

Streszczenie rozprawy doktorskiej w języku angielskim

Summary of Ph.D. thesis

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Title: Selected psychological factors related to the quality of life in females with essential hypertension

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Subject and aim of the study. The doctoral dissertation is devoted to the role of selected psychological factors in the functioning of females with essential hypertension (HTN), and, in particular, to the psychological correlates of the quality of life. HTN is a disease characterized by persistent or intermittent high blood pressure of 140/90 mmHg or more, the cause of which cannot be identified unambiguously or resolved. As a psychosomatic chronic disease, HTN requires treatment and monitoring throughout the patient's life and is associated with a decrease in their quality of life. The research emphasizes that psychological factors may play an important role in the process of development, course, and treatment of the disease, and may also affect the rehabilitation and quality of life of people with HTN.

This doctoral dissertation is focused on selected relevant psychological factors potentially related to the quality of life in females with HTN, namely emotional reactivity (in terms of positive and negative emotions separately), rumination, depression and anxiety symptoms, hostility, and illness perception. Taking into account the recommendations of scientific societies and the need to assess numerous psychological factors in medical practice, important questions arise: (1) whether and what kind of psychological factors are related to the quality of life?; (2) which psychological factors are the most relevant (significant) predictors of the quality of life?; (3) which psychological factors are to be of primary importance, and which are of secondary, or should they not be considered altogether due to their low relevance and time constraints during medical visits? Previous studies have supported the significant role of psychological factors in HTN, especially in the process of development, course, and treatment of the disease. This doctoral dissertation was intended to take into account further factors (controlling sociodemographic variables) in predicting the quality of life in females with HTN.

The doctoral dissertation aimed to analyze the relationships between emotional reactivity, rumination, depression and anxiety symptoms, hostility, illness perception, and the quality of life in females with HTN. In addition, (1) the most significant predictors of the quality of life in women with HTN among the examined psychological factors were indicated, (2) the relationships between these psychological factors and HTN control (presence of target blood pressure parameters below 140/90 mm Hg during treatment) and comorbidity were examined, and (3) the associations of sociodemographic and

medical variables with the quality of life in females with HTN were explored. This made it possible to identify the most significant predictors of life quality among these psychological factors, as well as to identify the factors which were significantly associated with HTN control and comorbidity.

Method. One hundred and eleven females with physician-diagnosed HTN without other chronic conditions or with one or at most two comorbid diseases which developed after the diagnosis of HTN were recruited in an online survey. Females with HTN were aged from 35 to 75 ($M = 60.86$, $Me = 61$, $SD = 8.27$). The participants filled out a sociodemographic form and answered questions about their clinical conditions. The following questionnaires were applied: (1) the World Health Organization Quality of Life–BREF questionnaire in its Polish version by Jaracz et al. (2006) for measuring four domains of quality of life (i.e., physical health, psychological, social relationships, environment), (2) the Perth Emotional Reactivity Scale-Short Form in the Polish version by Larionow and Mudło-Głagolska (2022) for assessing the emotional reactivity traits, including the typical ease/speed of activation, intensity and duration of positive and negative emotions separately, (3) the Patient Health Questionnaire–4 in the Polish version by Larionow and Mudło-Głagolska (2023) for examining depression and anxiety symptoms and their screening assessment, (4) the Rumination subscale derived from the Cognitive Regulation of Emotions Questionnaire in its Polish version by Marszał-Wiśniewska and Fajkowska (2010) for assessing rumination (thinking all the time about the feelings and thoughts associated with the negative event), (5) the Hostility subscale from the Buss and Perry Aggression Questionnaire in its Polish version by Aranowska et al. (2015) for measuring hostility, and (6) the Brief Illness Perception Questionnaire in its Polish version by Nowicka-Sauer et al. (2016) for assessing eight dimensions of illness perception and three subjective causes of disease.

Results and conclusions. Most of the surveyed females with HTN assessed their quality of life as good. In general, the participants were the least satisfied with the quality of their “sleep and rest” (among the assessed parameters of the physical health domain), “positive feelings” (psychological domain), “sexual activity” (social relationships domain), and “health and social care: accessibility and quality” (environment domain). One in four surveyed females with HTN indicated that they did not have target blood pressure levels (140/90 mmHg or below during treatment). A high prevalence of anxiety and depression symptoms was noted in the sample of females with HTN. A positive screening result for anxiety and depressive disorders was obtained by approximately 40% and 25% of the participants, respectively. It is necessary to carry out screening for anxiety and depressive disorders among females with HTN, as well as to develop guidelines for the assessment of the symptoms of these disorders in the process of HTN treatment. Among the sociodemographic variables, better socioeconomic status of the family, being in a relationship, and higher education were associated with a higher quality of life in the surveyed females with HTN. Education levels affected the quality-of-life level the most (differences were

noted in three domains with small and medium effect sizes). In this respect, education level is the most relevant sociodemographic variable that determines the quality of life in females with HTN and should be taken into account in medical practice.

Among the medical or clinical variables, an increase in the number of drugs taken for HTN was associated with a lower quality of life, whereas the duration of HTN (controlling for age) was not related to the quality of life in females with HTN. It is necessary to choose the optimal method of treatment and to individualize pharmacotherapy with a reduction in the number of drugs taken (e.g., through the use of combined drugs) to prevent the deterioration of life quality. Higher levels of anxiety-depressive symptoms, a more threatening illness perception, and a stronger tendency to experience negative emotions were more common in females with HTN who were characterized by uncontrolled HTN and/or had comorbidities. Females with HTN characterized by these features are at risk of severe HTN. Psychological support is recommended for this risk group.

Among the examined psychological factors, including emotional reactivity, rumination, depression, and anxiety symptoms, hostility, the illness perception, it is the anxiety-depression symptoms (mainly depression symptoms), as well as individual dimensions of the illness perception (consequences, personal control, treatment control, identity, concern, and emotional representation) that are of particular importance for the clinical status of HTN (i.e., HTN control, comorbidity) and the quality of life in females with HTN. The decrease in the duration and intensity of positive emotions is related to uncontrolled HTN. The use of psychotherapeutic techniques which increase the positive reactivity traits seems to be helpful to increase HTN control.

Based on Wilson and Cleary's (1995) health-related quality of life model, this doctoral dissertation supported previous reports on the specific role of the "symptom status" component of this model as a determinant of life quality in samples of patients with chronic diseases. In this study, depression symptoms were a very strong predictor of low quality of life (taking into account other variables in the regression model), which emphasizes a particularly negative role of these symptoms in decreasing the quality of life. The results of this study also supported the validity of Wilson and Cleary's (1995) health-related quality of life model as a theoretical basis for explaining the quality of life in females with HTN.

The essence of the examined psychological factors' role assessment in the functioning of females with HTN is the following conclusion. The depression symptoms and the illness perception are the most relevant variables which have the greatest significance in differentiating the clinical conditions and quality of life of females with HTN, whereas hostility and rumination are the least significant factors, therefore, the assessment of depression symptoms and the illness perception in medical practice seems to be of primary importance to ensure the most effective treatment and psychological help.