REVIEW

Dissertation on the topic: PERSONALITY PROFILES IN PATIENTS WITH CARDIOLOGICAL AND CARDIOSURGICAL INTERVENTIONS

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The proposed dissertation is on the complex medical field of cardiac diseases and cardiac surgery, where clinical psychologists contribute to diagnostic assessments of personality that relate to specific aspects of treatment and choice of medical interventions, with accompanying psychotherapeutic effects.

The dissertation is written on 162 pages, 29 tables and 15 graphs, 220 titles are cited in three Western and Bulgarian languages, which are emphatically modern and relevant to the topic.

The first part of the dissertation focuses on theoretical approaches to understanding the relationship between personality and disease. The main theories in psychosomatics, the views of psychoanalytic psychosomatics, including the positions of the Paris School of Psychosomatics, are presented very concisely. The Bulgarian and foreign theories about the personality predisposition of psychocardiology are also discussed. A number of studies are summarized to show the mechanisms linking personality specificity in negative affect, its expression and social inhibition, which underlie the development of coronary heart disease. The mechanisms linking personality to coronary heart disease, models of psychophysiological reactivity, models of psychosocial vulnerability through the transactional model, health behavior, constitutional genetically determined vulnerability, personality characteristics of extraversion and social dominance are described. The medical aspects of these diseases, the types of cardiac surgery, the current data on the impact of stress from COVID disease are also presented.

The second chapter presents the organization of the study. In essence, the set goal, tasks and hypotheses of the research are very good and related to the scientific objectives and tasks. A total of 135 patients were studied, divided into three groups: patients who underwent invasive cardiac intervention, patients with cardiac surgery and a control group (non patents). The standardized methodologies used are: Toronto Alexithymia Self-Assessment Scale, Anxiety Sensitivity Index, and Personality Trait Self-Assessment Scale (DSM-5 Personal Questionnaire), which are very well presented in the text with comments on their reliability, construct validity, Bulgarian adaptation, and relevance. research objectives. An original and modern methodology is the applied Personality questionnaire for DSM-5: abbreviated version PID-5-SF, Maples et al., 2015, which measures 5 main domains, describing in detail the Bulgarian adaptation and the analyzed specific cultural differences. Eight dependent psychological variables were identified, which were measured by methodologies and compared for the three groups. Four main areas of personality traits and behavior are also structured, which were studied and compared in the three groups. The first stage of the study is presented in detail, the outliers where the test results are outside the standardized z-values are removed, in order to form homogeneity of the main group. This part of the dissertation shows the tendency of the PhD candidate to be precise in the organization of the research, with developed skills to understand in detail the diagnostic possibilities of research methods and their relationship to the objectives. She deserves admiration!

The third chapter presents the analyzes and interpretations of data from the specific methodologies, specialized and up-to-date statistical analyzes separately for each group, with subsequent comparisons on the set parameters between them. PhD candidate presents in great detail all the successive stages of statistical analysis and interpretations in each test methodology and for each individual group. All these analyzes are illustrated with very clear and detailed tables, graphs that facilitate perception and interpretations. In this part are presented details about hypersensitivity, increased anxiety, different manifestations in the groups of hostility, obedience, suspicion, separation insecurity, avoidance of intimacy, withdrawal, eccentricity, attention, grandiosity, manipulation, unusualness. All analyzes arranged according to the hypotheses are described in great detail. The analyzes are followed by psychological interpretations that reflect the personal clinical experience of doctor Azis and present the acquired skills to make a relationship between test assessments and diagnostic additions to psychological

counseling in the treatment process. Here doctor Azis demonstrates her differentiated skills for scientific analysis based on statistical data and psychotherapeutic experience. I will note a few more significant constructive analyzes in the chapter with clinical-psychological discussion: in order to derive a more definite interpretation of whether differences in personality traits in the group are part of the personal predisposition of patients, additional analysis of variance and "additional post-hoc tests according to the Bonferroni method are performed, which showed that inter group differences are significant only on the scales External Oriented Thinking and General Alexithymia, with differences between the control group and the two clinical groups". Additional re-analyzes were performed when duplicating the data in the database in order to expand the sample. It appears that patients who have undergone cardiac intervention are more emotionally labile, more suspicious and unwilling to take risks; and patients who have undergone invasive cardiac and / or cardiac surgery have higher levels of alexithymia. It is very correctly summarized that the third hypothesis is not confirmed, and the fourth is partially confirmed. In other analyzes, doctor Azis clearly and self-critically states that the number of subjects is insufficient to make more definite conclusions and therefore she plans future studies.

In the conclusion, Violeta Azis arranges a group of personality characteristics in patients with invasive cardiac interventions and cardiac surgeries, which may be a personal predisposition to specific heart diseases. The PhD student correctly determines that the details of the differences and similarities in emotional lability and the avoidance of intimacy between the experimental and control groups, require more extensive research. Extremely valuable is her generalizing conclusion that those suffering from cardiovascular disease are characterized by higher levels of alexithymia, which includes difficulties in identifying and describing feelings and propensity for operatory thinking. All these dispositions are in a dynamic relationship not only with mental but also with physical health. At the same time, she strongly emphasizes that psychological counseling and support for patients with heart disease is an integral part and "key unit" of medical treatment. It has been correctly concluded that there is no significant difference between the level of stress in the groups studied before and during the COVID pandemic.

Interpretations of the specific operatory thinking and the reduced ability for mentalization in severe heart disease and interventions, the reduced ability to respond to nervous excitement in a verbal and symbolic way, are very well

introduced in the discussion. In this regard, the PhD student successfully plans future research comparisons between patients with cardiac interventions and patients with interventions in other organs. Also, the necessity to monitor resocialization in the family and social functioning in the chronic stage of the disease.

In this part, the PhD candidate performs good comparative analyzes with researchers from other countries, again planning additional research and psychotherapeutic interventions that will bring a positive change in the recovery process and social resocialization of the patients. Absolutely correct and in detail in the last part are summarized the limitations of the study and the recommendations for diagnostic psychological practice. In the recommendations section for her future research, Azis confirms the need for more extensive research at a later stage in order to distinguish the impact of the COVID pandemic, the additional somatization of the patients and more clearly and unequivocally differentiate between the two cardiac groups of patients - whether they are a personal predisposition or a disease consequence.

Five main conclusions are derived, which are relevant to the data and analyzes of the study and interpretations.

The last part identifies six main contributions to diagnostic assessments and psychological counseling in patients with heart disease.

The autoreferate reflects the dissertation development. There are 10 publications related to the dissertation topic, presented by teams of doctors and psychologists, corresponding to the mandatory team style of work in cardiology and cardiac surgery. In the publications PhD candidate is in the first or second psychological position.

I have no critical remarks on the latest revised version of Violeta Azis's dissertation, the recommendations I have proposed are in line.

In conclusion, I believe that the dissertation topic of Violeta Kamenova Azis is excellently developed, meets the highest criteria for a doctoral dissertation and reflects her high professional level as a research psychologist and consultant in the complex field of cardiology and cardiac surgery!

With personal professional conviction I will vote positively and I suggest to the members of the Scientific Jury to vote for Violeta Azis the educational and scientific degree "Doctor" in professional field 3.2. Psychology (Clinical Psychology)

March 14, 2022.   **Prepared the review**
                                            Assoc. Prof. P. Petkova