

# **S T A T E M E N T**

**From - Prof. Tsana Boshnakova - Praznikova, MD, PhD, DSc**

**about the dissertation thesis of Dr. Dragomir Svetozarov Stoyanov,  
entitled "The relationship between distress and time perception in cancer  
patients"**

The dissertation of Dr. Dragomir Svetozarov Stoyanov is dedicated to an important problem in cancer patients - the care for the psychosocial consequences of cancer and the search for new methods for screening for distress.

Up to fifty-two percent of cancer patients suffer from clinically significant levels of distress. In recent decades, more and more attention has been paid to the holistic approach to the patient, which includes treatment not only of somatic illness, but also psychosocial support. There are data in the literature for better therapeutic outcomes with simultaneous treatment of distress. A key aspect in the management of distress in cancer patients is the correct and timely identification of affected patients. Given the difficulties in building a distress management system and the lack of efficient screening tools, Dr. Stoyanov's topic is relevant and has a contribution in the field of screening and subsequent treatment of distress in patients with malignant tumors.

The dissertation thesis is written on 135 pages and contains the following sections: introduction - 2 pages, literature review - 52 pages, aim and objectives - 1 page, hypotheses - 1 page, materials and methods - 6 pages, results - 24 pages, discussion - 11 pages, summary - 1 page, conclusions - 2 pages, contributions - 1 page, scientific publications and participations related to the dissertation - 2 pages, appendices - 2 pages. References include 309 authors and are presented on 25 pages. The dissertation thesis is well structured, the proportions of the separate sections are balanced and it meets the requirements of the Law for development of the scientific staff in the Republic of Bulgaria.

At the beginning of the dissertation, contents and used abbreviations are provided which facilitates the reading of the thesis.

The introduction is short and clear and contains the main aspects of the individual chapters of the dissertation. The literature review thoroughly analyzes worldwide data about the current definition of the term distress in cancer patients, epidemiology, risk factors, impact, algorithms for screening, diagnosis and treatment of distress. Particular attention is paid to current problems related to the management of distress - the lack of reliable screening methods for detection of all potentially affected patients. The necessary qualities of the ideal screening method are described. The review provides an in-depth study of the available literature about time perception and the cognitive models that explain this phenomenon. At the end of the chapter, a critical synthesis of the acquired information is made by searching for a potential connection between distress and the perception of time, which makes a transition towards the essence of the present dissertation.

The aim is precisely formulated and corresponds to the topic of the dissertation. The set objectives are 8 and are in accordance with the aim of the thesis.

The materials and methods are correctly and precisely selected to fulfill the set aim and objectives. Descriptive statistics, nonparametric analysis ( $\chi^2$ , Mann-Whitney U test, Kruskal-Wallis H test, etc.), correlation analysis, ROC analysis and regression analysis were used for statistical analysis of the collected data.

In the chapter "Results" Dr. Stoyanov presents his own data from a study of 262 patients. The description of the results corresponds to the set tasks and is illustrated with rich graphic and tabular material.

The chapter "Discussion" shows the doctoral student's ability to analyze, synthesize and summarize his own results and draw logical conclusions. The data and analyzes show that the subjective perception of time is influenced by distress levels and that its evaluation can be used as a screening test for distress in cancer patients.

The conclusions are a total of 12 in number and reflect the obtained results. They are short and clear, with an ascertaining and analytical nature.


I accept the derived contributions, which are summarized in two directions: established for the first time worldwide and established for the first time in Bulgaria.

The dissertation summary consists of 72 pages and contains the main chapters of the dissertation thesis.

In connection with the dissertation, 4 publications and 2 participations in international forums with abstract presentation were made. After a reference it is established that the scientific activity of Dr. Stoyanov fully meets the criteria for defense of the educational and scientific degree "Doctor (PhD)" of the Medical University - Varna.

**The topic of the dissertation is original, the methods used are adequate to achieve the aim and objectives, the results are significant and well reflected in the conclusions, the contributions are significant and the dissertation should receive a positive assessment.**

**The dissertation of Dr. Dragomir Stoyanov meets the requirements of the Law for the development of the academic staff for obtaining the educational and scientific degree "Doctor" and I suggest to the Honored Scientific Jury to vote positively for his choice.**

Reviewer: .....  .....

/Prof. Tsana Petrova Boshnakova – Praznikova, MD, PhD, DSc/