and internal consistency between the categories measured with emotional thermometers.

5. Evaluation of the dissertation and contributions

The doctoral student Dr. Asen Yanchev presented the conclusions and contributions in two sections, formulating 7 conclusions. More significant conclusions:

- 49.3% of patients have moderate and high levels of distress, which will potentially disrupt the treatment and worsen the prognosis of these patients
- Patients with metastatic and non-metastatic cancer have similar levels of distress.

- Factors associated with a higher risk for high levels of distress are the following: unmarried ($p = 0.02$); poor performance status ($p = 0.001$), lung cancer ($p = 0.001$), breast cancer ($p = 0.01$)

- Factors that are associated with a higher risk of high levels of anxiety are the following:
- divorced ($p = 0.041$); not good performance status ($p = 0.044$); lung cancer ($p = 0.009$); breast cancer ($p = 0.02$)

- Factors that are associated with a higher risk of high levels of depression are the following: - distance from a medical center ($p = 0.014$); poor performance status ($p = 0.005$); lung cancer ($p = 0.002$)

- Factors that are associated with a higher risk of high levels of anger are respectively: - not good performance status ($p = 0.003$); men ($p = 0.026$)

More significant contributions:

- For the first time in Bulgaria, a correlation analysis was conducted between the levels of distress and anxiety, depression, anger and the need for help in cancer patients before starting treatment.

- For the first time in Bulgaria, risk factors for high levels of anxiety, depression, anger and need for help have been identified.

- For the first time in Bulgaria, the reliability of emotional thermometers to characterize the mental status of patients before the start of their systemic treatment has been demonstrated.

IV. Scientific production

Dr. Yanchev is the author of 3 full text publications in Bulgarian in connection with the dissertation in refereed Bulgarian journals. He is also the author of three scientific papers in English in connection with the dissertation, all published in the Journal of Clinical Oncology.

V. Conclusion

The dissertation of Dr. Asen Yanchev is a significant study on "Comparative analysis between levels of distress, anxiety, depression, anger and need for help in patients with solid tumors and upcoming chemotherapy." The study design and scientific methods are well explained . Despite the well-known criticisms that I have on the work of Dr. Yanchev as a member of the Scientific Jury, I believe that the presented scientific work is relevant, and the results allow to make significant contributions to oncology science and clinical practice.

My assessment is based on the content of the dissertation, in which the doctoral student proves that he has mastered the methodology of scientific research and that he is able to apply it. Scientific work that focuses not only on the biological side of the malignant process, but also seeks associations between the prognosis of patients with solid malignancies and their psycho-emotional reactions and conditions, performed well, arouses respect and deserves admiration.

This gives me reason to convincingly suggest to the members of the scientific jury to vote positively for acquiring the scientific and educational degree "DOCTOR" in the scientific specialty "Oncology" of Dr. Asen Yanchev.

With respect:

/ <rof. Dr. Zhasmina Mikhaylova, MD /