

## SCIENTIFIC STATEMENT

from

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**About:** thesis for acquiring an educational and scientific degree “doctor” in the field of higher education 7. Healthcare and sport, by professional direction 7.1 Medicine and Doctoral Program PSYCHIATRY (scientific specialty 03.01.20 Psychiatry)

**Subject:** „*Specifics and dynamics of the pain symptoms and experiences in patients with depression*“

**Doctoral candidate:** dr. Tatyana Ivanova Telbizova, enrolled as a doctoral student B in independent form of education by order № P-109-159/16.04.2019 г. of the Rector of MU „Prof. dr. Paraskev Stoyanov“ – Varna

**Scientific supervisor:** Prof. Dr. Mariana Dimitrova Arnaoudova – Jekova, MD, PhD

**Scientific consultant:** Prof. Ivan Stoyanov Aleksandrov, PhD, DSc.

### **Relevance and significance of the topic:**

The subject of the dissertation encompasses two widespread and socially significant disease conditions, such as chronic pain and depression. They are both associated with a large range of somatic and neurological diseases and in this sense represent a significant interdisciplinary (and not a solely psychiatric or psychological) medical problem. The dissertation includes rheumatologic and neurological patients with chronic non-malignant pain of different origins, which were divided into two subgroups, depending on the presence or absence of a clinically established depressive episode (according to the criteria of ICD-10). The selected sample makes it possible to draw conclusions about the interactions between pain, anxiety and depression that are valid for the prevalent contingent of patients with such comorbidity. The topic is relevant because in real clinical practice the patients in question are diagnosed and treated by medical professionals without special psychiatric or psychological education, who could easily miss or underestimate both the psychiatric pathology and the serious psychological problems that accompany the underlying disease and therefore ignore the possibilities of a timely and adequate medical and psychological therapy. The thesis conceptualizes and constructs a model that combines qualitative and quantitative methods of examination of patients with chronic pain and depression, which includes a set of test methodologies for evaluation and dynamic monitoring of the pain and the affective symptoms and experiences in such comorbid patients and could be successfully applied in clinical practice in the future.

## **Structure of the thesis:**

The thesis meets the requirements, set in the Regulations of the development of the academic staff of the Medical University „Prof. dr. Paraskev Stoyanov“ – Varna. The body text is on 146 standard pages and is illustrated with 20 figures and 77 tables. The bibliography includes 370 literary sources, of which 16 are written in Cyrillic script and 354 – in Latin script. The psychometric tools used are presented in 6 attachments. The chapters of the thesis are: introduction, literature review, empirical research methodology (purpose and tasks, hypotheses, data collection methods and methods of data analysis), results, discussion, conclusions, contributions, references and attachments.

### ***Introduction***

It is relatively short and substantiates that chronic pain and depression are disease conditions of great social importance that have a negative impact on all spheres of life, sometimes changing its meaning. They are a leading cause of disability worldwide and are identified as a global health problem. Depressive experiences are among the main psychological factors involved in the maintenance and the persistence of chronic pain. That is why the combination of chronic pain with a depressive episode is a common mental comorbidity, but there is still insufficient systematization in the studies proving the common neurobiological, psychological and phenomenological links between the two types of experiences. From this, the significance of their combined study with a battery of tools is deducted. It is justifiably pointed out that anxiety is also a factor, the appearance and intensity of which, predetermine not only the persistence of pain during its acute and sub-acute period, but also the manifestation of depression during its chronic period. It is declared that the idea of the dissertation is to not only contribute to a better and more thorough study of the pain phenomenon in patients with depression, but also to identify individuals at risk, in order to apply individualized therapeutic approaches, aimed at restoring functioning despite pain.

### ***Literature review***

It encompasses 45 pages. It starts with definition, function analysis and classification of pain, defined as a multidimensional experience that involves sensory, cognitive, motivational and affective aspects that link it not only to somatic medicine and neurology, but also to psychology and psychiatry. It is pointed out that pain of unclear origin (dysfunctional pain) remained outside the scope of the classification of chronic pain in ICD-11. The relation of this type of pain to the concept of somatization, which has historically been associated with hysteria and hypochondria, is analyzed. A discussion of the somatoform disorders is also included. From a historical point of view, various theories of pain as an approach for gaining insight into its mechanisms have been considered. It occurs to me that too much attention has been paid to the neurobiological mechanisms, since they are not actually subject of the study in this dissertation. Various factors associated with chronic pain have also been analysed in detail. And here, in my opinion, the in-depth study of factors that are not directly relevant to the dissertation work is somewhat unnecessary. The focus on the links between pain and depression, which have also been thoroughly analysed, is much more reasonable. As a counter-thesis of the mutual



potentiation between pain and depression, the decreased sensitivity to pain and the increased tolerance to pain stimuli in patients with negative schizophrenic symptomatology, which in its clinical manifestation is quite similar to the depressive one, are reasonably considered. The comparison between the sensitivity to pain in depressive and schizophrenic patients enables the doctoral student to delve into psychiatric aspects of the pain syndromes that are directly related to their own empirical data and their interpretation. The comparison with the experience of pain in dementia is not as informative, but it is justified in view of the memory disorders in patients with chronic pain. The summary continues logically with a discussion of the psychological (cognitive and affective) factors, associated with chronic pain. Among the affective factors the role of anxiety is also discussed, which is directly related to the empirical study of the doctoral student, but the space allocated to it is relatively small. More attention is paid to the role of personality traits, as well as to the phenomenology of the experience of pain. The summary concludes with a brief analysis of 16 publications with “qualitative studies related to chronic pain”, from which 5 main themes of experiences are derived. In my opinion, the choice of the methodologies applied in the study should also be justified, in so far as this choice should be justified in the summary, by a comparison between different (discussed therein) options. I deem the fact that the survey ends with conclusions that represent a transition from someone else’s to one’s own studies, as very positive. These conclusions (summarising the data from the review) largely justify the purpose, the tasks and the hypotheses of the dissertation work and at the same time make it possible, considering what is already known from the literature, to highlight the areas for further study.

### ***Empirical research methodology***

This part starts with the purpose, tasks and hypotheses of the study. I can say that the **objective** set and the 5 related **tasks** are clearly and well formulated. The 4 **hypotheses** presented after them are logically derived from the summary of the literature. In my opinion, hypotheses are better to precede the purpose and tasks in order to conform them, rather than to follow them. The **methods** are divided into two groups – for **data collection** and for **data analysis**. I consider that they have been adequately selected in light of the purpose and the tasks of the study, although their selection is not explicitly substantiated. **The description of the sample and the criteria for inclusion and exclusion**, as well as the overall **organization and conduction** of the study, I also consider to be adequate to the purpose and the tasks.

### ***Results***

The specific indicators of the persons surveyed are presented in detail and systematically, in accordance with the requirements for dissertation works. They are illustrated with tables and graphs, which facilitates their analysis. The significant prevalence of women (81.7% in the general group and 91.8% in the group of studied persons with chronic pain and depression) is noticeable. The results of the individual comparisons in each of the two stages of the study and between the corresponding data from both stages are, in my opinion, logical and well-illustrated by tables and graphs. It is worth noting that the concept of the dissertation is very wide in scope and the amount of empirical data collected is impressive. Huge effort has been made to process them and understanding all the results of correlation and regression analyses is at times quite



difficult, especially regarding the results of the content analyses. Perhaps some focus on the more significant results would be useful for the perception of the conglomerate of the accumulated diverse data. It seems to me that, by its scope, the work goes beyond the requirements for such dissertation work and some of the material collected could be left for further publications. The doctoral student has undoubtedly not spared herself the work and provides plenty of information on the topic chosen. It would be even better if this abundance of information was focused around some unifying idea, possibly derived from the review of the literature or from a preliminary analysis of trends, in order to make it easier for the reader to understand.

### ***Discussion of the results***

In my opinion, separating the discussion from the presentation of the results is a good choice because it makes it possible to distinguish objective facts from their subjective interpretation. In most cases, the interpretation of the dissertation leads to new levels of rationalization of the primary data in the context of data from the literature. In individual cases, however, it comes close to their brief summary, without reaching more in-depth comparisons with data from the literature. A tendency towards a thorough and systematic analysis of all established facts is once again observed, and attempts to prioritize the consideration of certain data are relatively rare and episodic. This way, a certain equalization of findings, different in significance, occurs, and the possibility to highlight the more important among them is being missed. Overall, the discussion confirms the preliminary hypotheses and substantiates the need to apply a test battery to study patients with comorbidity of chronic pain and clinically manifested depression. Especially valuable are the data that prove that the selected scales are sensitive and can be used to track the dynamics in the symptomatology of treated patients with depression. From a clinical point of view, it is worth noting that the degree of state anxiety is determined by the severity of depression. This means that the improvement in depressive symptomatology determines the decrease in state anxiety, which reduces its degree of influence on the intensity of pain. On the other hand, the severity of depression affects the intensity of pain most strongly, state anxiety affects it less, and personality anxiety affects insignificantly. The doctoral student's findings are supported by data from the literature. The discussion of the data from content analyses is also of interest from a psychological and psychiatric point of view and is, in my opinion, very informative.

### ***Conclusions***

The doctoral student has presented 11 conclusions that are largely consistent with the results and are substantiated in the discussion.

### ***Contributions***

They are modestly reduced to only three. I accept them fully and believe that they correspond to the results of the survey.

### ***Summary assessment of the dissertation work***

The study is well conceived and carried out with precision. The facts, separated from their interpretation, are presented systematically and thoroughly. There is a logical and sensible connection between the different parts of the dissertation. The meets the requirements and reflects the essence of the full text accurately enough. The publications on the subject of the dissertation also meet the requirements. They are a total of 4, of which 3 have been published in full. In all publications, the doctoral candidate is the first author.

### ***Conclusion***

The thesis of dr. Tatyana Ivanova Telbizova on the topic „Specifics and dynamics of the pain symptoms and experiences in patients with depression“ meets the requirements for acquiring scientific degrees in MU “Prof. dr. Paraskev Stoyanov” – Varna, as well as those of the Academic Staff Development Law in the Republic of Bulgaria (ASDLRB) and the Regulations for its application. For this reason, I give it a positive assessment and propose that the esteemed members of the jury also vote positively for the conferment of the educational and scientific degree of “doctor”.

20.05.2021 г.

Sofia

Prepared by: 

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