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IR PSICHOFARMAKOLOGIJA




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Remiamas Lietuvos sveikatos mokslų universiteto Neuromokslų instituto ir Palangos klinikos

LEIDĖJAI
Lietuvos biologinės psichiatrijos draugijos (LBPD)
Tvirtovės al. 90A LT-50154 Kaunas. Tel. (8 460) 30011,
Lietuvos sveikatos mokslų universiteto Neuromokslų instituto
Elgesio medicinos laboratorija
Vydūno al. 4 LT–00135 Palanga. Tel. (8460) 30017

# CONTENTS
# TURINYS



VIRŠELYJE – Lauros Sabaliauskaitės darbas

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Dear friends and colleagues,

I am pleased to introduce new issue of the Biological Psychiatry and Psychopharmacology that includes original research papers, an insightful peer review and stimulating case report.

Somatic, cognitive and other complaints are common among depressed individuals that should carefully considered and managed. Kairiukstyte with colleagues explored somatic, cognitive, and depressive symptom severity among individuals at risk of depressive disorder. They found that somatic complaints are common among depressed individuals and were associated with self-reported symptom severity on the somatic symptom domain of the PHQ-9.

Obesity is common and often associated with adverse mental health consequences. Seskeviciute and Martinaitiene evaluated the impact of weight stigma on mental health of obese individuals. They identified high prevalence of weight stigmata among overweight or obese individuals that exceeded 90%. Presence and higher frequency of weight stigmata experiences was associated with increased risk of depression and anxiety symptoms.

Kulaityte with colleagues reviewed the literature on the association between obsessive compulsive disorder (OCD) and attachment types showing that some attachment types can be associated with OCD symptoms and can predict OCD treatment outcomes.

Slabadiene provided an updated literature review focused on the effectivenss of CBT in patients with psoriasis, showing that there is convincing evidence to consider CBT for improving anxiety and quality of life of psoriasis patients.

Musneckyte and Jarutiene report a diagnostically challenging case of genetically confirmed Huntington's disease that presented with acute psychosis and its diagnosis was further complicated by treatment with antipsychotics.

Palaityte-Urbone presents Lithuanian translation of the he Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) that was developed by the World Health Organization for rapid screening of different substance use.

Lastly, I would like to thank Vesta Steibliene, Alicja Juskiene, Agne Stanyte and Evelina Palaityte-Urbone for serving as reviewers for the Journal.

On behalf of the Editorial board, I wish you happy and productive 2024.

Sincerely,

Adomas Bunevicius MD, PhD

Columbia university, NY, USA

# THE EXPRESSION OF SOMATIC SYMPTOMS AMONG INDIVIDUALS AT RISK OF DEPRESSIVE DISORDER

# Somatinių simptomų raiška tarp asmenų, kuriems yra rizika susirgti depresiniu sutrikimu

**Austeja KAIRIUKSTYTE[1], Gita PAULIUKONYTE[1], Margarita SLABADIENE[2], Julius BURKAUSKAS[3], Aurelija PODLIPSKYTE[3], Vesta STEIBLIENE[2,3]**

**[1]Medical Academy at Lithuanian University of Health Sciences, Kaunas, Lithuania**

**[2]Psychiatry Clinic at Medical Academy, Lithuanian University of Health Sciences, Kaunas, Lithuania**

**[3]Laboratory of Behavioural Medicine at Neuroscience Institute, Lithuanian University of Health Sciences, Palanga, Lithuania**

**SUMMARY**

**Background.** Depression stands as a significant mood disorder on a global scale. It is known that some physical symptoms show significant positive predictive values (PPV) for depression, such as sleep disturbances (PPV – 61%), fatigue (PPV – 60%), experiencing three or more complaints (PPV – 56%), nonspecific musculoskeletal complaints (PPV – 43%), back pain (PPV – 39%), amplified complaints (PPV 39%), and vaguely expressed complaints (PPV – 37%).

**The aim of this study.** This study aims to evaluate the correlations of subjective expressions of somatic, cognitive, and depressive symptoms severity among individuals at risk of depressive disorder.

**Methods.** The survey consisted of a questionnaire designed by the authors regarding sociodemographic information and two standard questionnaires: PHQ-9 and PHQ-15.

**Results.** 189 individuals had significant severity of depressive symptoms. Multivariable regression analysis indicated that PHQ-9 factor 2 (somatic symptoms) was associated with higher rates of back pain ($\beta = 0.250$, $p < 0.001$), pain in arms, legs, or joints ($\beta = 0.488$, $p < 0.001$), menstrual cramps ($\beta = 0.640$, $p < 0.001$), pain or problems during sexual intercourse ($\beta = 0.270$, $p < 0.001$), headaches ($\beta = 0.304$, $p < 0.001$), chest pain ($\beta = 0.304$, $p < 0.001$), dizziness ($\beta = 0.594$, $p < 0.001$), heart palpitations (feeling heart pound or race) ($\beta = 0.266$, $p < 0.001$), nausea, gas or indigestion ($\beta = 0.281$, $p < 0.001$) and feeling tired or having low energy ($\beta = 0.223$, $p < 0.001$), after adjusting each regression model for the potential confounders.

**Conclusions.** It can be emphasized that individuals who are at risk of developing depression may experience various somatic symptoms that are conditioned by their depressive state. The obtained results indicate that the following research is required to identify other factors affecting the severity of the disease and to determine more sufficient treatment plans.

**Keywords:** depressive symptoms, somatic symptoms, cognitive symptoms, PHQ-9, PHQ-15

**SANTRAUKA**

**Įvadas.** Depresinis sutrikimas yra reikšmingas psichikos nuotaikos sutrikimas pasauliniu mastu. Pažymėtina, kad didelę teigiamą depresijos prognostinę vertę (TPV) turintys somatiniai simptomai yra: miego sutrikimai (TPV – 61 proc.), nuovargis (TPV –60 proc.), didesnis skundų kiekis (trys ar daugiau) (TPV – 56 proc.), nespecifiniai raumenų ir kaulų sistemos sutrikimai ( TPV – 43 proc.), nugaros skausmas (TPV – 39 proc.), sustiprėję skundai (TPV: 39 proc.) ir neaiškiai išreikšti skundai (TPV – 37 proc.).

**Tyrimo tikslas.** Įvertinti subjektyvių somatinių, kognityvinių ir depresinių simptomų sunkumo sąsajas tarp asmenų, kuriems yra rizika susirgti depresija.

**Tyrimo metodai.** Apklausą sudarė autorių sukurta anketa apie sociodemografinę informaciją ir dvi standartinės anketos: PHQ-9 ir PHQ-15.

**Rezultatai.** 189 asmenys turėjo reikšmingą depresijos simptomų išraišką. Daugiaveiksnės regresijos analizė parodė, kad PSK-9 faktorius 2 (somatiniai simptomai) buvo susijęs su nugaros skausmu ($\beta = 0{,}250$, $p < 0{,}001$), rankų, kojų ar sąnarių skausmu ($\beta = 0{,}488$, $p < 0{,}001$), mėnesinių skausmu ($\beta = 0{,}640$, $p < 0{,}001$), skausmu ar problemomis lytinių santykių metu ($\beta = 0{,}270$, $p < 0{,}001$), galvos skausmu ($\beta = 0{,}304$, $p < 0{,}001$), krūtinės skausmu ($\beta = 0{,}304$, $p < 0{,}001$), galvos svaigimu ($\beta = 0{,}594$), $p < 0{,}001$), nereguliariu arba padažnėjusiu širdies ritmu ($\beta = 0{,}266$, $p < 0{,}001$), pykinimu, dujų susikaupimu žarnyne ar virškinimo sutrikimais ($\beta = 0{,}281$, $p < 0{,}001$) ir nuovargiu bei mažu energijos kiekiu ($\beta = 0{,}223$, $p < 0{,}001$), kiekvieną regresijos modelį pakoregavus pagal kitus įtakojančius veiksnius.

**Išvados.** Asmenys turintys riziką susirgti depresija gali jausti įvairius somatinius simptomus, nulemtus jų depresinės būsenos. Gauti rezultatai rodo, kad būtų tikslinga atlikti tolimesnius tyrimus, siekiant atrasti efektyvesnius gydymo metodus ir nustatyti papildomus veiksnius, turinčius įtakos ligos sunkumui.

**Raktažodžiai:** depresiniai simptomai, somatiniai simptomai, pažintiniai simptomai, PSK-9, PSK-15

**Autorius susirašinėjimui:** Austeja Kairiukstyte, Lithuanian University of Health Sciences, Medical Academy, A. Mickeviciaus g. 9, LT-44307 Kaunas, E-mail: austeja.kairiukstyte@stud.lsmu.lt

## INTRODUCTION

Depressive disorder is a significant psychiatric mood disorder on a global scale. Statistics reveal that around 17% of individuals encounter depression at least once in their lifetime [1]. According to the data of the World Health Organization, approximately 3.8% of the population undergoes depression, with 5% of adults being affected (4% among men and 6% among women), along with 5.7% of adults aged 60 and above. Based on the most recent information, around 280 million people in the world have this illness [2]. Depression can manifest in all age groups, from childhood to late adulthood, resulting in significant costs for society. If left untreated, this disease can cause severe distress, disrupt daily life, and lead to fatal outcomes [3].

Even though the emergence of depression has been strongly associated with genetic factors [4], depressive disorder can occur in anyone. It is worth noticing that patients with a history of substance abuse, significant losses, or other stressful situations have a higher risk of developing this ailment [2]. Major Depressive Disorder (MDD) has a huge impact on the disease burden within diverse economic landscapes, including low, middle, and high-income countries [5]. This condition challenges various aspects of life, affecting the patient‘s performance in school, work, home, and community.

The severity of a depressive episode is classified as mild, moderate, or severe based on the amount and intensity of symptoms, as well as their impact on the individual’s overall functioning [2]. To diagnose the depressive disorder, at least five of the following nine DSM-V symptoms must persist consistently for a minimum period of two weeks, with at least one symptom involving depressed mood or loss of interest or pleasure. These symptoms include feelings of worthlessness or excessive or inappropriate guilt, disruptions in sleep patterns (insomnia or hypersomnia), notable changes in weight or appetite, psychomotor agitation or retardation, indecisiveness, reduced ability to think or concentrate, increased suicidality, experiencing a low or depressed mood, a lack of interest or pleasure, along with fatigue or loss of energy. These symptoms must result in significant distress or interfere with functioning in social and occupational interactions or other essential aspects of life. Moreover, the episode must not be caused by the direct physiological impact of a substance or by any other medical condition [6]. The prognosis of depressive disorders is adversely influenced by cognitive dysfunctions because they increase the likelihood of depression recurrence and reduce responsiveness to pharmacological treatment [7].

It is noteworthy that age, among demographic factors, has a significant influence on the cognitive impairments observed in depressed patients. Older patients with depression tend to exhibit more significant disabilities compared to younger patients. Particularly affected are those, who experience a late onset of the disease, typically between the ages of 50 to 65 years [8, 9].

Concerning symptoms of MDD, fluctuations in emotional well-being are the primary manifestations of the ailment. This consists of reduced interest or motivation for pleasurable activities, a decrease in experiencing positive emotions (anhedonia), and an abundance of negative emotions such as feelings of depression or anxiety [10]. Another characteristic occurring in the group of patients with depression is apathy, which can overlap with reduced interest, loss of energy, and even indecisiveness but is too unspecific to be considered a fundamental symptom. Apathy is more commonly reported as a side effect, impacting up to 20% of patients prescribed SSRI antidepressants [11]. In a family practice assessment comparing physician diagnosis with patient self-reports of depressive manifestations, disruptions in sleep patterns and depressed mood were the most identified symptoms. Interestingly, the diagnosis of depression was most frequently assigned to those patients, who had the presence of suicidal thoughts together with insomnia or hypersomnia [12]. Sleep disturbances commonly occur as a symptom of depression and could often be an early sign of a major depressive episode [13]. In addition, sleep disturbances are often an indicator of the likelihood of relapse [14] and are considered the eighth most sensitive factor in reflecting the patient‘s response to antidepressants [15]. Additionally, individuals diagnosed with depression have a higher sensitivity to negative information. That contributes to a pessimistic outlook on the world and a poorer perception of themselves and others [16].

Moreover, complaints of exhaustion or an inability to engage in physical or mental activities are very common among individuals with depression in primary healthcare settings as well [11]. Among the domains assessed on the WSAS (work, home management, social activities, private activities, relationships) impaired concentration emerged as one of the most disabling symptoms in each area [17]. Data indicate persistent impairments in both memory and executive function, especially affecting elderly patients [18]. It is noteworthy that the presence of cognitive impairment in older individuals with moderate-to-severe depression significantly predicts the likelihood of developing dementia in the future [19].

Moreover, physical manifestations, especially somatic anxiety and fatigue were observed in 80% of patients diagnosed with MDD (a group consisting of 260 women and 239 men) [20, 21]. A strong correlation between pain symptoms and depression has been recorded as well, as around two-thirds (69%) of 573 patients diagnosed with MDD in a United States study reported experiencing general aches and pains [22]. Certain somatic symptoms demonstrated considerable positive predictive values (PPV) for depression such as: sleep disturbances (PPV – 61%), fatigue (PPV – 60%), three or more complaints (PPV – 56%), nonspecific musculoskeletal complaints (PPV – 43%), back pain (PPV – 39%), amplified complaints (PPV – 39%) and vaguely stated complaints (PPV – 37 %) [23].

Additionally, other symptoms that often complicate the experiences of individuals dealing with depression are sexual difficulties. These challenges may involve a decrease in sexual desire, diminished arousal, infrequent engagement in sexual activities, and obstacles in reaching orgasm [11]. In a large-scale European study conducted to examine sexual function among both treated and untreated individuals with depression, over two-thirds of men and women experienced a decrease in libido. The reduction in libido augmented with the severity and

duration of the depressive episode [24]. Diminished libido can contribute to the worsening of interpersonal or marital relations and make the severity of depression even worse. Up to 60% of patients undertaking treatment with SSRI antidepressants report encountering the onset of sexual dysfunction during the therapy [25,26]. Taking that into account, sexual dysfunction remains one of the most frequent reasons for discontinuing prescribed medicines [27].

Notably, the depressive disorder often manifests only with somatic symptoms (about 50% of the patients report physical manifestations exclusively), while affective symptoms and mood disorders are not obvious and often remain unrecognizable [28]. Therefore, the assessment of somatic symptoms and the variation in their intensity over the daytime is an important diagnostic criterion. That confirms the significant importance of an early diagnosis and appropriate treatment, especially when approximately half of the 800,000 annual suicides globally occur during a depressive episode. Compared to the general population, individuals with MDD are nearly 20 times more likely to commit suicide in the future [29].

It is noteworthy that early symptoms of MDD can manifest differently in males and females [30]. The Prodrome of MDD in men is most often associated with enhanced aggression, irritability, violent tendencies, substance misuse, risky behaviors, or somatic complaints [30-35]. Such outbursts of violence or angry verbal reactions are not only damaging to the individual but can also trigger negative emotions and traumatic reactions in the entire family [36].

Talking about the female population, increased rates of anxiety, somatic symptoms, changes in appetite, and weight gain are among the most common depressive symptoms [37]. Depression in women can have a huge negative impact on the whole family as well and induce abnormal development, cognitive deficiencies, and psychological disorders in children, especially when a female is diagnosed with postpartum depression [38].

Taking that into account, it is important to recognize early signs of depressive disorder as soon as possible and start the proper treatment. Nevertheless, immediate recognition, early intervention, and appropriate medical care can foster recovery, prevent relapse, and diminish the emotional and financial strain caused by the condition [39].

Considering this, our study aims to evaluate the correlations of subjective expressions of somatic, cognitive, and depressive symptoms severity among individuals at risk of depressive disorder.

## STUDY PROCEDURES AND METHODS

### Ethical considerations

The study procedures were approved by the Bioethics Center of Lithuanian University of Health Sciences (Approval No. BEC-MF-247, April 4, 2023). Before starting the survey, participants had to provide online informed consent to participate in the study by marking the appropriate answer "agree/disagree."

### Study participants

After receiving permission from the Bioethics Center of the Lithuanian University of Health Sciences (LUHS) (No. BEC-MF-247), an online survey was started on April 4, 2023. Adult (over 18 years) subjects were invited to participate in this study and fill in an anonymous online survey. The researchers provided information about the study and an invitation for participation, sharing information about the study and the link to the online survey on various social media groups. The inclusion criterion for the study was age: adult (over 18 years) subjects. Out of the 603 respondents who accepted the invitation and completed the survey for the ultimate assessment, the final sample consisted of 189 individuals with significant severity of depressive symptoms (according to PHQ-9 ≥10). The engagement rate for accessing the questionnaire was not monitored.

### Methods

The survey was composed of three parts. The first part of the survey consisted of a questionnaire designed by the authors regarding sociodemographic information. The following data was collected: gender and age of participants, as well as marital status, education, work, number of children, and place of residence. Current living conditions were also evaluated, where participants were able to rate their current conditions in comparison with others. The possible answers ranged from "very poor compared to other people" to "very good compared to other people".

For the evaluation of the subjective psychological characteristics in this study, we used two standard questionnaires:

PHQ-9 was used to measure symptoms of depression [40, 41]. The PHQ-9 is a brief nine-item self-report questionnaire measuring depression symptoms and severity over the past two weeks. Answers are presented on a four-point Likert scale ranging from 0 ("not at all") to 3 ("nearly every day"). The total score ranges from 0 to 27, with higher scores indicating a higher prevalence of depressive symptoms. Cronbach's alpha for the measure in the current study was 0.66.

The two factors that emerged were related [42] to cognitive/affective symptoms: loss of interest, feeling depressed, feeling bad about yourself, suicidal thoughts (Cronbach's alpha = 0.632), and somatic symptoms: sleep problems, loss of energy, poor appetite or overeating, trouble concentrating, being slower or more restless (Cronbach's alpha = 0.528) [42].

PHQ-15 was used to measure somatic symptoms [43]. The PHQ-15 comprises 13 somatic symptoms from the PHQ, each symptom scored from 0 ("not bothered at all") to 2 ("bothered a lot") and two additional physical symptoms (feeling tired or having little energy and trouble sleeping) are contained in the PHQ-9 depression module. The total score ranges from 0 to 30, with higher scores indicating higher somatic symptom severity. Cronbach's alpha for the measure in the current study was 0.69.

### Statistical analysis

Statistical analyses were conducted using version 27.0 of the SPSS for Windows statistical package (SPSS Inc., Chicago, IL, USA). There was no missing data. Descriptive statistics such as means and frequencies were calculated for all

sociodemographic characteristics and subjective psychological characteristics. For correlations between somatic symptoms and PHQ-9 two factors (F1 – cognitive/affective symptoms; F2 – somatic symptoms), the significance threshold was adjusted by using Bonferroni correction, setting the p-value at 0.003. A multivariable regression analysis was conducted to investigate the associations between somatic symptoms and PHQ-9 two factors (F1 – cognitive/affective symptoms; F2 – somatic symptoms). Each factor was adjusted for age, sex, education, current employment status, place of residence, living conditions, and family status.

## RESULTS

Out of the 603 respondents who accepted the invitation and completed the survey for the ultimate assessment, the final sample consisted of 189 individuals with significant severity of depressive symptoms. The age of the individuals ranged from 19 to 75 years old (M = 33; SD = 13), and the majority were female (n = 151; 78.1%).

Most of the study participants had higher education (59.3%) and were currently working (54.5%). Also, most of them were single (36%) or married (30.2%), had no children (65.1%), and lived in the city (78.8%). Almost half of all participants rated their living conditions as average (45.5%) or much better than average (23.8%) compared with others.

A detailed description of the sample, somatic, and depression characteristics is presented in Table 1.

The distribution in severity of somatic symptoms is presented in Table 2. The most severe range was reported in the severity of trouble sleeping (M = 1.06; SD = 0.78), feeling tired or having low energy (M = 1.39; SD = 0.65), back pain (M = 0.9; SD = 0.67) and headaches (M = 0.84; SD = 0.68).

Next, we analyzed the correlations between somatic symptoms, measured with PHQ-15 and PHQ-9 two factors (F1 – cognitive/affective symptoms; F2 – somatic symptoms) (Table 3).

PHQ-9 factor 1 (cognitive/affective symptoms) had a weak positive correlation with feeling tired or having low energy ($r = 0.252$, $p < 0.005$). PHQ-9 factor 2 (somatic symptoms) had a weak positive correlation with back pain ($r = 0.278$, $p < 0.001$), pain or problems during sexual intercourse ($r = 0.279$, $p < 0.001$), feeling tired or having low energy ($r = 0.290$, $p < 0.001$), low positive correlation with headaches ($r = 0.340$, $p < 0.001$), chest pain ($r = 0.489$, $p < 0.001$), heart palpitations (feeling heart pound or race) ($r = 0.309$, $p < 0.001$), nausea, gas or indigestion ($r = 0.342$, $p < 0.001$), and a moderate positive associations with pain in your arms, legs or joints ($r = 0.511$, $p < 0.001$), menstrual cramps ($r = 0.511$, $p < 0.001$) and dizziness ($r = 0.615$, $p < 0.001$).

Finally, multivariable regression analyses were used to examine the associations among somatic symptoms and PHQ-9 two factors (F1 – cognitive/affective symptoms; F2 – somatic symptoms) adjusted age, sex, education, currently working, residence, living conditions, and family status (Table 4).

Multivariable regression analysis indicated that PHQ-9 factor 1 (cognitive/affective symptoms), was associated with higher feeling tired or having low energy ($\beta = 0.259$, $p < 0.001$). PHQ-9 factor 2 (somatic symptoms) was associated

*Table 1.* **Sociodemographic characteristics of study participants with significant severity of depressive symptoms (n=189)**

| | **PHQ-9≥10** |
|---|---|
| **Age, years; mean (SD)** | 33.2 (12.8) |
| **Sex, n (%)** | |
| Male | 38 (20.1) |
| Female | 151 (79.9) |
| **Education, n (%)** | |
| Primary | 4 (2.1) |
| Secondary | 73 (38.6) |
| Higher | 112 (59.3) |
| **Are you currently studying? n (%)** | |
| Yes, at school | 4 (2.1) |
| Yes, at college or university | 81 (42.9) |
| No | 104 (55.0) |
| **Are you currently working? n (%)** | |
| Yes, full-time | 103 (54.5) |
| Yes, part-time | 33 (17.5) |
| Yes, I am a freelancer | 11 (5.8) |
| No | 42 (22.2) |
| **Where is your place of residence? n (%)** | |
| In the city | 149 (78.8) |
| In the town | 27 (14.3) |
| In the village | 13 (6.9) |
| **How would you rate your living conditions? n (%)** | |
| Very poor | 1 (0.5) |
| Much worse than average | 5 (2.6) |
| Worse than average | 16 (8.5) |
| Average | 86 (45.5) |
| Much better than average | 45 (23.8) |
| Better than average | 25 (13.2) |
| Very good | 11 (5.8) |
| **Family status, n (%)** | |
| Single | 68 (36.0) |
| In an extramarital relationship | 47 (24.9) |
| Married | 57 (30.2) |
| Widower | 2 (1.1) |
| Divorced | 15 (7.9) |
| **Do you have any children? n (%)** | |
| No | 123 (65.1) |
| 1 | 18 (9.5) |
| 2 | 38 (20.1) |
| 3 | 7 (3.7) |
| 4 | 3 (1.6) |
| PHQ-15, total score; mean (SD) | 12.9 (4.4) |
| PHQ-9, total score; mean (SD) | 14.8 (4.2) |

*Table 2.* **The range of somatic symptoms severity among study participants with significant severity of depressive symptoms (n=189)**

| Symptoms | Mean (SD) | Did not bother me at all | Bothered me minimally | Bothered me significantly |
|---|---|---|---|---|
| | | n (%) | | |
| Stomach pain | 0.44 (0.61) | 373 (62.0) | 193 (32.1) | 36 (6.0 |
| Back pain | 0.90 (0.67) | 169 (28.1) | 327 (54.3) | 106 (17.6) |
| Pain in your arms, legs or joints (knees, hips, etc.) | 0.74 (0.71) | 253 (42.0) | 255 (42.4) | 94 (15.6) |
| Menstrual cramps or other problems with your periods | 0.54 (0.71) | 352 (58.5 | 175 (29.1) | 75 (12.5) |
| Been bothered by pain or problems during sexual intercourse | 0.14 (0.40) | 530 (88.0) | 60 (10.0) | 12 (2.0) |
| How often have you been bothered by headaches | 0.84 (0.68) | 195 (32.4) | 308 (51.2) | 99 (16.4) |
| Bothered by chest pain | 0.28 (0.53) | 455 (75.6) | 123 (20.4) | 24 (4.0) |
| Been bothered by dizziness | 0.48 (0.63) | 356 (59.1 | 201 (33.4) | 45 (7.5) |
| Been bothered by fainting spells | 0.03 (0.22) | 585 (97.2) | 13 (2.2) | 4 (0.7) |
| Feeling your heart pound or race | 0.48 (0.65) | 363 (60.3) | 189 (31.4) | 50 (8.3) |
| Bothered by shortness of breath | 0.18 (0.46) | 508 (84.4) | 77 (12.8) | 17 (2.8) |
| Bothered by constipation, loose bowels or diarrhea | 0.56 (0.66) | 322 (53.5) | 222 (36.9) | 58 (9.6) |
| Bothered by nausea, gas or indigestion | 0.65 (0.67) | 275 (45.7) | 260 (43.2) | 67 (11.1) |
| Bothered by trouble sleeping | 1.06 (0.78) | 165 (27.4) | 236 (39.2) | 201 (33.4) |
| Bothered by feeling tired or having low energy | 1.39 (0.65) | 56 (9.3) | 254 (42.2) | 292 (48.5) |

with higher rates of back pain ($\beta = 0.250$, $p < 0.001$), pain in arms, legs or joints ($\beta = 0.488$, $p < 0.001$), menstrual cramps ($\beta = 0.640$, $p < 0.001$), pain or problems during sexual intercourse ($\beta = 0.270$, $p < 0.001$), headaches ($\beta = 0.304$, $p < 0.001$), chest pain ($\beta = 0.304$, $p < 0.001$), dizziness ($\beta = 0.594$, $p < 0.001$), heart palpitations (feeling heart pound or race) ($\beta = 0.266$, $p < 0.001$), nausea, gas or indigestion ($\beta = 0.281$, $p < 0.001$) and feeling tired or having low energy ($\beta = 0.223$, $p < 0.001$), after adjusting each regression model for potential confounders.

## DISCUSSION

In the current study, we aimed to evaluate the correlations of subjective expressions of somatic, cognitive, and depressive symptoms severity among individuals at risk of depressive disorder.

This study shows that 189 respondents out of the 603 respondents who accepted the invitation and completed the survey, reported having significant severity of depressive symptoms (31.34%). This compares with the data provided by

*Table 3.* **Correlations between somatic symptoms (PHQ-15) and PHQ-9 factors**

| Factors | F1 | | F2 | |
|---|---|---|---|---|
| | r | p | r | p |
| Stomach pain | 0.058 | 0.431 | 0.159 | 0.029 |
| Back pain | 0.030 | 0.685 | 0.278 | **<0.001** |
| Pain in your arms, legs or joints (knees, hips, etc.) | 0.018 | 0.804 | 0.511 | **<0.001** |
| Menstrual cramps or other problems with your periods | 0.093 | 0.204 | 0.572 | **<0.001** |
| Been bothered by pain or problems during sexual intercourse | 0.012 | 0.871 | 0.279 | **<0.001** |
| How often have you been bothered by headaches | 0.164 | 0.024 | 0.340 | **<0.001** |
| Bothered by chest pain | 0.114 | 0.120 | 0.489 | **<0.001** |
| Been bothered by dizziness | 0.155 | 0.034 | 0.615 | **<0.001** |
| Been bothered by fainting spells | – 0.008 | 0.916 | 0.177 | 0.015 |
| Feeling your heart pound or race | 0.141 | 0.009 | 0.309 | **<0.001** |
| Bothered by shortness of breath | 0.032 | 0.657 | 0.211 | 0.004 |
| Bothered by constipation, loose bowels or diarrhea | – 0.047 | 0.525 | 0.143 | 0.049 |
| Bothered by nausea, gas or indigestion | 0.141 | 0.053 | 0.342 | **<0.001** |
| Bothered by trouble sleeping | 0.172 | <0.018 | 0.111 | 0.129 |
| Bothered by feeling tired or having low energy | 0.252 | **<0.001** | 0.290 | **<0.001** |

F1 – cognitive/affective symptoms; F2 – somatic symptoms
*Bonferoni p<0.003

*Table 4.* **Multivariable regression analyses of associations between somatic symptoms and PHQ-9 factors**

| | F1 | | | F2 | | |
|---|---|---|---|---|---|---|
| | $R^2$ | β | p | $R^2$ | β | p |
| Stomach pain | 0.124 | 0.101 | 0.168 | 0.199 | 0.169 | 0.017 |
| Back pain | 0.119 | 0.071 | 0.328 | 0.231 | 0.250 | **<0.001** |
| Pain in your arms, legs or joints (knees, hips, etc.) | 0.114 | 0.005 | 0.947 | 0.394 | 0.488 | **<0.001** |
| Menstrual cramps or other problems with your periods | 0.128 | 0.147 | 0.092 | 0.436 | 0.640 | **<0.001** |
| Been bothered by pain or problems during sexual intercourse | 0.114 | 0.006 | 0.934 | 0.237 | 0.270 | **<0.001** |
| How often have you been bothered by headaches | 0.131 | 0.135 | 0.065 | 0.259 | 0.304 | **<0.001** |
| Bothered by chest pain | 0.129 | 0.122 | 0.088 | 0.436 | 0.525 | **<0.001** |
| Been bothered by dizziness | 0.131 | 0.131 | 0.069 | 0.505 | 0.592 | **<0.001** |
| Been bothered by fainting spells | 0.118 | – 0.060 | 0.406 | 0.180 | 0.084 | 0.230 |
| Feeling your heart pound or race | 0.145 | 0.180 | 0.013 | 0.239 | 0.266 | **<0.001** |
| Bothered by shortness of breath | 0.120 | 0.076 | 0.303 | 0.192 | 0.145 | 0.042 |
| Bothered by constipation, loose bowels or diarrhea | 0.115 | 0.035 | 0.652 | 0.183 | 0.106 | 0.149 |
| Bothered by nausea, gas or indigestion | 0.135 | 0.150 | 0.041 | 0.244 | 0.281 | **<0.001** |
| Bothered by trouble sleeping | 0.137 | 0.153 | 0.032 | 0.182 | 0.097 | 0.162 |
| Bothered by feeling tired or having low energy | 0.176 | 0.259 | **<0.001** | 0.219 | 0.223 | **0.001** |

F1 – cognitive/affective symptoms; F2 – somatic symptoms. *Bonferoni p<0.003
Adjusted age, sex, education, currently working, residence, living conditions, family status

Eurostat, showing that 7.2% of EU citizens reported having chronic depression in 2019, a minor increase compared to 2014 (+0.3 percentage points) (Eurostat statistics explained: "Mental well-being and social support statistics" [44]), where our survey recorded even higher figures than the survey conducted in 2019. The mentioned rise in results obtained could be due to COVID-19. This is also discussed in the research conducted with respondents who are 60 years old and older. In Portugal, the proportion of respondents reporting increased symptoms of sadness/depression ranges between more than 30 percent [45]. Meanwhile, an increase of slightly less than 20 percent is being recorded in Lithuania.

During the study, it was found that subjects with significantly expressed depression manifested several somatic symptoms. Ohayon and Schatzberg's population study also indicated that 43.4% of subjects with MDD reported having at least 1 chronic painful physical condition, which occurs four times as frequently as the remaining sample (16.1%) [46].

Our study showed that cognitive-affective symptoms have a significant correlation with fatigue and feeling lack of energy. This is one of the main symptoms of depression which possibly determines the cognitive deterioration that is observed during a depressive episode, regardless of gender, age, or other sociodemographic characteristics. The most significant impairment of cognitive functions occurs during and between episodes of depression. Cognitive subdomains such as learning and memory, executive functioning, processing speed, attention, and concentration significantly contribute to occupational and functional disability in people with depression [47]. Therefore, in order to treat depression and achieve effective treatment outcomes, patients have to restore their cognitive functions.

It is also important to note, that the study found a significant link between somatic symptoms (such as back pain, pain in arms, legs, or joints, menstrual cramps, pain during sexual intercourse, headaches, chest pain, dizziness, head pounding, nausea, low energy) and resolution of affective symptoms. Naturally, people start to feel anxious about their health when being faced with somatic symptoms. Anxiety can manifest itself as constant thinking about the severity of symptoms, which requires large amounts of individual energy. A study of patients with cardiac neurosis also found that somatic symptoms are linked with mood disturbances, where depression rates reach up to 50% [48].

The shortcoming of the research is that the conducted survey did not include questions on whether respondents suffered from depression and other mental or somatic illnesses. The absence of this question precluded the assessment of individuals who were already at increased risk of depression. Another study limitation is the cross-sectional design. Since only one-time symptoms are assessed, they cannot be evaluated as a variable of somatic signs with affective symptoms (for example during treatment with antidepressants) to determine whether the expressiveness is reduced or not. Moreover, the Cronbach's alpha of both PHQ-9 and PHQ-15 questionnaires is considered moderate (acceptable) [49] and ranges from 0.53 to 0.69. An established interpretation of the coefficient is $\alpha < 0.5$ for low reliability, $0.5 < \alpha < 0.8$ for moderate (acceptable) reliability, and $\alpha > 0.8$ for high (good) reliability [50]. The value of Cronbach's alpha is impacted by the length of the test and its dimensionality. A reduced alpha value might arise from a limited quantity of questions, insufficient connections among items, or the presence of heterogeneous constructs in the assessment [51].

In conclusion, it can be emphasized that individuals who are at risk of developing depression may experience various somatic symptoms that are conditioned by their depressive state. Our study showed that cognitive-affective symptoms

have a significant correlation with fatigue and feeling lack of energy. That is one of the main symptoms of depression which possibly determines the cognitive deterioration that is observed during a depressive episode, regardless of gender, age, or other sociodemographic characteristics. Moreover, the study found a significant link between somatic symptoms (such as back pain, pain in arms, legs, or joints, menstrual cramps, pain during sexual intercourse, headaches, chest pain, dizziness, head pounding, nausea, and low energy) and resolution of affective symptoms.

However, the obtained results indicate that the following research is required to identify other factors affecting the severity of the disease and to determine more sufficient treatment plans.

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## REFERENCES

1. Andrade L, Caraveo-Anduaga JJ, Berglund P, et al. The epidemiology of major depressive episodes: results from the International Consortium of Psychiatric Epidemiology (ICPE) Surveys [published correction appears in Int J Methods Psychiatr Res. 2003;12(3):165]. Int J Methods Psychiatr Res. 2003;12(1):3-21. doi:10.1002/mpr.138
2. World Health Organization. Depressive disorder (depression) [Internet]. Available from: https://www.who.int/news-room/fact-sheets/detail/depression. Accessed November 20, 2023
3. Brigitta B. Pathophysiology of depression and mechanisms of treatment. Dialogues Clin Neurosci. 2002;4(1):7-20. doi:10.31887/DCNS.2002.4.1/bbondy
4. Shadrina M, Bondarenko EA, Slominsky PA. Genetics Factors in Major Depression Disease. Front Psychiatry. 2018;9:334. Published 2018 Jul 23. doi:10.3389/fpsyt.2018.00334
5. Woody CA, Ferrari AJ, Siskind DJ, Whiteford HA, Harris MG. A systematic review and meta-regression of the prevalence and incidence of perinatal depression. J Affect Disord. 2017;219:86-92. doi:10.1016/j.jad.2017.05.003
6. American Psychiatric Association. "Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition", 2013
7. Czerwińska A, Pawłowski T. Cognitive dysfunctions in depression - significance, description and treatment prospects. Zaburzenia funkcji poznawczych w depresji – znaczenie, charakterystyka oraz możliwości leczenia. Psychiatr Pol. 2020;54(3):453-466. doi:10.12740/PP/OnlineFirst/105415
8. Bora E, Harrison BJ, Yücel M, Pantelis C. Cognitive impairment in euthymic major depressive disorder: a meta-analysis. Psychol Med. 2013;43(10):2017-2026. doi:10.1017/S0033291712002085
9. Herrmann LL, Goodwin GM, Ebmeier KP. The cognitive neuropsychology of depression in the elderly. Psychol Med. 2007;37(12):1693-1702. doi:10.1017/S0033291707001134
10. Dehn LB, Beblo T. Verstimmt, verzerrt, vergesslich: Das Zusammenwirken emotionaler und kognitiver Dysfunktionen bei Depression [Depressed, biased, forgetful: The interaction of emotional and cognitive dysfunctions in depression]. Neuropsychiatr. 2019;33(3):123-130. doi:10.1007/s40211-019-0307-4
11. Kennedy SH. Core symptoms of major depressive disorder: relevance to diagnosis and treatment. Dialogues Clin Neurosci. 2008;10(3):271-277. doi:10.31887/DCNS.2008.10.3/shkennedy
12. Ani C, Bazargan M, Hindman D, et al. Depression symptomatology and diagnosis: discordance between patients and physicians in primary care settings. BMC Fam Pract. 2008;9:1. Published 2008 Jan 3. doi:10.1186/1471-2296-9-1
13. Riemann D, Berger M, Voderholzer U. Sleep and depression--results from psychobiological studies: an overview. Biol Psychol. 2001;57(1-3):67-103. doi:10.1016/s0301-0511(01)00090-4
14. Tranter R, O'Donovan C, Chandarana P, Kennedy S. Prevalence and outcome of partial remission in depression. J Psychiatry Neurosci. 2002;27(4):241-247
15. McIntyre R, Kennedy S, Bagby RM, Bakish D. Assessing full remission. J Psychiatry Neurosci. 2002;27(4):235-239
16. Gotlib IH, Joormann J. Cognition and depression: current status and future directions. Annu Rev Clin Psychol. 2010;6:285-312. doi:10.1146/annurev.clinpsy.121208.131305
17. Culpepper L, Lam RW, McIntyre RS. Cognitive Impairment in Patients With Depression: Awareness, Assessment, and Management. J Clin Psychiatry. 2017;78(9):1383-1394. doi:10.4088/JCP.tk16043ah5c
18. O'Brien JT, Lloyd A, McKeith I, Gholkar A, Ferrier N. A longitudinal study of hippocampal volume, cortisol levels, and cognition in older depressed subjects. Am J Psychiatry. 2004;161(11):2081-2090. doi:10.1176/appi.ajp.161.11.2081
19. Sáez-Fonseca JA, Lee L, Walker Z. Long-term outcome of depressive pseudodementia in the elderly. J Affect Disord. 2007;101(1-3):123-129. doi:10.1016/j.jad.2006.11.004
20. Akiskal HS. Diagnosis and classification of affective disorders: new insights from clinical and laboratory approaches. Psychiatr Dev. 1983;1(2):123-160
21. Jones D, Hall SB. Significance of Somatic Complaints in Patients Suffering from Psychotic Depression. Acta Psychother Psychosom. 1963;11:193-199. doi:10.1159/000285676
22. Bair MJ, Robinson RL, Katon W, Kroenke K. Depression and pain comorbidity: a literature review. Arch Intern Med. 2003;163(20):2433-2445. doi:10.1001/archinte.163.20.2433
23. Gerber PD, Barrett JE, Barrett JA, et al. The relationship of presenting physical complaints to depressive symptoms in primary care patients. J Gen Intern Med. 1992;7(2):170-173. doi:10.1007/BF02598007
24. Bonierbale M, Lançon C, Tignol J. The ELIXIR study: evaluation of sexual dysfunction in 4557 depressed patients in France. Curr Med Res Opin. 2003;19(2):114-124. doi:10.1185/030079902125001461
25. Baldwin D, Bridgman K, Buis C. Resolution of sexual dysfunction during double-blind treatment of major depression with reboxetine or paroxetine. J Psychopharmacol. 2006;20(1):91-96. doi:10.1177/0269881105056666
26. Clayton A, Keller A, McGarvey EL. Burden of phase-specific sexual dysfunction with SSRIs. J Affect Disord. 2006;91(1):27-32. doi:10.1016/j.jad.2005.12.007
27. Montejo AL, Llorca G, Izquierdo JA, Rico-Villademoros F. Incidence of sexual dysfunction associated with antidepressant agents: a prospective multicenter study of 1022 outpatients. Spanish Working Group for the Study of Psychotropic-Related Sexual Dysfunction. J Clin Psychiatry. 2001;62 Suppl 3:10-21
28. Kapfhammer HP. Somatic symptoms in depression. Dialogues Clin Neurosci. 2006;8(2):227-239. doi:10.31887/DCNS.2006.8.2/hpkapfhammer
29. Otte C, Gold SM, Penninx BW, et al. Major depressive disorder. Nat Rev Dis Primers. 2016;2:16065. Published 2016 Sep 15. doi:10.1038/nrdp.2016.65
30. Cochran, S. V. & Rabinowitz, F. E. Men and depression : clinical and empirical perspectives. San Diego, California ; Academic Press, 2000
31. Addis ME. Gender and depression in men. Clinical Psychology: Science and Practice. 2008;15(3):153-168. doi: 10.1111/j.1468-2850.2008.00125.x
32. Fava M, Hwang I, Rush AJ, Sampson N, Walters EE, Kessler RC. The importance of irritability as a symptom of major depressive disorder: results from the National Comorbidity Survey Replication. Mol Psychiatry. 2010;15(8):856-867. doi:10.1038/mp.2009.20
33. Levant, R. F. Toward the reconstruction of masculinity. Journal of Family Psychology. 1993;5(3-4):379–402. https://doi.org/10.1037/0893-3200.5.3-4.379
34. Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. Development of the Conformity to Masculine Norms Inventory. Psychology of Men & Masculinity. 2003;4(1):3–25. https://doi.org/10.1037/1524-9220.4.1.3
35. Martin LA, Neighbors HW, Griffith DM. The experience of symptoms of depression in men vs women: analysis of the National Comorbidity Survey Replication. JAMA Psychiatry. 2013;70(10):1100-1106. doi:10.1001/jamapsychiatry.2013.1985
36. Lynch, J.; Kilmartin, CT. The pain behind the mask: Overcoming masculine depression. New York, NY: Routledge; 2013
37. Bogner HR, Gallo JJ. Are higher rates of depression in women accounted for by differential symptom reporting?. Soc Psychiatry Psychiatr Epidemiol. 2004;39(2):126-132. doi:10.1007/s00127-004-0714-z
38. Stewart DE. Clinical practice. Depression during pregnancy. N Engl J Med. 2011;365(17):1605-1611. doi:10.1056/NEJMcp1102730
39. Halfin A. Depression: the benefits of early and appropriate treatment. Am J Manag Care. 2007;13(4 Suppl):S92-S97
40. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606-13. doi: 10.1046/j.1525-1497.2001.016009606.x
41. Pranckeviciene A, Saudargiene A, Gecaite-Stonciene J, Liaugaudaite V, Griskova-Bulanova I, Simkute D, et al. Validation of the patient health questionnaire-9 and the generalized anxiety disorder-7 in Lithuanian student sample. PLoS One. 2022;17(1):e0263027. doi: 10.1371/journal.pone.0263027
42. Stanyte A, Fineberg NA, Podlipskyte A, Gecaite-Stonciene J, Macijauskiene J, Steibliene V, et al. Validation of the Patient Health Questionnaire-9 and the Generalized Anxiety Disorder-7 in Lithuanian individuals with anxiety and mood disorders. J Psychiatr Res. 2023;164:221-8. doi: 10.1016/j.jpsychires.2023.06.027
43. Kroenke K, Spitzer RL, Williams JB. The PHQ-15: validity of a new measure for evaluating the severity of somatic symptoms. Psychosom Med. 2002;64(2):258-66. doi: 10.1097/00006842-200203000-00008
44. Mental well-being and social support statistics [Internet]. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mental_well-being_and_social_support_statistics. Accessed November 22, 2023
45. Atzendorf J, Gruber S. Depression and loneliness of older adults in Europe and Israel after the first wave of covid-19. Eur J Ageing. 2021;19(4):849-861. Published 2021 Aug 24. doi:10.1007/s10433-021-00640-8
46. Ohayon MM, Schatzberg AF. Using chronic pain to predict depressive morbidity in the general population. Arch Gen Psychiatry. 2003;60(1):39-47. doi:10.1001/archpsyc.60.1.39
47. Pan Z, Park C, Brietzke E, et al. Cognitive impairment in major depressive disorder. CNS Spectr. 2019;24(1):22-29. doi:10.1017/S1092852918001207
48. Zheng F, Duan Y, Li J, et al. Somatic symptoms and their association with anxiety and depression in Chinese patients with cardiac neurosis. J Int Med Res. 2019;47(10):4920-4928. doi:10.1177/0300060519869711
49. Tan Ş. Misuses of KR-20 and Cronbach's alpha reliability coefficients. Education Science. 2009;34(152):101–112
50. Ekolu, S. O., Quainoo, H. Reliability of assessments in engineering education using Cronbach's alpha, KR and split-half methods. Global journal of engineering education. 2019;21(1):24-29
51. Tavakol M, Dennick R. Making sense of Cronbach's alpha. Int J Med Educ. 2011;2:53-55. Published 2011 Jun 27. doi:10.5116/ijme.4dfb.8dfd

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# THE EXPERIENCE OF WEIGHT STIGMA IN ADULTS AND ITS RELATIONS WITH MENTAL HEALTH

# Suaugusių asmenų patiriama svorio stigmatizacija ir jos sąsajos su psichikos sveikata

**Aiste SESKEVICIUTE[1], Dalia MARTINAITIENE[1,2]**

**[1]Klaipėdos valstybinė kolegija / Higher Education Institution, Faculty of Technologies, Department of Food Technologies and Nutrition, Klaipėda, Lithuania**

**[2]Laboratory of Behavioural Medicine at Neuroscience Institute, Lithuanian University of Health Sciences, Palanga, Lithuania**

**SUMMARY**

**Introduction.** Research shows that weight stigma is a chronic stressor for many people and a significant social determinant of health, causing adverse health consequences, hindering efforts to improve well-being, and potentially increasing the risk of obesogenic behaviors.

**Aim.** To assess the weight stigma experienced by overweight or obese adults and its relations with mental health.

**Methods.** The study was conducted in February and March 2023 through an anonymous, voluntary online survey on social media. The study included respondents who were overweight or obese (n = 202, 86.1% females, with an average age of 33 ± 9 years). The frequency of weight stigma experiences was assessed using the Stigmatizing Situations Inventory-Brief (SSI-B). To assess the subjective opinion of experiencing weight stigma, the respondents were asked one question: "Do you feel stigmatized because of your body weight?" with possible answers of "yes" or "no". The respondents' mental health was assessed using the short version of the Patient Health Questionnaire (PHQ-4).

**Results.** Only four percent (n = 8) of respondents indicated that they had never experienced weight stigma in their lives. In contrast, the remaining 96% of the respondents have experienced weight stigma at least once in their lives (n = 194). One in two respondents (55.4%) reported feeling weight stigma, and this was more commonly felt by women than men (59.8% and 28.6%, respectively, $p < 0.002$) and individuals younger than 25 years old ($p = 0.023$). Respondents who reported feeling weight stigma were three times more likely to have anxiety (OR = 3.08; 95% CI 1.47–6.47; $p < 0.003$) and depression (OR = 3.34; 95% CI 1.55–7.21; $p < 0.002$) symptoms. Moreover, a more frequent experience of weight stigma increased the likelihood of having both anxiety (OR = 1.65; 95% CI 1.24–2.19; $p < 0.001$) and depression symptoms (OR = 1.74; 95% CI 1.27–2.37; $p < 0.001$) by more than 1.5 times.

**Conclusion.** The study results revealed that weight stigma is a common phenomenon in our society, and experiencing it has a negative impact on an individual's mental health.

**Keywords:** weight stigma, anxiety, depression, mental health

**SANTRAUKA**

**Įvadas.** Tyrimai rodo, kad svorio stigmatizacija daugeliui žmonių yra lėtinis stresorius ir svarbus sveikatą lemiantis socialinis veiksnys, kuris sukelia neigiamų pasekmių sveikatai, trukdo stengtis pagerinti savijautą ir gali didinti nutukimą skatinančios elgsenos riziką.

**Tikslas** – įvertinti antsvorį ar nutukimą turinčių suaugusių asmenų patiriamą svorio stigmatizaciją ir jos sąsajas su psichikos sveikata.

**Metodai.** Tyrimas atliktas 2023 m. vasario–kovo mėnesiais vykdant anoniminę savanorišką internetinę apklausą socialiniuose tinkluose. Tyrime dalyvavo turintys antsvorį ar nutukimu sergantys respondentai (n = 202, 86,1 proc. moterys, amžius 33 ± 9 m.). Svorio stigmatizacijos patyrimo dažnumui įvertinti buvo naudojama Stigmatizuojančių situacijų klausimyno trumpoji versija (SSK-T). Respondentų subjektyviai nuomonei apie patiriamą svorio stigmatizaciją įvertinti, buvo naudojamas vienas klausimas – Ar Jūs jaučiate stigmatizaciją dėl kūno svorio?; atsakymo variantai Taip/Ne. Respondentų psichikos sveikata vertinta naudojant laisvai prieinamą Pacientų sveikatos klausimyno (PSK) trumpąją versiją PSK-4.

**Rezultatai.** Tik keturi procentai (n = 8) respondentų pažymėjo niekada gyvenime nepatyrę stigmatizacijos dėl svorio, tuo tarpu bent kartą gyvenime ar dažniau stigmatizaciją dėl svorio patyrė 96 proc. (n = 194) respondentų. Kas antras tyrime dalyvavęs respondentas (55,4 proc.) nurodė jaučiantis stigmatizaciją dėl kūno svorio ir dažniau ją jautė moterys nei vyrai (atitinkamai 59,8 proc. ir 28,6 proc., $p < 0,002$) ir jaunesni nei 25 metų amžiaus asmenys ($p = 0,023$). Respondentai nurodę, kad jaučią stigmatizaciją dėl kūno svorio, turėjo 3 kartus didesnę tikimybę patirti nerimo (GS = 3,08; 95 proc. PI 1,47–6,47; $p < 0,003$) ir depresijos (GS = 3,34; 95 proc. PI 1,55–7,21; $p < 0,002$) simptomus. O dažnesnis svorio stigmatizacijos patyrimas tikimybę patirti tiek nerimo (GS = 1,65; 95 proc. PI 1,24–2,19; $p < 0,001$), tiek depresijos simptomus (GS = 1,74; 95 proc. PI 1,27–2,37; $p < 0,001$) didino daugiau nei 1,5 karto.

**Išvada**. Tyrimo rezultatai atskleidė, kad stigmatizacija dėl kūno svorio yra dažnas reiškinys mūsų visuomenėje ir jos patyrimas turi neigiamos įtakos asmens psichikos sveikatai.

**Reikšminiai žodžiai:** svorio stigmatizacija, nerimas, depresija, psichikos sveikata

**Autorius susirašinėjimui:** Aiste Seskeviciute, Klaipėdos valstybinė kolegija / Higher Education Institution, Faculty of Technologies, Department of Food Technologies and Nutrition, Bijūnų St. 10, 91223 Klaipėda, E-mail: seskeviciute.aiste@gmail.com

## ĮVADAS

XXI amžiaus visuomenės sveikatos problema tampa vis didėjantis žmonių nutukimas pasaulyje, kuris yra sudėtinga lėtinė liga, turinti didelį neigiamą poveikį žmonių sveikatai. Remiantis Higienos instituto duomenimis, Lietuvoje 2022 metais nutukimu sirgo 77 937 asmenys, iš kurių suaugusieji sudarė 65 264 asmenis. Iš jų daugiau moterų (41 864 asmenys), nei vyrų (23 400 asmenų), o per pastaruosius penkerius metus (nuo 2018 m. iki 2022 m.) nutukimu sergančių asmenų skaičius yra didžiausias [1].

Pastaraisiais dešimtmečiais didėjantis nutukimo lygis taip pat susijęs ir su svorio stigmatizacijos paplitimo didėjimu [2]. Stigma – tai savybė, išskirianti asmenį iš kitų ir reiškianti jo nuvertinimą [3]. Svorio stigmatizacija apibrėžiama kaip diskriminacija, žmonių sukurtų stereotipų nukreipimas į asmenis dėl jų kūno svorio [4]. Svorio stigmos patyrimas dar skirstomas į išorinį ir vidinį (tiesioginį) [5, 6]. Išorinė stigma pasireiškia viešąja stigma, kuri apima išankstines nuostatas, stereotipus ir priešišką požiūrį ar elgesį asmenų atžvilgiu dėl jų kūno svorio, ją išreikšti gali įvairūs šaltiniai, kaip bendraamžiai, tėvai, sveikatos priežiūros specialistai, treneriai ir kt. Tiesioginė svorio stigmos patirties pasekmė – asmenys, turintys antsvorio ar sergantys nutukimu, gali internalizuoti viešąją svorio stigmą, taikydami šias neigiamas nuostatas ir stereotipus dėl kūno svorio sau. Kai kurie tyrimai rodo, jog išorinė, viešoji stigma ir vidinė savistigma veikia unikaliai ir dažnai sukelia skirtingus padarinius [7, 8].

Šiandieninėje visuomenėje nutukimo diskriminavimas tampa įprastu reiškiniu, tad svorio stigmatizacijos egzistavimas dažnai net nepastebimas [9], sukeliamas klaidingas suvokimas, jog nutukimo priežastis yra valios stoka, dėl kurios pasirenkama netinkama mityba ir fizinis pasyvumas [10]. Nutukimas, palyginti su daugeliu kitų fizinės ir psichinės sveikatos būklių, yra bene labiausiai socialiai priimtinas stigmatizavimas [3]. Nors moksliniai tyrimai rodo, kad nutukimą lemia sudėtingos genetinių ir aplinkos veiksnių sąveikos, kurios nepriklauso tik nuo asmens atsakomybės, visuomenėje stebimos gausios svorio stigmatizacijos patirtys įvairiose gyvenimo srityse. Nutukimu sergantys asmenys svorio stigmatizaciją patiria iš pedagogų, darbdavių, sveikatos priežiūros specialistų, žiniasklaidos ir net draugų ir / ar šeimos narių [11]. Svorio stigmatizacija visuomenėje dažnai propaguojama ir toleruojama dėl klaidingų įsitikinimų, kad stigmatizacija ir gėda paskatins asmenis mesti kūno svorį [12]. Tačiau, užuot skatinusi teigiamus pokyčius, svorio stigmatizacija skatina tokį elgesį kaip persivalgymas, socialinė izoliacija, sveikatos priežiūros paslaugų vengimas, sumažėjęs fizinis aktyvumas ir laikui bėgant padidėjęs kūno svoris, o tai dar labiau didina nutukimą ir sudaro kliūtis sveikos elgsenos pokyčiams [13]. Patys stigmatizuojami asmenys yra linkę priimti patiriamą stigmą, kurią gali lydėti sumažėjusi savigarba, padidėjęs psichologinis distresas ir sumažėjusi įveikos elgsena [3]. Nutukimu sergantys asmenys dažnai kenčia nuo padidėjusio kūno svorio dviem būdais. Pirma, dėl paties nutukimo ir jo sukeliamų su sveikata susijusių pasekmių prastėja gyvenimo kokybė, antra, dėl nutukimo stigmatizacijos didėja jų patiriama psichologinė įtampa.

Nepaisant gausėjančių mokslinių tyrimų, aprašančių svorio stigmatizaciją, jos poveikis visuomenės sveikatai vis dar yra ignoruojamas [14]. Nutukimo prevencijos ir gydymo srityse vis dar per mažai apie tai kalbama, nors svorio stigmatizacijos patyrimas yra stresą kelianti patirtis, kuri išlieka ilgą laiką visose svarbiose stigmatizaciją patiriančių asmenų gyvenimo srityse. Svorio stigmatizacija daugeliui žmonių yra lėtinis stresorius ir svarbus sveikatą lemiantis socialinis veiksnys [15], kuris sukelia neigiamų pasekmių sveikatai, trukdo stengtis pagerinti savijautą ir gali didinti nutukimą skatinančios elgsenos riziką [13]. Atsižvelgiant į tai, kad Lietuvoje didėja nutukimu sergančių žmonių (atitinkamai 2018 m. sergančių nutukimu buvo 55 960 asmenys, 2022 m. – 77 937 asmenys) [1], šio tyrimo tikslas – įvertinti antsvorį ar nutukimą turinčių asmenų patiriamą svorio stigmatizaciją ir jos sąsajas su psichikos sveikata.

## TYRIMO MEDŽIAGA IR METODAI

Duomenys surinkti vykdant anoniminę savanorišką internetinę apklausą socialiniuose tinkluose nuo 2023 m. vasario 24 d. iki 2023 m. kovo 10 d. Tyrimui atlikti gautas Klaipėdos valstybinės kolegijos Sveikatos mokslų fakulteto Bioetikos komisijos leidimas (protokolas Nr. SSV5-8). Tyrime dalyvauti buvo kviečiami vyrai ir moterys, nuo 18 metų ir vyresni, turintys antsvorio arba sergantys nutukimu, kurių KMI yra >25. Neįtraukimo kriterijai: KMI yra <25; nesugebėjimas suvokti tyrimo užduoties; lietuvių kalbos nemokėjimas.

Surinkta respondentų sociodemografinė informacija. Svorio stigmatizacijos patyrimui įvertinti buvo naudojama Stigmatizuojančių situacijų klausimyno trumpoji versija (SSK-T) (*angl.* Stigmatizing Situations Inventory-Brief, SSI-B) [16]. Klausimynas iš anglų į lietuvių kalbą išverstas dvigubo vertimo metodu šio straipsnio autorių. SSK-T pateikiamas sąrašas 10 situacijų, su kuriomis žmonės susiduria dėl savo kūno svorio. Respondentai turėjo pažymėti, ar ir kaip dažnai jiems pasitaiko kiekviena iš išvardintų situacijų. Dažnumas nustatomas 10 balų skalėje, nuo 0 (niekada) iki 9 (kasdien). Vertinamas visų elementų vidurkis. Aukštesni vidutiniai balai atspindi dažnesnę svorio stigmatizacijos patirtį. Balų vidurkių ribos 0–9. Nustatytas SSK-T Cronbacho alfa koeficientas šiame tyrime – 0,85.

Tiriamųjų subjektyviai nuomonei apie patiriamą svorio stigmatizaciją įvertinti, buvo naudojamas vienas klausimas – Ar Jūs jaučiate stigmatizaciją dėl kūno svorio?; atsakymo variantai Taip / Ne.

Tiriamųjų psichikos sveikata vertinta naudojant laisvai prieinamą Pacientų sveikatos klausimyno (PSK) trumpąją versiją PSK-4, kuri yra itin trumpa versija, skirta nustatyti depresijos ir generalizuoto nerimo sutrikimų riziką [17]. Tiriamieji turėjo pažymėti kaip dažnai per pastarąsias dvi savaites juos vargino išvardintos problemos, galimi atsakymų variantai nuo 0 (visai nekamavo) iki 3 (beveik kiekvieną dieną). Bendra pirmųjų 2 klausimų balų suma ≥3 rodo nerimo simptomų buvimą, bendra paskutinių 2 klausimų balų suma ≥3 rodo depresijos simptomų buvimą. PSK-4 Cronbach alfa koeficientas šiame tyrime – 0,86.

Duomenų analizė atlikta naudojantis SPSS for Windows 29.0 programa. Kiekybiniai kintamieji, pasiskirstę pagal normalųjį skirstinį, aprašomi vidurkiu ir standartiniu nuokrypiu (SN). Dažnių palyginimui naudotas chi-kvadrato

($\chi 2$) kriterijus su Fišerio testo patikslinimu, o dviejų proporcijų palyginimui taikytas Z testas. Priklausomybės ryšiui tarp svorio stigmatizacijos patyrimo dažnumo ir sociodemografinių rodiklių, KMI, subjektyvios tiriamųjų nuomones, psichikos sveikatos taikytas Spearmano koreliacijos koeficientas (r). Siekiant įvertinti lyties, amžiaus, KMI ir svorio stigmatizacijos patyrimo įtaką respondentų psichikos sveikatai (patiriamiems nerimo ir depresijos simptomams) atlikta daugiaveiksnė binarinė logistinė regresinė analizė, apskaičiuotas galimybių santykis (GS) ir jo 95 proc. pasikliautinasis intervalas (PI), Nagelkerke determinacijos koeficientas. Skirtumas laikytas statistiškai patikimu, kai $p < 0,05$. Tikrinant vidinį skalių suderinamumą, skaičiuoti Cronbacho alfa rodikliai.

**REZULTATAI**

Tyrime sutiko dalyvauti 224 respondentai. Vienas respondentas savo amžių nurodė <18 metų; 21 respondento KMI buvo <25. Todėl į tyrimą įtrauktos 202 įtraukimo kriterijus atitikusios respondentų anketos. Pagrindinės respondentų charakteristikos pateiktos 1 lentelėje. Tyrime dalyvavo daugiau moterų (86,1 proc.) nei vyrų, daugiau nei pusė (58,4 proc.) buvo jaunesni nei 35 m. amžiaus (amžiaus vidurkis 33 ± 9 m. (nuo 18 m. iki 64 m.), trys penktadaliai respondentų turėjo aukštąjį išsilavinimą (63,8 proc.) ir didžioji dalis respondentų turėjo antsvorį (38,1 proc.) arba sirgo I laipsnio nutukimu (32,7 proc.). Daugiau nei pusė respondentų (55,4 proc.) nurodė jaučiantys stigmatizaciją dėl kūno svorio ir daug dažniau ją jautė moterys (atitinkamai 59,8 proc. ir 28,6 proc., $p < 0,002$). SSK-T balo vidurkis tiriamojoje grupėje buvo 2,01 (SN 1,53), tarp moterų – 2,01 (SN 1,48), vyrų – 1,98 (SN 1,87). Beveik pusė respondentų patyrė nerimo (46,0 proc.) ir / ar depresijos (46,5 proc.) simptomus. Nors nerimo ir depresijos simptomų daugiau patyrė moterys nei vyrai, statistiškai reikšmingų skirtumų tarp lyčių nenustatyta.

Tyrimo duomenimis, nerimo simptomus dažniau turėjo jaunesni nei 25 m. respondentai, lyginat su vyresniais nei 44 m. ($p = 0,046$) (2 lentelė). Beveik trys ketvirtadaliai (72,3 proc.) depresijos simptomus patyrusių respondentų buvo jaunesni nei 35 metų amžiaus. Asmenys jaunesni nei 25 m. dažniau nurodė jaučiantys ir stigmatizaciją dėl svorio ($p = 0,023$), o vyresni nei 44 m. stigmatizaciją jautė rečiau ($p = 0,001$). Tuo tarpu, nei išsilavinimas, nei kūno svoris tarp jaučiančių ir nejaučiančių

*1 lentelė.* **Respondentų pagrindinės charakteristikos bendrai ir pagal lytį**

| Charakteristika | Visi (n = 202) n (proc.) | Moterys (n = 174) n (proc.) | Vyrai (n = 28) n (proc.) | p reikšmė* |
|---|---|---|---|---|
| **Amžius, metai** | | | | 0,118 |
| <25 | 44 (21,8) | 34 (19,5) | 10 (35,7) | |
| 25–34 | 74 (36,6) | 64 (36,8) | 10 (35,7) | |
| 35–44 | 61 (30,2) | 57 (32,8) | 4 (14,3) | |
| >44 | 23 (11,4) | 19 (10,9) | 4 (14,3) | |
| **Išsilavinimas** | | | | 0,887 |
| Vidurinis | 50 (24,8) | 42 (24,1) | 8 (28,6) | |
| Profesinis | 23 (11,4) | 20 (11,5) | 3 (10,7) | |
| Aukštasis neuniversitetinis | 52 (25,7) | 44 (25,3) | 8 (28,6) | |
| Aukštasis | 77 (38,1) | 68 (39,1) | 9 (32,1) | |
| **KMI** | | | | 0,461 |
| Antsvoris | 77 (38,1) | 63 (36,2) | 14 (50,0) | |
| I laipsnio nutukimas | 66 (32,7) | 59 (33,9) | 7 (25,0) | |
| II laipsnio nutukimas | 35 (17,3) | 32 (18,4) | 3 (10,7) | |
| III laipsnio nutukimas | 24 (11,9) | 20 (11,5) | 4 (14,3) | |
| **Patiria svorio stigmatizaciją**:** | | | | 0,002 |
| Taip | 112 (55,4) | 104 (59,8) | 8 (28,6) | |
| Ne | 90 (44,6) | 70 (40,2) | 20 (71,4) | |
| SSK-T balas (vidurkis + SN) | 2,01 ± 1,53 | 2,01 ± 1,48 | 1,98 ± 1,87 | 0,380 |
| **PSK-4 Nerimo simptomai** | | | | 0,440 |
| Yra | 93 (46,0) | 82 (47,1) | 11 (39,3) | |
| Nėra | 109 (54,0) | 92 (52,9) | 17 (60,7) | |
| **PSK-4 Depresijos simptomai** | | | | 0,674 |
| Yra | 94 (46,5) | 82 (47,1) | 12 (42,9) | |
| Nėra | 108 (53,5) | 92 (52,9) | 16 (57,1) | |

* p reikšmė lyginant tarp vyrų ir moterų ** pagal atsakymą į klausimą „Ar jaučiate stigmatizaciją dėl svorio?“ – Taip / Ne
SSK-T – Stigmatizuojančių situacijų klausimyno trumpoji versija; PSK-4 – Pacientų sveikatos klausimyno trumpoji versija

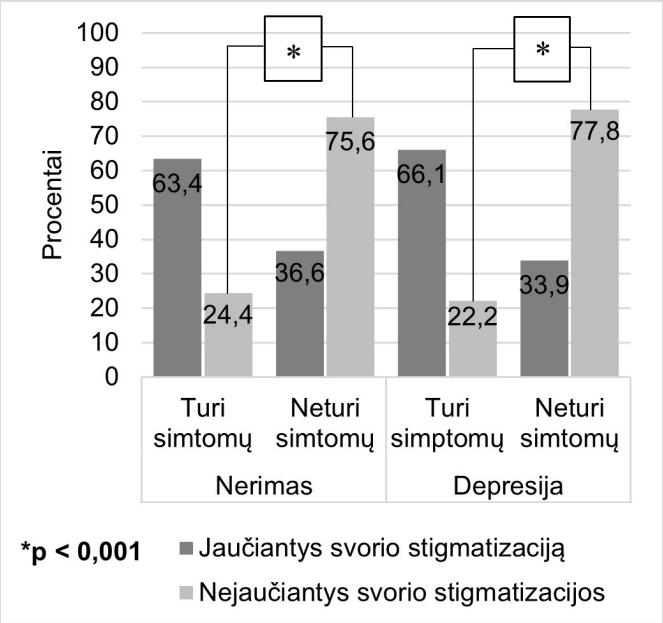
*2 lentelė.* **Respondentų, suskirstytų pagal atsakymą į klausimą „Ar Jūs jaučiate stigmatizaciją dėl kūno svorio?“ ir nerimo bei depresijos simptomų buvimą, sociodemografinių–antropometrinių charakteristikų palyginimas**

| Charakteristika | Jaučia stigmatizaciją | | p* | Nerimo simptomai | | p* | Depresijos simptomai | | p* |
|---|---|---|---|---|---|---|---|---|---|
| | Taip n (proc.) | Ne n (proc.) | | Yra n (proc.) | Nėra n (proc.) | | Yra n (proc.) | Nėra n (proc.) | |
| **Amžius, metai** | | | | | | | | | |
| <25 | 31 (27,7) | 13 (14,4) | 0,023 | 27 (29,0) | 17 (15,6) | 0,046 | 30 (31,9) | 14 (13,0) | 0,001 |
| 25–34 | 47 (42,0) | 27 (30,0) | 0,079 | 33 (35,5) | 41 (37,6) | | 38 (40,4) | 36 (33,3) | |
| 35–44 | 30 (26,8) | 31 (34,4) | 0,243 | 27 (29,0) | 34 (31,2) | | 24 (25,5) | 37 (34,3) | |
| >44 | 4 (3,6) | 19 (21,1) | 0,001 | 6 (6,5) | 17 (15,6) | | 2 (2,1) | 21 (19,4) | |
| **Išsilavinimas** | | | | | | | | | |
| Vidurinis | 29 (25,9) | 21 (23,4) | 0,671 | 26 (28,0) | 24 (22,0) | 0,350 | 30 (31,9) | 20 (18,5) | 0,136 |
| Profesinis | 13 (11,6) | 10 (11,1) | 0,912 | 13 (14,0) | 10 (9,2) | | 11 (11,7) | 12 (11,1) | |
| Aukštasis neuniversitetinis | 30 (26,8) | 22 (24,4) | 0,699 | 24 (25,8) | 28 (25,7) | | 23 (24,5) | 29 (26,9) | |
| Aukštasis | 40 (35,7) | 37 (41,1) | 0,433 | 30 (32,3) | 47 (43,1) | | 30 (31,9) | 47 (43,5) | |
| **KMI** | | | | | | | | | |
| Antsvoris | 38 (33,9) | 39 (43,3) | 0,173 | 34 (36,6) | 43 (39,4) | 0,965 | 33 (35,1) | 44 (40,7) | 0,875 |
| I laipsnio nutukimas | 39 (34,8) | 27 (30,0) | 0,471 | 32 (34,4) | 34 (31,2) | | 32 (34,0) | 34 (31,5) | |
| II laipsnio nutukimas | 19 (17,0) | 16 (17,8) | 0,882 | 16 (17,2) | 19 (17,4) | | 17 (18,1) | 18 (16,7) | |
| III laipsnio nutukimas | 16 (14,3) | 8 (8,9) | 0,240 | 11 (11,8) | 13 (11,9) | | 12 (12,8) | 12 (11,1) | |

* p reikšmė skirtumo tarp turinčių požymį ir neturinčių

stigmatizaciją bei tarp patiriančių ir nepatiriančių nerimo ir / ar depresijos simptomus statistiškai reikšmingai nesiskyrė (2 lentelė).

Be subjektyvios respondentų nuomonės apie patiriamą stigmatizaciją dėl svorio, tyrime buvo siekiama išsiaiškinti ir stigmatizacijos patyrimo dažnį. SSK-T rezultatų analizė atskleidė, kad tik keturi procentai (n = 8) respondentų pažymėjo niekada gyvenime nepatyrę stigmatizacijos dėl svorio, tuo tarpu bent kartą gyvenime ar dažniau stigmatizaciją dėl svorio patyrė 96 proc. (n = 194) respondentų. SSK-T balo vidurkis svyravo nuo 0 iki 8,10 (3 lentelė). Pusės respondentų (50 proc.) balų vidurkis buvo ≤1,70 rodantys, kad respondentai stigmatizaciją dėl svorio patyrė kelis kartus per gyvenimą ir dažniau. Ketvirtadalis respondentų (25 proc.) stigmatizaciją dėl svorio patiria maždaug kartą per metus ir dažniau (≤2,70), 10 proc. – mažiausiai kelis kartus per metus (≤4,30) ir 5 proc. – mažiausiai kartą per mėnesį ir dažniau (≤5,0).




*1 pav.* **Palyginus psichikos sveikatos rezultatus su subjektyvia respondentų nuomone apie patiriamą stigmatizaciją dėl svorio, rezultatai atskleidė, jog nejaučiantys svorio stigmatizacijos statistiškai reikšmingai rečiau patyrė nerimo (p < 0,001) ir depresijos simptomus (p < 0,001).**

Siekiant nustatyti sąsajas tarp svorio stigmatizacijos patyrimo dažnumo ir tiriamųjų sociodemografinių charakteristikų, KMI, subjektyvios respondentų nuomonės ir psichikos sveikatos, buvo atlikta Spearmano koreliacijos analizė (4 lentelė). Rezultatai atskleidė, kad SSK-T balo vidurkis stipriausiai, t. y. vidutiniškai teigiamai ir statistiškai

*3 lentelė.* **SSK-T balų vidurkių aprašomoji statistika**

| | SSK-T balo vidurkis |
|---|---|
| Minimalus | 0 |
| Maksimalus | 8,10 |
| Percentilės | |
| 25 | 0,8 |
| 50 (mediana) | **1,70** |
| 75 | 2,7 |
| 90 | 4,3 |
| 95 | 5 |

*4 lentelė.* **Spearmano koreliacijos koeficientai (r) tarp SSK-T balo vidurkio ir respondentų sociodemografinių charakteristikų, KMI, subjektyvaus stigmatizacijos patyrimo ir psichikos sveikatos**

| | SSK-T balo vidurkis | Lytis | Amžius | Išsilavinimas | KMI | Jaučia stigmatizaciją*** | Nerimo simptomai | Depresijos simptomai |
|---|---|---|---|---|---|---|---|---|
| SSK-T balo vidurkis | 1 | | | | | | | |
| Lytis | −0,062 | 1 | | | | | | |
| Amžius | −0,347** | −0,106 | 1 | | | | | |
| Išsilavinimas | −0,066 | −0,046 | 0,406** | 1 | | | | |
| KMI | 0,312** | −0,052 | 0,076 | 0,132 | 1 | | | |
| Jaučia stigmatizaciją*** | 0,560** | −0,217** | −0,288** | −0,050 | 0,102 | 1 | | |
| Nerimo simptomai | 0,427** | –0,056 | –0,225** | –0,094 | –0,021 | 0,344** | 1 | |
| Depresijos simptomai | 0,492** | –0,061 | –0,372** | –0,154* | 0,062 | 0,409** | 0,638** | 1 |

*p < 0,05; **p < 0,001 ***pagal atsakymą į klausimą „Ar jaučiate stigmatizaciją dėl svorio?“ – Taip / Ne
SSK-T – Stigmatizuojančių situacijų klausimyno trumpoji versija

reikšmingai buvo susijęs su subjektyvia respondentų nuomone (r = 0,560, p < 0,001), depresijos (r = 0,492, p < 0,001) ir / ar nerimo (r = 0,427, p <0,001) simptomais ir KMI (r = 0,312, p < 0,001) o vidutiniškai neigiamai, statistiškai reikšmingai su amžiumi (r = −0,347, p < 0,001). Tuo tarpu koreliacija tarp SSK-T balo vidurkio ir lyties bei išsilavinimo yra labai silpna, neigiama ir statistiškai nereikšminga.

Siekiant įvertinti lyties, amžiaus, išsilavinimo, KMI ir svorio stigmatizacijos patyrimo įtaką respondentų psichikos sveikatai (patiriamiems nerimo ir depresijos simptomams) atlikta daugiaveiksnė binarinė logistinė regresinė analizė (5 lentelė).

Įvertinus įtrauktų į modelį požymių (lytis, amžius, išsilavinimas, KMI, subjektyvi respondentų nuomonė apie jaučiamą svorio stigmatizaciją ir SSK-T balo vidurkis) iškraipantįjį poveikį, rezultatai parodė, kad, nepaisant lyties, amžiaus, išsilavinimo ir KMI, patiriama svorio stigmatizacija (tiek subjektyvi respondentų nuomonė, tiek SSK-T balo vidurkis) išliko reikšmingu veiksniu didinančiu nerimo ir depresijos simptomų pasireiškimo tikimybę. Tyrimo dalyviai nurodę, kad jaučią stigmatizaciją dėl svorio, turėjo 3 kartus didesnę tikimybę patirti nerimo (GS = 3,08; 95 proc. PI 1,47–6,47; p < 0,003) ir depresijos (GS = 3,34; 95 proc. PI 1,55–7,21; p < 0,002) simptomus. O dažnesnis stigmatizacijos patyrimas tikimybę patirti tiek nerimo (GS = 1,65; 95 proc. PI 1,24–2,19; p < 0,001), tiek depresijos simptomus (GS = 1,74; 95 proc. PI 1,27–2,37; p < 0,001) didino daugiau nei 1,5 karto. Be to, subjektyviai suvokiama jaučiama svorio stigmatizacija ir dažnesnė stigmatizuojančių situacijų patirtis nusako 27,1 proc. nerimo ir 37,4 proc. depresijos simptomų pasireiškimo kitimo.

## APTARIMAS

Šiuo tyrimu siekta įvertinti antsvorį ar nutukimą turinčių asmenų patiriamą svorio stigmatizaciją ir jos sąsajas su psichikos sveikata. Tyrimo rezultatai atskleidė, kad stigmatizacija dėl kūno svorio yra dažnas reiškinys mūsų visuomenėje ir jos patyrimas turi neigiamos įtakos asmens psichikos sveikatai.

Bent kartą gyvenime ar dažniau stigmatizaciją dėl svorio įvairiose gyvenimiškose situacijose patyrė 96 proc. respondentų ir dažniau šias situacijas patyrė jaunesni ir turintys didesnį

*5 lentelė.* **Nerimo ir depresijos simptomų buvimas priklausomai nuo sociodemografinių, antropometrinių ir svorio stigmatiziacijos patyrimo požymių (logistinės regresijos metodas)**

| Požymiai | Nerimo simptomai | | | Depresijos simptomai | | |
|---|---|---|---|---|---|---|
| | GS | 95 proc. PI | p reikšmė | GS | 95 proc. PI | p reikšmė |
| Lytis | 0,97 | 0,36–2,61 | 0,96 | 1,08 | 0,38–3,08 | 0,88 |
| Amžius | 1,01 | 0,97–1,05 | 0,56 | 0,97 | 0,93–1,01 | 0,17 |
| Išsilavinimas | 0,83 | 0,62–1,10 | 0,19 | 0,83 | 0,62–1,12 | 0,22 |
| KMI | 0,96 | 0,90–1,02 | 0,96 | 0,97 | 0,91–1,04 | 0,40 |
| Jaučia stigmatizaciją* | 3,08 | 1,47–6,47 | 0,003 | 3,34 | 1,55–7,21 | 0,002 |
| SSK-T balo vidurkis | 1,65 | 1,24–2,19 | <0,001 | 1,74 | 1,27–2,37 | <0,001 |
| Modelio Nagelkerke $R^2$ | 27,1 proc. | | 37,4 proc. | | | |

* pagal atsakymą į klausimą „Ar jaučiate stigmatizaciją dėl svorio?“ – Taip / Ne
SSK-T – Stigmatizuojančių situacijų klausimyno trumpoji versija

KMI respondentai. Tai, kad svorio stigmatizacija yra paplitusi rodo eilė tyrimų atliktų skirtingose šalyse [18, 19]. Panašūs rezultatai gauti Pietų Taivane atliktame tyrime, kuriame taip pat buvo vertintas patiriamų stigmatizuojančių situacijų dažnis tarp antsvorį ar nutukimą turinčių asmenų naudojant modifikuotą SSK-T versiją [20]. Bent vieną su svoriu susijusią stigmatizuojančią patirtį per savo gyvenimą patyrė 98 proc. respondentų. O aukštesni SSK-T balai, rodantys dažnesnį stigmos patyrimą, kaip ir mūsų tyrime, buvo susiję su jaunesniu amžiumi ir didesniu KMI. Kito plataus tyrimo, kuriame stigmatizacijos dėl svorio patyrimas buvo vertinamas šešiose šalyse: Australijoje, Kanadoje, Prancūzijoje, Vokietijoje, Jungtinėje Karalystėje ir JAV; rezultatai parodė [21], jog visose šalyse didesnis KMI buvo susijęs su didesne tikimybe patirti stigmatizaciją dėl svorio, o vyresnis amžius, priešingai, buvo susijęs su mažesne stigmatizacijos patyrimo tikimybe.

Subjektyvios respondentų nuomonės rezultatai parodė, jog kas antras tyrime dalyvavęs antsvorį ar nutukimą turintys asmuo (55,4 proc.) nurodė jaučiantys stigmatizaciją dėl kūno svorio ir dažniau ją jautė moterys bei jaunesnio amžiaus asmenys. Subjektyvi nuomonė apie jaučiamą stigmatizaciją taip pat patvirtino dažnesnį stigmatizuojančių situacijų patyrimą. T. y. asmenys nurodę, kad jaučią stigmatizaciją dėl svorio statistiškai reikšmingai dažniau patyrė stigmatizaciją įvairiose gyvenimiškose situacijose. Tačiau išryškėjo tam tikri skirtumai tarp subjektyvios nuomonės, stigmatizacijos patyrimo dažnumo, lyties ir kūno svorio. Vertinant subjektyviai, dažniau jaučiančios stigmatizaciją nurodė moterys, tačiau vertinant patiriamų stigmatizuojančių situacijų dažnumą, statistiškai reikšmingų skirtumų tarp lyčių nenustatyta. Didesnis stigmatizacijos patyrimo dažnio balas buvo susijęs su didesniu KMI, tuo tarpu reikšmingų KMI skirtumų tarp subjektyviai nurodžiusių, kad jaučią stigmatizaciją dėl svorio ir nejaučiančių, nebuvo nustatyta. Kalbant apie lytį, tokius rezultatus galėjo lemti didesnis tyrime dalyvavusių moterų skaičius (86,1 proc.), tačiau taip pat keliame prielaidą, kad šie skirtumai yra dėl didesnio moterų jautrumo su kūno įvaizdžiu susijusiems komentarams, nepaisant jų kūno svorio, o taip pat ir dėl plačiai paplitusio fizinio patrauklumo idealo, kuris pabrėžia, kad lieknumas yra svarbiausias moters grožio elementas. Kalbant apie KMI, darome prielaidą, jog nepaisant to, kad respondentai per gyvenimą patiria stigmatizuojančių situacijų, tačiau ne visi į jas vienodai reaguoja, kai kurie, galbūt, ne taip kreipia dėmesį ir jų nesureikšmina. Taip pat manome, kad šie rezultatai yra susiję su svorio stigmos internalizavimu. Internalizuota svorio stigma – tai asmens tikėjimo stereotipais, susijusiais su neigiamu savęs vertinimu, matas [5]. Patyręs su svoriu susijusią diskriminaciją, asmuo gali internalizuoti svorio stigmą ir save stigmatizuoti. Patirtis, susijusi su svorio stigmatizavimu, nebūtinai yra internalizuota, o svorio stigmatizavimo internalizavimas pas asmenis gali išsivystyti dėl įvairios gyvenimiškos patirties (pvz., žiniasklaidos poveikio), kuri pas visus skirtinga. Jaučiama svorio stigmatizavimo patirtis ir svorio stigmos internalizavimas gali veikti skirtingai ir tokiu būdu turėti skirtingą poveikį [22].

Mūsų tyrimo rezultatai parodė, kad stigmatizaciją dėl svorio labiau jaučia moterys ir jaunesnio amžiaus asmenys ir tai patvirtina eilė tyrimų [21; 23-26], tačiau kai kurie tyrimai rodo priešingus rezultatus. Neseniai atlikta metaanalizė [15], naudojusi daugiau nei 59 000 dalyvių iš 105 tyrimų duomenis, parodė, kad nors svorio stigmatizaciją patiria abi lytys, duomenys išlieka prieštaringi. Kai kurie tyrimai rodo, kad vyrai ir moterys yra vienodai pažeidžiami svorio stigmatizacijos, kiti, kad moterys svorio stigmatizaciją patiria dažniau nei vyrai, įskaitant santykius, mokslą ir darbą. Mokslinėje literatūroje nurodoma, kad reikalinga atlikti daugiau tyrimų, kad būtų galima išsiaiškinti svorio stigmatizacijos ir lyties ir amžiaus ryšį, nes nėra jokio nuoseklaus dėsningumo [2].

Vertinant stigmatizacijos dėl svorio patyrimo sąsajas su psichikos sveikata atlikta daug įvairių tyrimų. Daugelyje jų, kaip ir mūsų tyrime, nustatyta, kad dažnesnė stigmatizacijos patirtis lemia prastesnę asmenų psichikos sveikatos būklę [27]. Mūsų tyrime, asmenys, nurodę, kad nejaučia stigmatizacijos dėl kūno svorio, rečiau patyrė nerimo ir depresijos simptomus. Dar daugiau, nepriklausomai nuo lyties, amžiaus, išsilavinimo ir KMI, asmenys jaučiantys stigmatizaciją dėl svorio, turėjo 3 kartus didesnę tikimybę patirti nerimo ir / ar depresijos simptomus, o dažnesnis stigmatizacijos patyrimas tikimybę patirti tiek nerimo, tiek depresijos simptomus didino daugiau nei 1,5 karto. Jau minėtoje metaanalizėje [15], rezultatai taip pat patvirtino, kad dažnesnė svorio stigmatizacija yra susijusi su stipriau išreikštu psichologiniu stresu, nerimo ir depresijos simptomais. Tyrimuose tarp suaugusių nutukimu sergančių respondentų, norinčių atlikti bariatrinę operaciją [28] ar siekiančių gydymo dėl nutukimo [29], dažnesni svorio stigmatizacijos išgyvenimai padidino depresijos simptomų sunkumą. O tyrimuose, tyrusiuose įvairaus kūno svorio studentus Indonezijoje [30] ir Tailande [31], dažnesnė svorio stigmatizacijos patirtis statistiškai reikšmingai buvo susijusi su surinktais didesniais balais, rodančiais didesnį depresijos, nerimo ir streso lygį. Šioms sąsajoms paaiškinti galima būtų kelti prielaidą, kad mokslinėje literatūroje aprašomas su svorio stigmatizacija susijęs dažnesnis kitų žmonių atstūmimas, dažnesnė socialinė izoliacija, nepasitenkinimas savo kūnu, gėdos jausmas, padidina nuolat lydinčias neigiamas emocijas, kurios gali lemti dažnesnį stipriau išreikštų nerimo ir depresijos simptomų turėjimą. Nerimą kelia tai, kad šios patiriamos neigiamos emocijos turi ilgalaikių pasekmių. Viename didelės apimties tyrime (n = 33 604) pastebėta, kad ankščiau antsvorį turėję respondentai, dažniau patyrė svorio stigmatizaciją ir net numetę svorio turėjo didesnę riziką nerimo ir depresijos sutrikimų pasireiškimui ar bandymui nusižudyti nei niekada antsvorio neturėję respondentai [32]. Tyrimais nustatyta, jog tikimybė, kad mergaitės ir berniukai, iš kurių buvo tyčiojamasi dėl jų kūno svorio, galvoja apie savižudybę ir bando nusižudyti, yra maždaug 2 kartus didesnė, palyginti su tais, iš kurių nebuvo tyčiojamasi dėl jų kūno svorio [33].

Mūsų rezultatai patvirtina literatūroje keliamas prielaidas, kad svorio stigmatizacijos patirtis ir internalizuota svorio stigma gali sukelti skirtingą streso lygį ir turėti skirtingą poveikį sveikatos elgsenai [22]. Respondentai, nurodę jaučiantys stigmatizaciją dėl svorio, turėjo du kartus didesnę tikimybę patirti nerimo ir / ar depresijos simptomus, nei respondentai dažniau patiriantys įvairias stigmatizuojančias situacijas. Šios sąsajos taip pat pasireiškia nepriklausomai nuo KMI, o tai rodo, kad ne vien kūno svoris, bet ir pati stigmatizuojanti patirtis

gali turėti įtakos neigiamoms psichologinėms pasekmėms [2]. Tyrimai taip pat rodo, kad internalizuotos stigmos tendencijos turi didelį neigiamą poveikį ne tik psichikos sveikatai, taip pat gali neigiamai paveikti fizinę sveikatą, gali lemti sveikatai nepalankų mitybos elgesį (pvz., persivalgymą) ir yra susijusios su prastesniu kūno svorio mažinimu ir jo išlaikymu [6].

Apibendrinant, asmenų patiriama stigmatizacija dėl svorio yra susijusi su neigiamomis pasekmėmis psichikos sveikatai. Ši išvada rodo, kad reikia didinti visuomenės ir specialistų informuotumą apie svorio stigmatizacijos problemą ir plėtoti stigmatizacijos dėl svorio prevencijos strategijas. Reikia atkreipti dėmesį į skirtingą svorio stigmatizavimo situacijų patirties ir stigmos internalizavimo poveikį, kuris gali turėti reikšmės tiek klinikinėje praktikoje, tiek visuomenės sveikatai.

**LITERATŪRA**


1. Higienos instituto sveikatos statistinių duomenų portalas. Sergančių asmenų skaičius pagal diagnozių grupes. Prieiga: https://stat.hi.lt/default.aspx?report_id=168 [žiūrėta 2023-10-01].
2. Papadopoulos S, Brennan L. Correlates of weight stigma in adults with overweight and obesity: A systematic literature review. Obesity 2015;23(9):1743–1760.
3. Hilbert A, Ried J, Zipfel S, Martina de Zwaan. Stigmatisierung bei Adipositas. Adipositas 2013;07(03):150–153.
4. World Obesity Federation. Weight stigma. Available from: https://www.worldobesity.org/what-we-do/our-policy-priorities/weight-stigma [cited 2023 Sep 17].
5. Durso LE, Latner JD. Understanding Self-directed Stigma: Development of the Weight Bias Internalization Scale. Obesity 2008;16(S2):S80–S86.
6. Warnick JL, Darling KE, West CE, Jones L, Jelalian E. Weight Stigma and Mental Health in Youth: A Systematic Review and Meta-Analysis. Journal of Pediatric Psychology 2021;47(3):237–255.
7. Corrigan PW, Larson JE, Rusch N. Self-stigma and the "why try" effect: impact on life goals and evidence-based practices. World Psychiatry 2009;8(2):75–81.
8. Krajewski C, Burazeri G, Brand H. Self-stigma, perceived discrimination and empowerment among people with a mental illness in six countries: Pan European stigma study. Psychiatry Research 2013;210(3):1136–1146.
9. Westbury S, Oyebode O, van Rens T, Barber TM. Obesity Stigma: Causes, Consequences, and Potential Solutions. Current Obesity Reports 2023;12(1):10–23.
10. Upadhay J, Farr O, Perakakis N, Ghaly W, Mantzoros C. Obesity as a Disesase. Medical Clinics of North America 2018;102(1):13–33.
11. Brown A, Flint SW, Batterham RL. Pervasiveness, impact and implications of weight stigma. eClinicalMedicine 2022;47:101408.
12. Callahan D. Obesity: chasing an elusive epidemic. The Hastings Center report 2013;43(1):34–40.
13. Puhl R, Suh Y. Health Consequences of Weight Stigma: Implications for Obesity Prevention and Treatment. Current Obesity Reports 2015;4(2):182–190.
14. Puhl RM, Heuer CA. Obesity Stigma: Important Considerations for Public Health. American Journal of Public Health 2010;100(6):1019–1028.
15. Emmer C, Bosnjak M, Mata J. The association between weight stigma and mental health: A meta-analysis. Obesity Reviews 2019;21(1):e12935.
16. Vartanian LR. Development and validation of a brief version of the Stigmatizing Situations Inventory. Obesity Science & Practice 2015;1(2):119–125.
17. Kroenke K, Spitzer RL, Williams JBW, Löwe B. An Ultra-Brief Screening Scale for Anxiety and Depression: The PHQ–4. Psychosomatics 2009;50(6):613–621.
18. Friedman KE, Ashmore JA, Applegate KL. Recent Experiences of Weight-based Stigmatization in a Weight Loss Surgery Population: Psychological and Behavioral Correlates. Obesity 2008;16:S69–S74.
19. Puhl RM, Himmelstein MS, Quinn DM. Internalizing Weight Stigma: Prevalence and Sociodemographic Considerations in US Adults. Obesity 2017;26(1):167–175.
20. Wu YK, Liu Y. Weight-related stigmatization and binge eating among overweight adults in Southern Taiwan. PubMed 2015;24(1):118–127.
21. Puhl RM, Lessard LM, Pearl RL, Himmelstein MS, Foster GD. International comparisons of weight stigma: addressing a void in the field. Int J Obes (Lond) 2021;45(9):1976–1985.
22. Pearl RL, Puhl RM, Dovidio JF. Differential effects of weight bias experiences and internalization on exercise among women with overweight and obesity. Journal of Health Psychology 2014;20(12):1626–1632.
23. Roehling MV, Roehling PV, Pichler S. The relationship between body weight and perceived weight-related employment discrimination: The role of sex and race. Journal of Vocational Behavior 2007;71(2):300–18.
24. Puhl RM, Andreyeva T, Brownell KD. Perceptions of weight discrimination: prevalence and comparison to race and gender discrimination in America. International Journal of Obesity 2008;32(6):992–1000.
25. Hatzenbuehler ML, Keyes KM, Hasin DS. Associations Between Perceived Weight Discrimination and the Prevalence of Psychiatric Disorders in the General Population. Obesity 2009;17(11):2033–2039.
26. Himmelstein MS, Puhl RM, Quinn DM. Weight Stigma in Men: What, When, and by Whom? Obesity 2018;26(6):968–76.
27. Wu YK, Berry DC. Impact of weight stigma on physiological and psychological health outcomes for overweight and obese adults: A systematic review. Journal of Advanced Nursing 2017;74(5):1030–1042.
28. Fettich KC, Chen EY. Coping With Obesity Stigma Affects Depressed Mood in African-American and White Candidates for Bariatric Surgery. Obesity 2012;20(5):1118–1121.
29. Friedman KE, Reichmann SK, Costanzo PR, Zelli A, Ashmore JA, Musante GJ. Weight stigmatization and ideological beliefs: relation to psychological functioning in obese adults. Obesity research 2005;13(5):907–916.
30. Kamolthip R, Lin CY, Nadhiroh S, Nurmala I, Pramukti I, Tivany St, et al. Weight stigma in Indonesian young adults: Validating the indonesian versions of the weight self-stigma questionnaire and perceived weight stigma scale. Asian Journal of Social Health and Behavior 2022;5(4):169.
31. Chirawat P, Kamolthip R, Rattaprach R, Nadhiroh SR, Tung SEH, Gan WY, et al. Weight Stigma among Young Adults in Thailand: Reliability, Validation, and Measurement Invariance of the Thai-Translated Weight Self Stigma Questionnaire and Perceived Weight Stigma Scale. International Journal of Environmental Research and Public Health 2022;19(23):15868.
32. Levy BR, Pilver CE. Residual stigma: Psychological distress among the formerly overweight. Social Science & Medicine 2012;75(2):297–299.
33. Pont SJ, Puhl R, Cook SR, Slusser W. Stigma Experienced by Children and Adolescents With Obesity. Pediatrics 2017;140(6):e20173034.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# A LINK BETWEEN OBSESSIVE COMPULSIVE DISORDER AND ATTACHMENT STYLES: A NARRATIVE LITERATURE REVIEW

# Obsesinio kompulsinio sutrikimo sąsaja su prieraišumo stiliais: literatūros apžvalga

**Dovile KULAITYTE[1,2], Gabriele GUTPARAKYTE[1,2], Vesta STEIBLIENE[2,3]**

**[1]Medical Academy at Lithuanian University of Health Sciences, Kaunas, Lithuania**

**[2]Psychiatry Clinic at Medical Academy, Lithuanian University of Health Sciences, Kaunas, Lithuania**

**[3]Laboratory of Behavioural Medicine at Neuroscience Institute, Lithuanian University of Health Sciences, Palanga, Lithuania**

**SUMMARY**

**Introduction.** Obsessive-Compulsive Disorder (OCD) is ranked as the fourth most prevalent mental disorder, with the higher incidence among women and younger individuals. To gain a deeper understanding of the underlying factors contributing to OCD, discover additional treatment options, and facilitate early interventions, it is important to investigate various aspects, including both secure and insecure attachment styles.

**Aim.** The aim of this study is to provide an overview of existing literature data regarding the link between OCD and attachment styles.

**Methods.** A literature search was conducted using computerised databases, employing the following keywords: "OCD", "OCD and attachment", "anxious attachment and OCD", "avoidant attachment and OCD", "secure attachment and OCD". Out of 96 identified articles, 24 were reviewed. Exclusion criteria: non-English publications, articles lacking full open access, meta-analysis, and publications that did not analysed relationship between OCD and precisely defined attachment styles. Priority was given to papers published between 2013 and 2023.

**Results.** The heightened association between anxious attachment and OCD is frequently found and can be attributed to various factors: a need for approval, an ambivalent self-concept, locus of control, and repetitive thinking. Anxious attachment correlates with obsessional, ordering, and hoarding, while avoidant attachment is associated with hoarding symptoms. A significant relationship between avoidant attachment and OCD is seldom identified. Individuals with a disorganised attachment style tend to drop out of treatment prematurely. Secure attachment protects against the exacerbation of dysfunctional beliefs and feared self-perceptions. It prevents future depressive and sexual arousal impairment symptoms among individuals with OCD.

**Conclusions.** Research on OCD and attachment patterns lacks consensus. Nevertheless, anxious attachment is frequently associated with the development of OCD symptoms and their greater severity. Disorganised attachment is a prognostic factor for worse treatment outcomes. Secure attachment acts as a buffer **for OCD.**

**Keywords:** obsessive compulsive disorder (OCD), attachment, attachment styles.

**SANTRAUKA**

**Įvadas.** Obsesinis kompulsinis sutrikimas (OKS) yra 4 dažniausias psichinis sutrikimas, labiau pasireiškiantis moterims ir jaunesnio amžiaus asmenims. Norint geriau suprasti OKS sukeliančius veiksnius, atrasti daugiau gydymo galimybių, skatinti ankstyvąją intervenciją, svarbu apžvelgti įvairius aspektus, tokius kaip saugus ir nesaugus prieraišumo stiliai.

**Tikslas.** Atlikti literatūros apžvalgą, vertinančią sąsajas tarp OKS ir skirtingų prieraišumo stilių.

**Tyrimo medžiaga ir metodai.** Literatūros paieška atlikta kompiuterinėse mokslinių darbų bazėse, naudojant raktinius žodžius: „OKS", „OKS ir prieraišumas", „nerimastingas prieraišumas ir OKS", „vengiantis prieraišumas ir OKS'', „saugus prieraišumas ir OKS''. Iš paieškoje rastų 96, apžvalgoje analizuojami 24 straipsnių duomenys. Atmetimo kriterijai: meta-analizės, be pilnos atviros prieigos, ne angliškos, nenagrinėjančios sąsajų tarp OKS ir įvardintų prieraišumo stilių publikacijos. Prioritetas buvo teiktas 2013–2023 metų publikacijoms.

**Rezultatai.** Dažnai nustatomas ryšys tarp nerimastingo prieraišumo stiliaus ir OKS. Tokį ryšį nulemia įvairūs faktoriai: pritarimo siekimas, ambivalentiška savęs samprata, įsitikinimai apie tai, kas kontroliuoja gyvenimo patirtis, pasikartojantis mąstymas. Nerimastingas prieraišumo tipas susijęs su obsesiniais, tvarkos ir kaupimo, o vengiantis prieraišumo tipas su kaupimo simptomais. Reikšmingas ryšys tarp vengiančio prieraišumo tipo ir OKS nustatomas retai. Turintieji dezorganizuotą prieraišumo tipą linkę nutraukti gydymą jam dar nepasibaigus. Saugus prieraišumas apsaugo nuo klaidingų įsitikinimų stiprėjimo ir baimės dėl esamų ar ateityje pasireikšiančių savo nepageidaujamų asmeninių savybių. Taip pat sergančiuosius OKS apsaugo nuo depresijai būdingų simptomų ir seksualinės funkcijos sutrikimo.

**Išvados.** Nėra visiškai vieningos nuomonės dėl prieraišumo stilių įtakos OKS pasireiškimui. Visgi, labiausiai su OKS išsivystymu ir stipresniu pasireiškimu yra susijęs nerimastingas prieraišumo stilius. Dezorganizuotas prieraišumo stilius lemia blogesnes gydymo išeitis. Saugus prieraišumas yra apsauginis OKS veiksnys.

**Raktiniai žodžiai:** obsesinis kompulsinis sutrikimas (OKS), prieraišumas, prieraišumo stiliai.

**Autorius susirašinėjimui:** Dovilė Kulaitytė, Lithuanian University of Health Sciences, Medical Academy, A. Mickeviciaus g. 9, LT-44307 Kaunas, E-mail: kulaityte@gmail.com

## INTRODUCTION

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) characterises Obsessive-Compulsive Disorder (OCD) by the presence of obsessions, compulsions, or both. Obsessions are defined by intrusive, unwanted, recurrent, and persistent thoughts, urges, or impulses that cause anxiety or distress. In an attempt to ignore, suppress, or neutralise such thoughts, urges, or images, an individual performs a compulsion – some other thought or action [1].

OCD ranks as the fourth most prevalent mental disorder [2]. Its estimated 12-month prevalence in Europe ranges from 0.1 to 2.3% [3]. Women are 1,6 times more likely to develop OCD than men, and OCD tends to occur at a younger age, with the peak age being 14,5 years [4, 5]. Given the impact of OCD on the quality of life, including symptoms such as fatigue, difficulty concentrating, and irritability, it should be a priority in mental health prevention programs [6, 7].

Family and twin studies provide evidence that both genetic and environmental factors contribute to OCD pathophysiology. Genes in the serotonergic, dopaminergic, and glutamatergic systems pose a risk of OCD development, and a cortico-striato-thalamo-cortical circuit is the prevailing neural OCD pathway. Since OCD is a multidimensional disorder, the most effective treatment involves a combination of cognitive behavioural therapy and pharmacological agents [8]. Interestingly, OCD has a relatively small placebo effect, meaning effective treatment and new approches are crucial in managing this disease [9].

To gain a deeper understanding of the underlying factors contributing to OCD, discover additional treatment options, and facilitate early interventions, it is important to investigate various aspects influencing this disorder, including both secure and insecure attachment styles. This approach enables a more personalised and comprehensive strategy, addressing both attachment-related factors and symptoms of OCD, thereby enhancing outcomes for individuals with OCD exhibiting different attachment styles.

Attachment style is determined by the caregiver's availability. When the caregiver is responsive and attentive to the child's needs, secure attachment is gained [10]. However, a lack of caregiver's availability creates an insecure attachment style, which can be categorised into anxious, avoidant, and disorganised [11]. Individuals with a secure attachment feel confident in their relationships, while those with an anxious attachment style fear abandonment, and those with an avoidant attachment fear intimacy [12]. Disorganised attachment is linked to a sense of chaos, reflecting a strong childhood need for connection and a simultaneuous need to stay safe from a frightening parent, encompassing both anxious and avoidant tendencies [13]. Insecure attachment is related to mental health problems such as depression, anxiety, more severe post-traumatic stress symptoms, loneliness, and leaves the individual with lower self esteem and poorer life satisfaction [14, 15].

To acquire a broad perspective and provide a comprehensive understanding of the link between attachment styles and OCD, the narrative review format was chosen. The primary objective of this study is to offer an overview of the existing literature data regarding the link between OCD and attachment styles.

## METHODS

### Search Strategy

A narrative review was conducted to examine the relationship between attachment styles and OCD. The literature review was based on a keyword search of the PubMed, ScienceDirect, Taylor & Francis, and Google Scholar electronic databases. A combination and variations of the following terms were used as keywords: "obsessive compulsive disorder", "OCD and attachment", "anxious attachment and OCD", "avoidant attachment and OCD", "secure attachment and OCD". A database search was conducted from 30 September 2023 to 6 October 2023.

Selection Criteria

The included studies investigated the relationship between OCD and precisely defined attachment styles. Articles were included using the following criteria: (1) be available in full-text in English, (2) involve individuals diagnosed with OCD or with obsessive-compulsive traits, (3) include people's assessment of or attribution to defined attachment styles, (4) published no earlier than 2011 (focus was on articles published 2013–2023). Studies were excluded if they were meta-analyses, comments, and letters. Using this search approach, 96 articles were found. Following the screening, 72 studies were excluded, and 24 studies were included in this review. The studies, which differed in terms of their characteristics and tools, are described in Table 1.

## RESULTS

### Relationship between OCD and insecure attachment

Literature data analysis has revealed no unequivocal opinion regarding the connection between different attachment patterns and the development of OCD and its symptomatology. However, many studies have demonstrated the presence of this relationship [16–24]. Some researchers have investigated that both anxious and avoidant attachment tendencies play a statistically significant role in OCD symptomatology [16, 17, 19, 25]. These insecure attachment orientations could even be used as one of the factors to predict the severity of OCD symptoms and obsessional beliefs [16, 17]. Studies conducted with children have shown that general attachment insecurity could predict the development of paediatric obsessive–compulsive symptoms [25].

### Anxious or avoidant – which attachment style is more closely related to OCD?

Given the belief that both anxious and avoidant insecure attachment styles might be linked to OCD symptomatology, there is a need to determine which insecure attachment style is more involved in the development of OCD.

It has been observed that individuals with OCD have lower confidence levels with a higher rate of anxious attachment patterns compared to the control group. The need for approval (as a dimension of anxious attachment) is the most important prognostic factor in the diagnosis of OCD, among factors such as obsessive beliefs or other attachment facets (preoccupation

*Table 1.* **An overview of analysed publications**

| Authors (year) | Study aim | Sample characteristics | Outcome Measurement Method | Main findings |
|---|---|---|---|---|
| Boysan M. et al. (2018) | To examine the relationship between attachment insecurities, obsessional beliefs, and OCD symptoms. | 334 Ankara University students, 17–37 years. | PI-R and OBQ-44 (to measure obsessive-compulsive symptoms); ECR-R (to measure adult attachment style). | Anxious and avoidant attachments significantly contribute to the severity of obsessive-compulsive symptoms. |
| Seah R. et al. (2018) | To investigate the connection between insecure attachment and self-perceptions as vulnerabilities to OCD severity. | 439 Australian residents, mean age 23.2 years. | OCI-R (to measure OC symptoms severity); OBQ-20 (to evaluate OCD symptoms); ECR-S (to measure anxious attachment); SAM (to evaluate self-ambivalence); DASS-21) (to measure symptoms of depression, anxiety, and stress). | Anxious attachment is significantly associated with OC severity and self-ambivalence is partial mediator of this connection. |
| Shiva R. et al. (2012) | To examine the potential of attachment insecurity in predicting the development of obsessive-compulsive symptoms in children. | 221 secondary school female students, 10-12 years. | CY-BOCS (to assess the severity of OCD symptomatology); DSRS (to assess children's depressiveness); IPPA-R (to measure different dimensions of children's relationship with their parents); CSI-4 (to evaluate children's behavioural symptoms). | The level of attachment insecurity is strongly associated with OCD symptoms in children. Communication, alienation, and trust (dimensions of children's parental attachment) predict children's OC symptoms and their distribution. |
| Pozza A. et al. (2021) | To investigate how different aspects of insecure attachment could be related to different obsessive-compulsive symptoms separately. | 270 participants (135 in OCD group and 135 in control group). In OCD group, participants had to meet criteria for diagnosis of OCD and to be 18-65 years old. Control group was recruited from general population (matched age and gender with OCD patients). | OCI-R (to measure the severity of obsessive-compulsive symptoms); OBQ-46 (to measure 5 obsessive beliefs); ASQ (to assess adults' attachment styles). | (1) People with OCD have respectively lower and higher confidence and attachment anxiety levels; (2) Higher need for approval (one of attachment facets) is the most relevant predictor of OCD diagnosis; (3) Two features of anxious attachment – need for approval and preoccupation with relationships can clarify variance over and above OCD-related beliefs and demographic variables. |
| Dag I. et al. (2013) | To examine the mediator role of cognitive flexibility in the relation between attachment patterns and depression, OCD, social anxiety. | 992 participants (661 women, 331 men) from 9 different provinces. | CFI (to evaluate the ability to produce different types of thoughts under difficult situations); ECR-R (to evaluate insecure attachment patterns); BDI (to quantify depressive symptoms); MOCSL (to investigate obsessive-compulsive symptoms); LSAS (to measure the role of social phobia). | Cognitive flexibility-control mediates the relationship between anxious attachment and OCD, depression, and social anxiety in both genders. Cognitive flexibility-control acts as mediator in the relationship between attachment avoidance and depression and social anxiety for women, but not for men. |
| Hodny F. et al. (2021) | To review present understanding of connection between attachment styles and OCD. | A literature review performed using the PubMed, Web of Science, Google Scholar, and ScienceDirect databases with the following search terms: OCD, attachment, therapy, treatment, and long-term outcome. | - | Anxious attachment is related to OCD patients and has an impact on OCD symptoms. Dealing with an insecure attachment related problems could improve OCD treatment outcomes. |
| Doron G. et al. (2012) | To investigate, whether attachment insecurities are connected to one of the most disabling anxiety disorders – OCD. | 82 participants divided into 3 groups: an OCD sample (N= 30), a sample of other anxiety disorders (N= 20), and a community sample (N= 32). | ADIS-IV (to assess manifestation of anxiety disorders). | Attachment anxiety is notably higher in patients with OCD. |
| Hodny F. et al. (2022) | To explore the relationship between unfavorable childhood experiences, adult attachment patterns, and parental styles, and to investigate their connection with OCD, its severity, and onset in adults. | 87 pharmacoresistant inpatients with OCD, 18-60 years old. Patients were admitted for 6-week therapy program. | MINI (screening for mental disorders, including OCD); HAMA (to estimate the severity of anxiety disorders); CGI (to evaluate general severity of psychopathology); BAI (to assess anxiety symptoms); BDI-II (to evaluate the severity of depressive symptoms); PBI (to evaluate patient's parents behaviour in childhood); ECR-R (to evaluate insecure attachment patterns); DES (to measure dissociative symptoms); CTQ-SF (to evaluate childhood adverse experiences); Y-BOCS-SR (to assess the severity of OCD); The demographic questionnaire. | Anxious attachment, physical abuse and neglect have a significantly positive connection with the severity of non-specific OCD symptoms (anxiety, depression, dissociation). The connection with specific OCD symptoms (obsessions, and compulsions) was less apparent. The onset of OCD is earlier in patients with more severe adverse childhood experiences or anxious attachment. |

*Table 1 continuation.* **An overview of analysed publications**

| Authors (year) | Study aim | Sample characteristics | Outcome Measurement Method | Main findings |
|---|---|---|---|---|
| Volkan Gülüm İ. et al. (2014) | To investigate the mediating role of locus control and repetitive thinking in relationship between attachment styles and such psychopathologies as OCD, social anxiety, and depression. | 992 participants (661 women, 331 men) for the locus of control model, and 875 participants (581 women, 294 men) for the repetitive thinking model from 9 different provinces. | RTQ (to assess the repetitive thinking cycle); LCS (to measure an individual's level of internal versus external control); ECR-R (to measure adult attachment style); BDI (to investigate the risk and severity of depression); MOCSL (to investigate obsessive-compulsive symptoms); LSAS (to evaluate the role of social phobia in social and performance demanding situations). | The locus of control is a partial mediator in the connection between anxious attachment and depression for both genders and connection between anxious attachment and OCD together with social anxiety for women. Repetitive thinking has a partial mediator role in the relationship between anxious attachment and OCD, depression, and social anxiety for both genders. However, neither locus of control nor repetitive thinking are possible mediators between avoidant attachment and OCD, depression, or social anxiety for either women or men. |
| Carpenter L. et al. (2011) | To investigate relationship between alexithymia, childhood trauma, attachment patterns and the severity of OCD. | 174 participants: 82 participants in OCD group and 92 participants in comparison group. | CTQ-R (to evaluate adverse childhood experiences); Y-BOCS-SR (to assess the severity of OCD); ECR (to measure adult attachment style); TAS-20 (to measure difficulty in identifying and describing emotions). | The chain of interrelationships was found: childhood trauma positively correlates with attachment avoidance, which, in turn, has a positive connection with alexithymia. A significant positive association links alexithymia with OCD severity and the amount of OCD symptoms. |
| Fergus TA. et al. (2014) | To examine a relationship between attachment to God and scrupulosity (a subtype of OCD). | 450 adult participants, 18-75 years old. 59,1% self-identified as female. | PIOS (to investigate the severity of scrupulosity), AGS (to assess aspects of insecure attachment in relation to God); ECR-R (to evaluate insecure attachment patterns); DOCS (to evaluate the severity of obsessive-compulsive symptoms); OBQ-20 (to evaluate OCD symptoms); PANAS (to measure mood or emotion); General Religiousness Scale (to assess religiosity). | Scrupulosity positively correlates with anxious attachment in relation to God and negatively correlates with attachment avoidance in relation to God. Scrupulosity has a significantly positive association with an insecure attachment in interpersonal relationships. |
| Yarbro J. et al. (2013) | To investigate possible contribution of parental behaviour to attachment styles and the severity of obsessive-compulsive beliefs in adulthood. | 397 undergraduate students at the University of North Carolina, 18-55 years old (97% under the age of 25). Final sample included 338 participants (59 were with missing data) | OBQ (to assess obsessive-compulsive beliefs); ECR-S (to measure insecure attachment styles); PBI (to evaluate patients' parents behaviour in childhood). | Anxious attachment (avoidant attachment) has a partial mediator role in the connection between parent-child relationships and obsessive beliefs. |
| Tibi L. et al. (2017) | To explore the directionality and moderators of relationship between OCD and depression. | 382 patients with OCD diagnosis, 18 years old and over. | Y-BOCS (to measure severity of OCD symptoms); BDI (to assess depression severity); III (to assess immediate appraisals or interpretations of intrusions); LEE (to measure perceived expressed emotion). | Depressive comorbidity in OCD patients possibly determines incapacitating OCD symptoms. Secure attachment style might act as a buffer against depressive symptoms in OCD patients. |
| Doron G. (2020) | To examine a moderator role of attachment security in relationship between fear of self and OCD symptoms. | 239 Israeli community participants (116 women and 123 men), 19-65 years old. | FSQ (to assess feared-self perceptions); OCI-R (to evaluate OCD symptoms); ECR (to measure adult attachment style); The short version of the DASS (to assess symptoms of depression); PSWQ (to evaluate pathological worry), SISE (to measure a global self-esteem). | Attachment styles are moderators of the relationship of fear of self and OCD symptoms. Participants with high fear of self-perceptions coinciding with attachment insecurities (anxious and avoidant attachment) showed less OCD symptoms than secure attached participants with increased feared self-perceptions. |

*Table 1 continuation.* **An overview of analysed publications**

| Authors (year) | Study aim | Sample characteristics | Outcome Measurement Method | Main findings |
|---|---|---|---|---|
| Boger S. et al. (2020) | To examine a potential mediator role of insecure attachment style, emotion regulation difficulties, dissociation, rumination, and post-traumatic stress symptoms in the relation between childhood maltreatment (CM) and severity of OCD symptoms among OCD patients. | 68 inpatients (38 women and 30 men) with OCD. | OCI-R (to measure OCD symptom severity); CTQ-SF (to assess abuse and neglect during childhood); DERS (to assess problems in emotion regulation); PTQ (to measure repetitive negative thinking); ECR-R (to evaluate insecure attachment patterns); FDS-20 (to assess dissociative symptoms); PCL-5 (to measure symptoms of posttraumatic stress disorder). | An insecure attachment style, emotion regulation difficulties, dissociation, rumination, and post-traumatic stress symptoms are potential mediators of relationship between CM and OCD symptom severity. More severe CM leads to higher difficulties in all mentioned factors which possibly contribute to more severe OCD symptoms. |
| Tibi L. et al. (2020) | To investigate the role of environmental (childhood trauma, negative life events, previous and current treatment for OCD), clinical (depressive symptoms severity, age of onset, chronicity), and interpersonal (expressed emotion, social support, adult attachment style) predictors of long-term outcome of OCD. | 382 participants diagnosed with OCD, 18 years old and over (participating in the naturalistic cohort study of the Netherlands Obsessive Compulsive Disorder Association (NOCDA)). | Y-BOCS-SR (to assess the severity of OCD); BDI (to assess depression severity); SCID interview (to determine age of onset of OCD); LCI (to investigate the course of OCD in the past 5 years); LEE (to measure perceived expressed emotion); SSI (to measure perceived social support); RQ (to assess adult attachment style); STI (to evaluate childhood trauma); The list of 12 negative life events (to count negative life events in the past year). | Remission at 2- and 4-year follow-up was found 11-26%. Secure attachment style constitutes a buffer for improved outcome. A worsen 4-year course was predicted by childhood trauma in the past and early age of onset. |
| Tibi L. et al. (2021) | To investigate correlates (such as clinical aspects – symptoms, age of onset, chronicity, and comorbidity; environmental aspects - childhood trauma, negative life events; interpersonal aspects – attachment style, social support, expressed emotion) of social phobia among OCD patients. | 382 participants diagnosed with OCD, 18 years old and over (participating in the naturalistic cohort study of NOCDA) and 312 non-OCD patients with social phobia (from the Netherlands Study of Depression and Anxiety (NESDA)). | - | 20% of patients with OCD have a social phobia as co-occurring anxiety disorder. The combination of OCD and social phobia is linked with increased depression severity and lower rates of secure attachment style. Comparing patients with OCD and without this disorder, SP begins significantly earlier in OCD patients. |
| Hodny F. et al. (2022) | To examine the contribution of parental behaviour, childhood experiences, attachment patterns and comorbidity with a personality disorder to treatment outcomes for pharmacoresistant OCD patients. | 87 pharmacoresistant inpatients with OCD, 18-60 years old. Patients were admitted for 6-week therapy program. 66 patients completed the treatment (cognitive-behavioural therapy with medication). | MINI (to evaluate major psychiatric disorders); CGI (to evaluate the severity of psychopathology); HAMA (to estimate severity of anxiety disorders); BAI (to assess anxiety symptoms); BDI-II (to evaluate severity of depressive symptoms); Y-BOCS-SR (to assess the severity of OCD); PBI (to evaluate patients' parents behaviour in childhood); ECR-R (to evaluate insecure attachment patterns); DES (to measure dissociative symptoms); CTQ-SF (to evaluate childhood adverse experiences); The demographic questionnaire. | With reference to specific OCD symptomatology, the early onset of the disorder was the only significant predictor of OCD treatment. Childhood adverse experiences, maternal care and adult anxious attachment are associated with change in anxiety symptoms. |
| Tibi L. et al. (2019) | To examine attachment style and expressed emotion as predictors of the completion and outcome of OCD treatment therapy with exposure and response prevention (ERP). | 118 adult OCD patients (71 women and 47 men) who entered ERP. | Y-BOCS-SR (to assess the severity of OCD); BDI (to evaluate severity of depressive symptoms); RQ (to assess adult attachment style); PDQ-4+ (to evaluate general personality pathology); LEE (to measure perceived expressed emotion). | Disorganised attachment and OCD initial severity are the most important contributors to treatment outcome. Patients with severe symptoms of OCD and disorganised patients have a higher probability to dropout prematurely. |

*Table 1 continuation.* **An overview of analysed publications**

| Authors (year) | Study aim | Sample characteristics | Outcome Measurement Method | Main findings |
|---|---|---|---|---|
| Ivarsson T. et al. (2016) | To explore how attachment experiences (AEs), including traumatic and adverse AE (TAE) associate with OCD and depression, and whether depression combined with OCD differs from depression without OCD. | 100 participants: 50 participants from OCD clinic in Sweden: 25 individuals with OCD and 25 individuals with OCD and depression; 25 participants with depressive disorder; 25 participants as general population control group. | DICA and KSADS (for diagnostic assessment); AAI (to measure individual attachment patterns in adults). | OCD, OCD with depression and depression group were assessed to have lower parental loving and higher rejection scores comparing with control group (depression group more than OCD group). Increased levels of involving/role reversal caregiving occurred only in depression group. The combination of high levels of rejection and involving/role reversal caregiving is related to depression, but not with OCD. Harmful experiences (including related to attachment) are more often among people with depression, less common among individuals with OCD and depression and rare among OCD people. |
| Verin RE. et al. (2022) | To investigate whether attachment style moderates the relationship between death anxiety and OCD symptoms. | 48 participants (33 women and 15 men), with OCD diagnosis, 18 years old and older. | ADIS-5L (to assess current and past anxiety, mood, obsessive-compulsive, and related disorders); MFODS (to assess death anxiety); VOCI (to evaluate obsessive-compulsive symptoms); BFAS (to measure personality traits); ECR-R (to measure adult attachment style). | Death anxiety significantly predicts OCD severity. Anxious and avoidant attachments do not moderate the link between fear of death and OCD severity. |
| Rezvan S. et al. (2013) | To determine the efficiency of attachment-based treatment for children with OCD. | 4 female children, with 10-12 years old. | CY-BOCS (to investigate the severity of OCD symptoms); DSRS (to assess children's depressiveness); IPPA-R (to measure different dimensions of children' relationship with their parents); BDI (to assess depression severity). | Attachment-based intervention is an effective treatment component for children with OCD, reducing obsessions and compulsions. |
| Asad S. et al. (2015) | To investigate the relationship between attachment insecurities, obsessive beliefs, and different OCD symptoms. | 90 participants with OCD (47 women and 43 men), 18-50 years old. | Demographic Questionnaire; RAAS (to assess insecure attachment styles); OBQ-44 (to measure obsessive-compulsive symptoms); Obsessive Compulsive Disorder Symptom Checklist (to assess severity of obsessive-compulsive symptoms); Screening Questionnaire for Psychiatric Disorders (to confirm OCD diagnosis). | Anxious and avoidant attachments are not significantly correlated with any of the OCD symptom dimensions. Obsessive beliefs of over importance/ need to control thoughts, and over responsibility/overestimation of threat positively correlate with control compulsions, sexual and blasphemous obsessions. Attachment avoidance is one of important predictors of sexual obsessions. |

Note: PI-R – Padua Inventory-Revised, OBQ-44 – Obsessive Beliefs Questionnaire-44, ECR-R – Experiences in Close Relationships-Revised, OCI-R – Obsessive-Compulsive Inventory Revised, OBQ-20 – Obsessive Beliefs Questionnaire-20, ECR-S – the short form of the Experiences in Close Relationships, SAM – Self-Ambivalence Measure, DASS-21 – Depression Anxiety Stress Scale Short Form, CY-BOCS – Children's Yale-Brown Obsessive-Compulsive Scale; DSRS – Birleson Depression Self-rating Scale, IPPA-R – inventory of parent and peer attachment – revised version for children, CSI-4 – Children Symptom Inventory, OBQ-46 – Obsessive Beliefs Questionnaire-46, ASQ – Attachment Style Questionnaire, CFI – Cognitive Flexibility Inventory, BDI – Beck Depression Inventory, MOCSL – Maudsley Obsessive-Compulsive Symptom Checklist, LSAS – Liebowitz Social Anxiety Scale, ADIS-IV – Anxiety Disorders Interview Schedule for DSM-IV, MINI – Mini International Neuropsychiatric Interview, HAMA – Hamilton Anxiety Rating Scale, CGI – Clinical Global Impression, BAI – Beck Anxiety Inventory, BDI-II – Beck Depression Inventory, second edition, PBI – Parental Bonding Instrument, DES – Dissociative Experiences Scale, CTQ-SF – Childhood Trauma Questionnaire-Short Form, Y-BOCS-SR – Yale-Brown Obsessive Compulsive Scale Self-Report, RTQ – Repetitive Thinking Questionnaire, LCS – Locus of Control Scale, CTQ-R – Childhood Trauma Questionnaire – revised, ECR – Experiences in Close Relationships Scale, TAS-20- Toronto Alexithymia Scale, PIOS – Penn Inventory of Scrupulosity, AGS – Attachment to God Scale, DOCS – Dimensional Obsessive-Compulsive Scale, PANAS – Positive and Negative Affect Schedule, Y-BOCS – Yale Brown Obsessive-Compulsive severity Scale, III-Interpretation of Intrusions Inventory, LEE – Level of Expressed Emotion Inventory, FSQ – Fear of Self-Questionnaire, DASS – Depression Anxiety Stress Scales, PSW –Penn State Worry Questionnaire, SISE – Single-Item Self-Esteem Scale, SIS/SES – Sexual Inhibition/Sexual Excitation Scales, DERS – Difficulties in Emotion Regulation Scale, PTQ – Perseverative Thinking Questionnaire, FDS-20 – Questionnaire on Dissociative Symptoms, PCL-5 – posttraumatic stress disorder Checklist for DSM-5, SCID – Structured Clinical Interview for DSM Disorders, LCI – Life-Chart Interview, SSI - Social Support Inventory, RQ – Relationship Questionnaire, STI – Structured Trauma Interview, PDQ-4+ – Personality Diagnostic Questionnaire, DICA – Diagnostic Interview of Children and Adolescents, KSADS – Kiddie Schedule for Affective Disorders and Schizophrenia, AAI – Adult attachment interview, ADIS-5L – Anxiety and Related Disorders Interview Schedule for DSM-5: Lifetime Edition, MFODS – Multidimensional Fear of Death Scale, VOCI – Vancouver Obsessive Compulsive Inventory, BFAS – Big Five Aspects Scale, RAAS – Revised Adult Attachment Scale.

with relationships, discomfort of closeness or relationships as secondary).

Additionally, the conclusion was drawn that different facets of insecure attachment styles are related to different dimensions of OCD symptoms. The need for approval (an aspect of anxious attachment) predicted an elevated level of ordering and obsessing symptoms; the concern for relationships (related to anxious attachment) prognosticated a higher level of hoarding symptoms; the discomfort of intimacy (characteristic of avoidant attachment) was more associated with ordering symptoms [18].

A study carried out in 2016 discovered that individuals with anxious and disorganised attachment styles (as mentioned before, having both anxious and avoidant tendencies) are more likely to develop obsessional symptoms than people with secure or avoidant attachment patterns [16]. Focusing on another study, even though the main purpose was to investigate the moderating role of cognitive flexibility in the connection between attachment styles and psychopathology symptoms, the results also included a statement that there is a relation between anxious attachment patterns and psychopathological symptoms (such as depression, OCD, and social anxiety). Nevertheless, no significant relationship between avoidant attachment and the same psychopathological symptoms was discovered [26].

While acknowledging that all insecure attachment patterns may be factors predisposing individuals to the progression of OCD symptoms, anxious attachment is more closely connected to OCD than avoidant orientation [19]. It was discovered that there are notably higher levels of anxious attachment patterns in patients with OCD compared to the healthy control group [20]. In addition, it appeared that there is a negative correlation between adult anxious attachment and the age of onset of OCD [21].

**Factors influencing the relationship between OCD and attachment**

After discovering that the anxious attachment style is more closely associated with OCD and its severity, attempts were made to understand which factors determine this connection. It appears that an ambivalent self-concept is one of the mediators in the relationship between the severity of OCD symptoms and anxious attachment patterns [17].

Additionally, there was a study investigating the mediator role of different cognitive features in the connection between attachment styles and symptoms of psychopathology (such as social anxiety, depression, OCD). The results indicate that locus of control (an individual's perception of what controls outcomes in their life) partially moderates the relationship between anxious attachment patterns and obsessive-compulsive symptoms, but only for women. Another cognitive feature, described as repetitive thinking, moderately mediates the same mentioned relationship in both genders. On the other hand, locus of control and repetitive thinking were not identified as mediators regarding avoidant attachment and OCD symptoms [27].

The connection between attachment insecurities and OCD symptoms can be analysed from various perspectives. One such perspective reveals that childhood trauma is significantly associated with avoidant attachment patterns, which, in turn, have a strong connection with alexithymia (difficulties in expressing and describing one's emotions). This sequence of associations concludes with findings suggesting that alexithymia has an important correlation with the severity and number of OCD symptoms. The same study asserts that alexithymia is the connection that conveys an influence from avoidant attachment experiences to the severity and number of obsessive-compulsive symptoms [28].

It was also observed that OCD patients with social phobia as comorbidity are described as individuals with decreased level of secure attachment style [29]. Another possible moderation is related to OCD and religion – scrupulosity, as one subtype of OCD, has a significantly positive connection with both anxious and avoidant styles of attachment [22].

**Attachment experience as a moderator itself**

In some cases, attachment styles are assumed to be a moderating factor between OCD and other subjects under study by themselves. It was discovered that anxious attachment moderately mediated the relationship between the negative parent-child interactions model (uncaring and cold parenting) and obsessive beliefs related to perfectionism, responsibility, and threat estimation. However, such a connection with avoidant attachment was not found [23].

Another aspect that might be helpful to understand the relationship between attachment styles and OCD was explored in a four-year follow up study. This study aimed to determine the relationship between OCD and depressive symptoms by assessing possible moderators of this connection. One of the most important conclusions was that secure attachment has a positive moderator effect on OCD patients against future detrimental depressive symptoms. In addition, it was declared that people with expressed OCD symptoms and a formed insecure attachment style have a larger tendency to experience symptoms related to depression in the future [30].

A study conducted with 239 participants revealed that attachment security is a significant moderator in the connection between OCD symptoms and fear of self. To be more specific, individuals with high attachment insecurity (anxious or avoidant style) and a high score in feared self-perceptions demonstrated more pronounced OCD symptoms than participants with the same high fear of self-tendencies but having secure attachment patterns [24].

The relationship between attachment styles and OCD is being explored by examining various aspects of this disorder. In 2020, there was an attempt to analyse the moderating effect of attachment styles on the connection between gender and sexual behaviour in patients with OCD [31]. The theoretical model that distinguished five different styles of attachment: "need for approval", "preoccupation with relationships", "confidence (in self and others)", "discomfort with closeness", and "relationships as secondary" was used [32]. According to the attachment styles that we are reviewing, these concepts can be categorized into two sections: the need for approval, preoccupation with relationships, and low confidence describe anxious attachment, while discomfort with closeness and

relationships as secondary depict avoidant attachment patterns [31].

It was found that avoidant attachment (especially discomfort related to intimacy) is connected with higher sexual excitation. Regardless, the same investigation showed that female patients with an anxious attachment style (having concerns about relationships) faced higher sexual inhibition because of the possible threat of performance consequences, and women having avoidant attachment problems had a lower sexual excitation level. A conclusion was made that the gender-related impact of attachment styles has to be involved in the evaluation of sexual functioning of OCD patients [31].

Insecure attachment is considered to be a potential mediator in the relationship between childhood maltreatment and OCD. Results revealed that the anxious attachment style is one factor that has a significant effect on childhood maltreatment and OCD symptoms severity. Nevertheless, the hypothesis that an avoidant attachment style is also related to the mentioned relationship was not confirmed [33].

**Secure attachment as a buffer against OCD**

While the impact of insecure attachment on OCD development and symptoms is not totally explicit, secure attachment is unequivocally considered to be a protective factor, aiding in achieving better long-term outcomes for patients with OCD [24, 30, 34]. When comparing individuals with high feared self-perceptions and secure attachment patterns to insecurely attached people expressing high fear of self, first group is less susceptible to OCD symptoms [24].

Going into more detail about this effect, it has also been suggested that a secure attachment style might serve as a buffer against sexual arousal impairment among OCD patients. Individuals with secure attachment patterns are believed to have healthier sexual relationships, which can help satisfy their needs and reduce negative emotions related to obsessive-compulsive beliefs [31]. Secure attachment can act as a flexible adjusting mechanism that protects from the aggravation of dysfunctional beliefs and feared self-perceptions, which could potentially lead to an OCD diagnosis [24].

**Importance of attachment in OCD treatment**

The impact of adult attachment is also analysed as one of possible predictors of the OCD treatment results. However, high rates of anxious attachment predicted a lower decrease in anxiety levels but did not have influence on change of OCS symptomatology or general severity of the disorder (only the early onset of OCD was related to treatment results of specific OCD symptomatology) [35].

On the other hand, in one study, the disorganised attachment style together with OCD baseline severity were proven to be the most important moderators of treatment results. This is because individuals with higher baseline OCD severity and disorganised attachment patterns had a higher tendency to drop out before treatment was finished. The results revealed that only 14.4% of patients with disorganised attachment style completed 5 out of 11 treatment sessions, thus not being able to achieve the desirable treatment effect [36].

As mentioned before, attachment insecurity might have a predictive effect on the development of paediatric obsessive–compulsive symptoms [25]. This connection might suggest the idea of secure and caring parent-child relationship as way to reduce or protect youngsters from obsessive-compulsive symptoms. That gives one more supporting evidence on attachment-based treatment options of OCD [25].

**Do attachment patterns and OCD have nothing in common?**

Some of the studies did not find a significant correlation between attachment patterns and OCD symptoms [21, 37–39]. Results in a study in which fifty adolescents participated revealed that insecure attachment styles do not have a direct effect on the development of OCD but there was an association between traumatic experiences and/or attachment and adolescents with depressive disorder [37].

Another study, conducted with eighty-seven pharmacoresistant patients with OCD, showed that anxious attachment is not notably associated with disorder-specific symptoms (such as obsessions and compulsions). Even though a significant link was found between anxious attachment and non-OCD symptoms, such as anxiety, dissociation, or depression [21].

Death anxiety is considered to be strongly associated with OCD. However, it was failed to find secure attachment as a buffer against the fear of death. Also, no significant correlation was found between anxious or avoidant attachment styles and predicted OCD severity. Hypothesis that attachment style plays a moderating role in relationship between death anxiety and OCD symptoms was not confirmed in the same study [38].

**DISCUSSION**

Summarizing all the analysed literature, there is no unambiguous agreement on the relationship between attachment experiences and OCD. Many studies reveal a significant connection between OCD and insecure attachment styles [16–21, 25, 26]. It is believed that insecure attachment can promote the development of dysfunctional beliefs about oneself and the surrounding environment. Perfectionism, an exaggerated feeling of responsibility, thought control, and other dysfunctional cognitive processes, along with unstable emotional regulation and low self-esteem, might contribute to the development of maladaptive behaviour, manifesting as obsessive and compulsive symptoms in an attempt to regain more positive self-concept and sense of safety [19].

While agreeing with the opinion that insecure attachment models could be related with the development of OCD and its symptomatology, another question should be answered – do avoidant and anxious attachment styles have different impacts on obsessive-compulsive symptoms? Analysed articles allowed us to draw conclusions that anxious attachment has a more significant relation to OCD than avoidant attachment [16, 18–21, 26]. This could be explained by a theory that disorganised (having both anxious and avoidant tendencies) and anxious attachments are associated with negative attitude towards oneself (feeling as unlovable) while avoidant attachment refers to a negative view of others but a positive approach to oneself. In conclusion, an especially negative point of view about oneself could contribute to the development of

obsessive-compulsive symptoms, whereas a more favourable approach to oneself could function as a preventive factor from obsessional psychopathology [16].

It is believed that factors, such as ambivalent self-concept, locus of control, repetitive thinking, childhood trauma leading to alexithymia, scrupulosity have an influence on the relationship between attachment patterns and OCD [17, 22, 27, 28]. Based on these findings, it is possible to claim that neglectful parental behaviour has a relation to anxious attachment and distorted perception of self and others which could serve as provocative factor of OCD [23]. Furthermore, the interpretation of reviewed findings could be that more severe childhood maltreatment leads to more anxious close relationships and challenges in emotional regulation. In turn, these vulnerabilities have a connection with more severe OCD symptoms [33].

On the other hand, it is considered that secure attachment style has a positive protective impact on OCD and its symptoms [24, 30, 34]. It suggests that even a combination of fear of oneself (meaning fear of who one might be or become) and secure attachment representations possibly could make individual more resistant to specific OCD symptoms [24]. It could be because of coping mechanisms patients with secure attachment use to deal with OCD symptoms. It is believed that people who feel secure can deal with difficulties caused by OCD with more flexibility and have better adaptive responses [34].

The interface between OCD and attachment theory might be shown through the positive effect of attachment-based interventions on decreasing obsessive-compulsive symptoms in children. The enhancing of supporting and caring parent-child relationship and an appropriate reaction to child's attachment needs help to reduce a child's negative environment conception and self-destructive sense of personal vulnerability. It is suggested that applying attachment-based treatment techniques during the early years of childhood could act as a preventive tool against the development of later OCD symptoms [40]. Using attachment-based treatment models helps to encourage feelings of being loved, accepted, and appreciated, thus leading to a sense of security [19].

As mentioned before, results showed that we could not categorically claim a correlation is significant between attachment and OCD. There were articles that could not prove that there is any kind of connection between these two subjects [21, 37, 38]. Some findings suggest that the connection between OCD and insecure attachment is often described because depression is a frequent comorbidity in OCD [37]. One of the reasons why some researchers did not detect a significant correlation between anxious or avoidant attachment and OCD could be the different duration of included OCD patients' treatment. Despite the fact, that patients could have experienced a cold and unsupportive parenting style that would have led to insecure attachment styles, the long period of development of the disorder, its treatment with different methods might have made parents to change their approach and create a secure attachment model. Such kind of situation could be the reason why the relation between insecure attachment and obsessive-compulsive symptoms is nonsignificant [39].

Limitations. This review is not without its limitations. There is an insufficiency of systematic analysis of accessible data; some relevant studies may have been missed due to a lack of full access in English. In certain studies, OCD diagnosis was not confirmed, and only obsessive-compulsive symptoms were investigated. It should be noted that comorbidity of OCD with other mental disorders could potentially distort the obtained results.

## CONCLUSIONS

Literature data analysis has revealed no unequivocal opinion regarding the connection between different attachment patterns and the development of OCD and its symptomatology. Some argue that attachment styles do not directly affect the development of OCD, but there is a link between OCD and traumatic experiences. However, others argue that individuals with anxious or disorganised attachment are more prone to develop OCD due to a negative attitude towards oneself. Additionally, a negative connection between adult anxious attachment and the onsent age of OCD was found. Anxious attachment could be related to obsessing, ordering, and both anxious and avoidant to hoarding symptoms. Most studies could not find a significant link between avoidant attachment and OCD, as these individuals tend to have high self-esteem that acts as a protective mechanism. However, it is noted that alexithymia is related to severity and number of OCD symptoms and is often found in individuals with an avoidant attachment style. Secure attachment acts as a protective buffer against OCD. Attachment style is also a predictor of the OCD treatment results, as individuals with a disorganised attachment tend to drop out of treatment. It is suggested that applying attachment-based treatment techniques during childhood reduces the chances of developing later OCD symptoms.

## LITERATŪRA

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th ed. Washington: D.C.: American Psychiatric Publishing, 2013.
2. Kessler RC, Berglund P, Demler O, Jin Rm Merikangas KR, Walters. Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2005;62(6):593-602.
3. Wittchen HU, Jacobi F. Size and burden of mental disorders in Europe - A critical review and appraisal of 27 studies. European Neuropsychopharmacology. 2005;15(4):357–376.
4. Fawcett EJ, Power H, Fawcett JM. Women Are at Greater Risk of OCD Than Men: A Meta-Analytic Review of OCD Prevalence Worldwide. The Journal of clinical psychiatry. 2020;81(4).
5. Solmi M, Radua J, Olivola M, Croce E, Soardo L, de Pablo GS et al. Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. Molecular Psychiatry 2022;27:281–295.
6. Abdin E, Chong SA, Vaingankar JA, Shafie S, Verma S, Luo N et al. Impact of mental disorders and chronic physical conditions on quality-adjusted life years in Singapore. Sci Rep. 2020:10(1):2695.
7. Jbireal JM, Azab AE. Symptoms, Etiology, Pathophysiology, and Treatment Article in The South African journal of medical sciences. 2019:2(10):80-91.
8. Pauls DL, Abramovitch A, Rauch SL, Geller DA. Obsessive–compulsive disorder: an integrative genetic and neurobiological perspective. Nat Rev Neurosci 2014;15(6):410–424.
9. Li F, Nasir M, Olten B, Bloch MH. Meta-Analysis of Placebo Response in Adult Antidepressant Trials. CNS Drugs. 2019;33(10):971–980.
10. Hong YR, Park JS. Impact of attachment, temperament and parenting on human development.

Korean Journal of Pediatrics. 2012; 55(12):449–454.

11. Verhage ML, Tharner A, Duschinsky R, Bosmans G, Fearon RMP. Editorial Perspective: On the need for clarity about attachment terminology. Journal of Child Psychology and Psychiatry and Allied Disciplines. 2023;64(5):839–843.
12. Hazan Cindy, Shaver Philips. Romantic love conceptualized as an attachment process. J Pers Soc Psychol; 1987;52(3):511-524.
13. Granqvist P, Sroufe LA, Dozier M, Hesse E, Steele M, Iljzendoorn MV et at. Disorganized attachment in infancy: a review of the phenomenon and its implications for clinicians and policy-makers. Attachment and Human Development. 2017;19(6) 534–558.
14. Zhang X, Li J, Xie F, Chen X, Xu W, Hudson NW. The relationship between adult attachment and mental health: A meta-analysis. J Pers Soc Psychol. 2022;123(5):1089–1137.
15. Woodhouse S, Ayers S, Field AP. The relationship between adult attachment style and post-traumatic stress symptoms: A meta-analysis. J Anxiety Disord. 2015;35 103–117.
16. Boysan M, Çam Z. An investigation into the role of attachment insecurities in obsessive-compulsive symptoms. Br J Guid Counc. 2018;46(5):566–581.
17. Seah R, Fassnacht D, Kyrios M. Attachment anxiety and self-ambivalence as vulnerabilities toward Obsessive Compulsive Disorder. J Obsessive Compuls Relat Disord. 2018;18:40–46.
18. Pozza A, Dèttore D, Marazziti D, Doron G, Barcaccia B, Pallini S. Facets of adult attachment style in patients with obsessive-compulsive disorder. J Psychiatr Res. 2021;144:14–25.
19. Hodny F, Prasko J, Ociskova M, Vanek J, Holubova M, Sollar et al. Attachment in patients with obsessive compulsive disorder. Neuroendocrinol Lett. 2021;42(5):283–291.
20. Guy Doron, Richard Moulding, Maja Nedeljkovic, Kyrios M, Mikulincer M, Sar-El D. Adult attachment insecurities are associated with obsessive compulsive disorder. Psychol Psychother 2012;85(2):163–178.
21. Hodny F, Ociskova M, Prasko J, Houdkova M, Vanek J, Sollar T et al. Early life experiences and adult attachment in obsessive-compulsive disorder Part 1: Relationships between demographic, clinical, and psychological factors in pharmacoresistant OCD. Neuroendocrinol Lett. 2022;43(6):333–344.
22. Fergus TA, Rowatt WC. Examining a purported association between attachment to God and scrupulosity. Psychology of Religion and Spirituality. 2014;6(3):230–236.
23. Yarbro J, Mahaffey B, Abramowitz J, Kashdan TB. Recollections of parent–child relationships, attachment insecurity, and obsessive–compulsive beliefs. Pers Individ Dif. 2013;54(3):355–360.
24. Doron G. Self-vulnerabilities, attachment and obsessive compulsive disorder (OCD) symptoms: Examining the moderating role of attachment security on fear of self. J Obsessive Compuls Relat Disord. 2020;27.
25. Shiva Rezvan Fatemeh Bahrami MACMHTND, Ghasemi V. Attachment insecurity as a predictor of obsessive–compulsive symptoms in female children. Couns Psychol. 2012;25(4):403–415.
26. Dag I, Gulum V. The Mediator Role of Cognitive Features in the Relationship Between Adult Attachment Patterns and Psychopathology Symptoms: Cognitive Flexibility. Turk Psikiyati Derg. 2013;24(4):240-7.
27. Volkan Gülüm İ, Dağ İ. The Mediator Role of the Cognitive Features in the Relationship between Adult Attachment Patterns and Psychopathology Symptoms: The Locus of Control and Repetitive Thinking* 2. Turkish Journal of Psychiatry. 2014;25(4):244-52.
28. Leanne Carpenter, Man Cheung Chung. Childhood trauma in obsessive compulsive disorder: The roles of alexithymia and attachment. Psychol Psychother. 2011;84(4):367–388.
29. Lee Tibi, Sapir Asher, Patricia van Oppen, van Balkom AJLM, Eikelenboom M, Visser HA et al. The correlates of social phobia in OCD: Findings from a large clinical sample. British Journal of Clinical Psychology. 2021;60(3):312–332.
30. L Tibi, P van Oppen, A J L M van Balkom, Eikelenboom M, Rickelt J, Schruers K R J et al. The long-term association of OCD and depression and its moderators: A four-year follow up study in a large clinical sample. European Psychiatry. 2017;44:76–82.
31. Dèttore D, Angelo NL, Marazziti D, Mucci F, Prestia D, Pozza A. A Pilot Study of Gender Differences in Sexual Arousal of Patients With OCD: The Moderator Roles of Attachment and Contamination Symptoms. Front Psychiatry; 2021;11.
32. Feeney JA, Noller P, Hanrahan M. Attachment In Adults: Clinical and Developmental Perspectives. New York: Guilford Press, 1994.
33. Boger S, Ehring T, Schwarzkopf W, Werner GG. Potential mediators of the association between childhood maltreatment and obsessive-compulsive disorder in adulthood. J Obsessive Compuls Relat Disord. 2020;27.
34. Tibi L, van Oppen P, van Balkom AJLM, Eikelenboom M, Hendriks GJ, Anholt GE. Childhood trauma and attachment style predict the four-year course of obsessive compulsive disorder: Findings from the Netherlands obsessive compulsive disorder study. J Affect Disord. 2020; 264:206–214.
35. Hodny F, Ociskova M, Prasko J, Vanek J, Visnovsky J, Sollar T et al. Early life experiences and adult attachment in obsessive-compulsive disorder Part 2: Therapeutic effectiveness of combined cognitive behavioural therapy and pharmacotherapy in treatment-resistant inpatients. Neuroendocrinol Lett. 2022;43(6):345–358.
36. Tibi L, van Oppen P, van Balkom AJLM, Eikelenboom M, Emmelkamp PMG, Anholt GE. Predictors of treatment outcome in OCD: An interpersonal perspective. J Anxiety Disord. 2019;68.
37. Ivarsson T, Saavedra F, Granqvist P, Broberg AG. Traumatic and Adverse Attachment Childhood Experiences are not Characteristic of OCD but of Depression in Adolescents. Child Psychiatry Hum Dev. 2016;47:270–280.
38. Verin RE, Menzies RE, Menzies RG. OCD, death anxiety, and attachment: What's love got to do with it? Behavioural and Cognitive Psychotherapy. 2022;50(2):131–141.
39. Asad S, Dawood S. Attachment orientation, obsessive beliefs, and symptom severity in patients with obsessive compulsive disorder. Pakistan Jorunal of Psychological research. 2015;30(2):207-223.
40. Rezvan S, Bahrami F, Abedi M, Macleod C, Doost HTN, Ghasemi V. A Preliminary Study on the Effects of Attachment-based Intervention on Pediatric Obsessive-Compulsive Disorder. Int J Prev Med. 2013;4(1):78-87.

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# THE EFFECT OF COGNITIVE BEHAVIORAL THERAPY ON THE MENTAL HEALTH, DISEASE SEVERITY, AND QUALITY OF LIFE IN PATIENTS WITH PSORIASIS: A LITERATURE REVIEW

# Kognityvinės elgesio terapijos poveikis sergančiųjų psoriaze psichikos sveikatai, ligos sunkumui bei gyvenimo kokybei: literatūros apžvalga

**Margarita SLABADIENE**

**Psychiatry Clinic, Lithuanian University of Health Sciences, Kaunas, Lithuania**

**SUMMARY**

**Introduction.** Many patients with psoriasis experience a variety of psychological difficulties, leading to an increased risk of depression, anxiety, social phobia, suicidal thoughts, smoking and alcohol abuse. In order to reduce the burden of psychological difficulties, various directions of psychotherapy can be used. One of them is cognitive behavioral therapy (CBT), which is based on the theory that negative thoughts and behaviors can affect person's symptoms and be an obstacle to recovery.

**Aim** to find out the effect of cognitive behavioral therapy on the mental health, disease severity, and quality of life in patients with psoriasis.

**Methodology.** The literature review was based on the scientific databases and journals, selecting publications from 2013 to 2023 in English using the keywords in the original language: "psoriasis", "CBT" and "cognitive behavioral therapy". More than 10 publications related to the effect of cognitive behavioral therapy on the mental health, disease severity and quality of life in patients with psoriasis have been reviewed.

**Results.** Cognitive behavioral therapy improves the mental state in people with psoriasis, but it is most effective in reducing the anxiety. CBT may be particularly beneficial for individuals with more severe pretreatment psychopathology in improving psoriasis severity, quality of life, anxiety and depression symptoms. In addition, the effect size of cognitive behavioral therapy is stronger in patients with moderate-to-severe psoriasis (or baseline PASI > 8) in comparison to those with mild psoriasis (or baseline PASI ≤ 8).

**Conclusions.** Psoriasis is a complex disease, the comprehensive diagnosis and full treatment should include the correction of both biological and psychological factors. One of the options for the correction of psychological factors is cognitive behavioral therapy, which can complement medical treatment to improve the mental state, quality of life and reduce the severity of the disease.

**Keywords:** psoriasis, cognitive behavioral therapy.

**SANTRAUKA**

**Įvadas.** Daugelis psoriaze sergančių pacientų patiria įvairiausių psichologinių sunkumų, todėl padidėja depresijos, nerimo, socialinės fobijos, minčių apie savižudybę, rūkymo ir piktnaudžiavimo alkoholiu rizika. Siekiant sumažinti psichologinių sunkumų naštą gali būti naudojamos įvairios psichoterapijos kryptys. Viena iš jų – kognityvinė elgesio terapija (KET), kuri remiasi teorija, kad neigiamos mintys ir elgesys gali paveikti žmogaus simptomus ir būti kliūtimi siekiant pasveikti.

**Tikslas** išsiaiškinti kognityvinės elgesio terapijos poveikį žvyneline sergančių pacientų psichikos sveikatai, ligos sunkumui bei gyvenimo kokybei.

**Metodika.** Literatūros apžvalga atlikta remiantis mokslinėmis duomenų bazėmis bei žurnalais, atrenkant publikacijas nuo 2013 iki 2023 metų anglų kalba naudojant raktažodžius originalo kalba: „psoriazė", „KET" ir „kognityvinė elgesio terapija". Apžvelgta daugiau nei 10 publikacijų apie kognityvinės elgesio terapijos poveikį psoriaze sergančių pacientų psichikos sveikatai, ligos sunkumui ir gyvenimo kokybei.

**Rezultatai.** Kognityvinė elgesio terapija pagerina sergančiųjų žvyneline psichikos sveikatą. Didžiausias efektas stebimas mažinant šių pacientų patiriamą nerimą. KET gali būti ypač naudinga asmenims, turintiems sunkesnius psichikos sutrikimus prieš gydymą, siekiant sumažinti psoriazės sunkumą, nerimą, depresijos simptomus bei pagerinti gyvenimo kokybę. Be to, kognityvinės elgesio terapijos poveikis yra stipresnis pacientams, sergantiems vidutinio sunkumo ar sunkia psoriaze (arba pradinis PASI > 8), lyginant su pacientais, sergančiais lengva psoriaze (arba pradinis PASI ≤ 8).

**Išvados.** Psoriazė yra sudėtinga liga, kurios visapusiška diagnostika bei pilnavertis gydymas turėtų apimti tiek biologinių, tiek ir psichologinių veiksnių korekcijas. Viena iš psichologinių veiksnių korekcijos galimybių – kognityvinė elgesio terapija, kuri gali papildyti medikamentinį gydymą siekiant pagerinti psichikos būklę, gyvenimo kokybę bei sumažinti ligos sunkumo lygį.

**Raktažodžiai:** psoriazė, kognityvinė elgesio terapija.

**Autorius susirašinėjimui:** Margarita Slabadiene, Lithuanian University of Health Sciences, Psychiatry Clinic, A. Mickeviciaus g. 9, LT-44307 Kaunas, E-mail: margarita.slabadiene@gmail.com

## INTRODUCTION

Psoriasis is a chronic, systemic, inflammatory skin condition with typical erythematous, indurated, scaly, pruritic and often painful skin plaques [1–3]. The incidence of this disease is about 1–3% of the total population [1, 2]. Psoriasis can cause significant disability, disrupt daily activities, increase social stigmatization and cause psychological distress [4, 5]. Studies have shown that many patients with psoriasis experience a variety of psychological difficulties, leading to an increased risk of depression, anxiety, social phobia, suicidal thoughts, smoking and alcohol abuse [4, 6–8]. To reduce the burden of psychological difficulties, various types of psychotherapy can be used. One of them is cognitive behavioral therapy (CBT), which is based on the theory that negative thoughts and behaviors can affect person's symptoms and be an obstacle to recovery [9]. The purpose of this literature review is to analyze the 2013–2023 scientific articles to find out the effect of cognitive behavioral therapy on the mental health, disease severity and quality of life in psoriasis patients.

## METHODOLOGY

A literature review was based on the scientific databases and journals: "UpToDate", "Cochrane Library", "ClinicalKey", "Wiley Online Library", "Taylor & Francis", "PsycARTICLES", "Oxford Journals", "PubMed", selecting publications from 2013 to 2023 in English using the original language keywords: "psoriasis", "CBT" and "cognitive behavioral therapy". The selection process involved reading the titles and abstracts of the publications. The most relevant articles were selected. More than 10 publications related to the effect of cognitive behavioral therapy on the mental health, disease severity and quality of life in patients with psoriasis have been reviewed.

## RESULTS

### Etiopathogenesis of psoriasis and typical areas of damage

The pathogenesis of the disease is complex and not fully understood [4, 10]. It is agreed that the development of psoriasis is the result of genetic susceptibility together with immunological factors and environmental factors such as stress, infection (often due to streptococci), smoking, obesity, alcohol consumption and exposure to certain drugs [4, 8]. The exact mechanism between immunogenetic factors and environmental factors has not yet been discovered [11]. Psoriatic disease is a systemic immune-mediated inflammatory disorder comprising three major domains, skin, vascular and bone/joint inflammation [8]. Due to various elevated pro-inflammatory interleukins, psoriasis is a multisystem disorder associated with diseases such as psoriatic arthritis, hypertension, coronary heart disease, dyslipidemia, diabetes, malignancy, inflammatory bowel disease and depression [8, 12]. Skin lesions classically affect the scalp, extensor surfaces of the knees, elbows and lower back [4]. There may also be nail involvement [4]. The severity of psoriasis cannot be fully explained by genetic and environmental factors [13]. Men and women are equally affected by the onset of symptoms at any age [4].

### The effect of psoriasis on the mental health

Psoriasis patients may experience a variety of psychosocial difficulties, including problems with body image, self-confidence, self-consciousness, embarrassment, shame, helplessness, stigmatization, rejection, social discomfort, isolation, sexual dysfunction, anger and frustration [14–17]. They often feel stigmatized because of their visible psoriatic areas and because of the resulting disgust or fear reactions from other people [18]. The general aspects related to stigma: anticipation of rejection, feeling of inferiority, sensitivity to public opinion, secrecy, guilt and shame [19]. They are also characterized by low self-esteem, negative body image and social withdrawal [7, 20]. In the past, mental problems were attributed to stress of suffering from a chronic condition that is often visible and itchy, leading to stigmatization and adding to a significant burden of disease [8]. Recent evidence suggests that all of these are associated with a specific inflammatory pattern with IL-23, IL-17 family cytokines, TNF, IL-6, and IL-8 leading to neuroinflammation and subsequent depression or depressive-like behavior or anxiety [8]. The proportion of people with psoriasis who have depressive symptoms ranges from 9% to 55%, the risk of depression depends on the severity of psoriasis [4, 18]. In contrast, the prevalence of anxiety ranges from 7% to 48% and is not related to disease severity [4, 21]. Several studies have shown that the prevalence of depression and anxiety in patients with psoriasis is significantly higher than in individuals with other serious skin diseases [4]. Notably, patients with psoriasis experience suicidal thoughts more than twice often as the general population, 17.3% compared to 8.2% ($p<0.001$) [22]. In addition, they consume more alcohol and have higher rates of alcoholism compared to the general population [4,23]. Smoking among psoriasis patients is twice as high as in controls [24]. There is a huge unmet need for psychological support for people with skin conditions in the UK [4]. It is found that 98% of survey respondents said their skin condition affected their emotional or psychological well-being, but only 18% sought help [25]. Patients with skin diseases often downplay their psychological problems because they believe that their condition is not vital or important enough to seek medical attention [4].

### Cognitive behavioral therapy

Cognitive behavioral therapy (CBT) is a structured method based on a collaborative relationship between the patient and the psychotherapist [26]. The American Psychological Association explains that CBT helps to identify thinking errors, create strategies to change patterns of thinking and behavior in response to future stressors [26, 27]. The method is based on the assumption that difficult situations often lead to unhelpful ways of thinking and problematic behavior patterns [27]. CBT is recommended to increase self-awareness and reframe negative thoughts and emotions so that future responses to challenging situations are more effective [27]. An important aspect of the therapy is that it focuses on the current problem and does not require a return to past events [26]. CBT consists of many cognitive and behavioral strategies: psychoeducation, stress management practices (for example: deep breathing exercises, progressive muscle relaxation), changing automatic thoughts and beliefs, behavioral experiments and many others [26]. It is noted that this is a short-term therapy, requiring an average of 12 sessions [26]. CBT can be effectively applied to

the treatment of both mental and somatic diseases: depression, anxiety, ADHD, eating disorders, sleep disorders, diabetes, pain reduction and many others [27]. Patients with psoriasis may often experience negative and unrealistic thoughts that cause even more anxiety and distort the interpretation of the situation, which can have additional negative consequences for their actions [4]. It is emphasized that they tend to frequently check their condition against the background of cognitive distortions, misrepresenting their view of themselves and their interactions with others [4]. Patients often report that stress can negatively affect condition of disease, which can lead to anxiety regarding the potential stress (which can lead to a feedback loop that ultimately worsens their physical and psychological state) [4].

**The effect of cognitive behavioral therapy on the mental health in patients with psoriasis**

10 publications (Table 1) were found in the scientific databases that analyzed the effect of CBT on the mental health (anxiety, depression, insomnia, bad mood) in patients with psoriasis. It is noteworthy that 9 of them reveal a positive effect of cognitive behavioral therapy.

*Table 1.* **Studies that analyzed the effect of CBT on the mental health in people with psoriasis**

| Authors of the study/article | Type | Country | Sample | CBT intervention | Conclusions (The effect of CBT on the mental health in people with psoriasis). |
|---|---|---|---|---|---|
| Alipour et al. (2013) [28] | A semi-experimental study | Iran | 20 subjects with psoriasis: an experimental group of 10 patients and a control group of 10 patients | 12 CBT group therapy sessions | Improved mental status including anxiety and insomnia (p=0.004), depression (p=0.044). |
| Bundy et al. (2013) [29] | A randomized trial | United Kingdom | 126 patients with mild-moderate psoriasis: 61- in the CBT intervention group, 65- in the control group with delayed CBT intervention | Online 6-week CBT program | Anxiety scores decreased only in subjects who completed the full 6 weeks. program ($p < 0.05$). Depression scores did not change. |
| Faridhoseini et al. (2016) [30] | A quasi-experimental study | Iran | 16 subjects with psoriasis: experimental group of 8 patients and control group of 8 patients | 8 group stress management sessions based on CBT | The mean scores of anxiety and depression decreased in the experimental group ($p < 0.05$) compared to the control group. |
| van Beugen et al .(2016) [31] | A multicenter, randomized controlled trial | The Netherlands | 131 subjects with psoriasis: 66 subjects with care as usual (CAU), 65 subjects with CAU + CBT | Individually adapted online CBT | No significant differences were found between ICBT and CAU regarding psychological functioning at posttreatment assessment and 6-month follow-up ($p = 0.32$) or on its subcomponents negative mood, anxiety, and depressive symptoms (all $p \geq 0.20$). Results indicated that a better working alliance with the therapist at the beginning of treatment was associated with greater pre- to posttreatment assessment improvements in psychological functioning ($p < 0.001$). |
| Piaserico et al. (2016) [9] | A single-blind, randomized controlled trial | Italy | 40 patients with moderate-severe psoriasis: half of the patients (20) received CBT+ UVB phototherapy, the other half – only UVB phototherapy | 8 individual consultations (each lasting 60 min.). The therapy consisted of stress management techniques taken from CBT, combining them with biofeedback | The emotional domain improved significantly in the CBT/biofeedback group ($p = 0.04$). CBT+ biofeedback reduces minor mental disorders. |
| Koulil et al. (2018) [32] | Two case reports | The Netherlands | 1 patient with psoriasis and 1 patient with rheumatoid arthritis | Individualized therapist-led online cognitive behavioral therapy (ICBT) | Psychological well-being has improved. The effect was observed for 6 months. |
| Zill et al. (2019) [33] | A systematic review and meta-analysis | Globally | 19 studies that used the following techniques: CBT, mindfulness, meditation, and emotional writing | - | Psychosocial interventions are effective in reducing anxiety. |
| Sijercic et al. (2020) [34] | A systematic review | Globally | 9 randomized controlled trials | - | CBT as an adjunct to dermatological treatment may be beneficial, particularly in individuals with more severe pre-treatment psychopathology, to reduce anxiety and depressive symptoms. |
| Esmalian Khamseh et al. (2020) [35] | A quasi-experimental study | Iran | 60 patients with psoriasis were randomly divided into a control (30 patients) and an experimental (treatment) group (30 patients) | 6 CBT group sessions (each lasted 60 to 90 minutes) | CBT reduces anxiety related to body image. This effect was permanent after three months. |
| Dehghan Nayeri et al. (2023) [36] | A semi-experimental research | Iran | 45 subjects with psoriasis: 15 of them applied CBT, 15 - emotional freedom technique (EFT), 15 - control group | 8 CBT group therapy sessions (one session of 90 minutes per week) | Reduces psychological distress more effectively ($p < 0.01$). |

Only one study did not find a positive effect of cognitive behavioral therapy on mental health was published in 2016. [31]. Study analyzed the effects of therapist-led and individually tailored online CBT (iCBT) in a clinical sample of patients with psoriasis. Interventions could target 5 areas: itching, pain, fatigue, depressed mood and social relationships. These are the main areas where people with psoriasis tend to have problems. Therapy began with a face-to-face meeting between the subject and the psychologist, during which individual treatment goals were discussed. After the introductory meeting, the researcher explained to the subjects on the phone how to use the online intervention website. Then, by logging into a secure website, they could begin individually tailored iCBT interventions that were selected based on the patient's goals, the therapist's judgment and the screening process. Approximately once a week, patients received personally written feedback from their therapist on their completed tasks. Intervention duration and content varied between participants depending on treatment goals, with a mean duration of 25 ± 12 weeks (range 1–57 weeks). Analysis of the results revealed that there was no statistically significant difference between the two study groups in the field of psychological functioning after treatment and at the 6-month follow-up period ($p = 0.32$) or between the components of that field: bad mood, anxiety and depressive symptoms (all $p \geq 0.20$). At the same time, it is accentuated that a better therapeutic alliance with the therapist at the beginning of the treatment was associated with a greater improvement in the psychological state before and after the treatment ($p < 0.001$).

As many as 6 publications [28–30, 34, 35], one of which was a meta-analysis [33], claim that cognitive behavioral therapy effectively reduces anxiety in patients with psoriasis. Depression was analyzed in 5 publications [28–31, 34], but only three of them claimed that CBT effectively reduces depression [28, 30, 34]. The effect of cognitive behavioral therapy on insomnia has been described in one publication and it was positive [28]. Overall improvements in mental health following CBT interventions were highlighted in three articles [9, 32, 36].

To sum up, cognitive behavioral therapy improves the mental state in patients with psoriasis, but it is most effective in reducing anxiety and possibly depression and insomnia.

**The impact of cognitive behavioral therapy on psoriasis severity**

6 publications (Table 2) were found in scientific databases that examined the effect of cognitive behavioral therapy on psoriasis severity. Two of them stated that CBT has no effect in reducing the severity of psoriasis [28, 29], while four publications contradicted this conclusion and presented contrary results [9, 34, 36, 37].

In 2019, Xiao and colleagues [37] published a systematic review and meta-analysis of randomized controlled trials that analyzed the effects of various psychological interventions in the treatment of psoriasis. After analyzing 8 randomized controlled trials, five of which used CBT interventions, they found that cognitive behavioral therapy was effective in reducing disease severity, while other psychological interventions (telephone-based emotional disclosure, telephone-based motivational interviewing, group multiprofessional education) were not. The authors emphasized the fact that the effect of psychological

*Table 2.* **Studies that analyzed the effect of CBT on psoriasis severity**

| Authors of the study/article | Type | Country | Sample | CBT intervention | Conclusions (Effect of CBT on psoriasis severity) |
|---|---|---|---|---|---|
| Alipour et al. (2013) [28] | A semi-experimental study | Iran | 20 subjects with psoriasis: an experimental group of 10 patients and a control group of 10 patients | 12 CBT group therapy sessions | Did not affect psoriasis severity. |
| Bundy et al. (2013) [29] | A randomized trial | United Kingdom | 126 patients with mild-moderate psoriasis: 61- in the CBT intervention group, 65- in the control group with delayed CBT intervention | Online 6-week CBT program | Psoriasis severity scores did not change. |
| Piaserico et al. (2016) [9] | A single-blind, randomized controlled trial | Italy | 40 patients with moderate-severe psoriasis: half of the patients (20) received CBT+ UVB phototherapy, the other half - only UVB phototherapy | 8 individual consultations (each lasting 60 min.). The therapy consisted of stress management techniques taken from CBT, combining them with biofeedback | PASI (Psoriasis Area Severity Index) decreased by 75% in 65% of patients in the CBT group, while only 15% of patients in the UVB group achieved the same decrease within 8 weeks ($p = 0.007$). Significant decrease in PASI. |
| Xiao et al. (2019) [37] | A systematic review and meta-analysis | Globally | 8 randomized controlled trials that used not only CBT but also other types of therapy (telephone-based emotional disclosure, telephone-based motivational interviewing, group multiprofessional education) | - | CBT is effective in the treatment of psoriasis in terms of area and severity reduction, whereas non-CBT psychological interventions are not effective. |
| Sijercic et al. (2020) [34] | A systematic review | Globally | 9 randomized controlled trials | - | CBT as an adjunct to dermatological treatment may be beneficial, particularly in individuals with more severe pre-treatment psychopathology, to reduce psoriasis severity. |
| Dehghan Nayeri et al. (2023) [36] | A semi-experimental research | Iran | 45 subjects with psoriasis: 15 of them applied CBT, 15 - emotional freedom technique (EFT), 15 - control group | 8 CBT group therapy sessions (one session of 90 minutes per week) | Reduced severity of psoriasis symptoms. |

interventions is stronger in those patients with psoriasis who have moderate-severe psoriasis (or baseline PASI (Psoriasis Area and Severity Index) >8) and that the systemic treatment of psoriasis does not further increase the effectiveness of CBT.

Another systematic review was published in 2020 by Sijercic and co-authors [34]. After analyzing 9 randomized controlled trials, the researchers revealed that cognitive behavioral therapy, as an adjunct to dermatological treatment, may be useful in reducing the severity of the disease. It is accentuated that it can be especially useful for those patients with psoriasis who had severe mental disorders before the treatment.

The majority of scientific studies [9, 34, 36], including one meta-analysis [37], reveal that CBT is effective in reducing the severity level of psoriasis. CBT may be particularly beneficial for individuals with more severe pretreatment psychopathology in improving psoriasis severity. In addition, the effect size of cognitive behavioral therapy is stronger in patients with moderate-to-severe psoriasis (or baseline PASI >8) in comparison to those with mild psoriasis (or baseline PASI ≤8).

**The effect of cognitive behavioral therapy on the quality of life in patients with psoriasis**

As a relapsing and remitting lifelong disease, psoriasis has a negative impact on patients' quality of life [4]. Visible skin lesions, itching, pain, felt stigma (internal stigma or self-stigmatization), shame, distress, sad mood and co-morbidities caused by psoriasis affect health-related quality of life.

Bundy and colleagues [29] conducted a research study, one of the objectives was to determine whether an online 6-week CBT program (eTIPs) improves the quality of life in people with psoriasis. The program consisted of 6 areas based on cognitive behavioral therapy and customized learning materials. The content of eTIPs focused on self-esteem management, thinking styles, low mood and depression, stress and tension, coping strategies and improving awareness of psoriasis and its comprehensive treatment. When patients logged in, they read prepared materials, listened to actors impersonating patients talk about their experiences, and completed short tasks designed to test and reinforce their understanding. Patients were encouraged to complete one domain per week. The authors stated that this is the first online CBT intervention for people with psoriasis to show improvement in quality of life, but also emphasized that the results are limited by a large amount of missing data.

An improvement in the quality of life with the application of CBT was also found by Piaserico and colleagues [9], they compared psoriasis patients who received CBT interventions based on stress management techniques, biofeedback and narrow-wave UVB phototherapy with a control group that was treated only with UVB phototherapy. After initial baseline measurements (week 0), patients participated in 8 individual psychotherapy sessions (60 minutes a week). It was planned that the sessions would take place on the same working day and at the same time of day. Psychotherapy was conducted by 2 psychologists who had completed CBT and biofeedback training programs.

In a systematic review- meta-analysis [33] published in 2019, the authors reviewed the effects of psychosocial interventions in patients with psoriasis. It should be accentuated that not only CBT but also the effects of mindfulness, meditation and emotional writing were analyzed. Zill and colleagues found that psychosocial interventions are effective in improving the quality of life in people with psoriasis, but also highlighted the lack of high-quality studies, making it difficult to draw reliable conclusions.

It is noticeable that the authors (Table 3) concur that this type of therapy improves the quality of life. Most likely, this is related to the fact, that with the help of CBT interventions mood improves, perceived distress decreases, reactions and thoughts to stigmatization change and feelings of shame/discomfort decrease.

*Table 3.* **Studies that analyzed the effect of CBT on the quality of life in people with psoriasis**

| Authors of the study/article | Type | Country | Sample | CBT intervention | Conclusions (Effect of CBT on the quality of life in patients with psoriasis). |
|---|---|---|---|---|---|
| Bundy et al. (2013) [29] | A randomized trial | United Kingdom | 126 patients with mild-moderate psoriasis: 61- in the CBT intervention group, 65- in the control group with delayed CBT intervention | Online 6-week CBT program | Quality of life improved ($p < 0.05$). |
| Faridhoseini et al. (2016) [30] | A quasi-experimental study | Iran | 16 subjects with psoriasis: experimental group of 8 patients and control group of 8 patients | 8 group stress management sessions based on CBT | The average quality of life scores in the experimental group increased ($p < 0.05$) compared to the control group. |
| Piaserico et al. (2016) [9] | A single-blind, randomized controlled trial | Italy | 40 patients with moderate-severe psoriasis: half of the patients (20) received CBT+ UVB phototherapy, the other half - only UVB phototherapy | 8 individual consultations (each lasting 60 min.). The therapy consisted of stress management techniques taken from CBT, combining them with biofeedback | The quality of life has improved. |
| Zill et al. (2019) [33] | A systematic review and meta-analysis | Globally | 19 studies that used the following techniques: CBT, mindfulness, meditation, and emotional writing | - | Psychosocial interventions are effective in improving quality of life. |
| Sijercic et al. (2020) [34] | A systematic review | Globally | 9 randomized controlled trials | - | Effective in improving the quality of life. |

## CONCLUSIONS

Psoriasis is a complex disease, the comprehensive diagnosis and full treatment should include the correction of both biological and psychological factors. One of the options for the correction of psychological factors is cognitive behavioral therapy, which can complement medical treatment to improve the mental state, quality of life and reduce the severity of the disease. It should be emphasized that there is a great lack of large-scale randomized studies and meta-analyses on this topic, which would examine the effects of CBT and compare the effectiveness of this therapy with other types of psychotherapy in patients with psoriasis. All this would contribute to a more effective treatment of psoriasis.

## LITERATŪRA


1. Mehrmal S, Uppal P, Nedley N, Giesey RL, Delost GR. The global, regional, and national burden of psoriasis in 195 countries and territories, 1990 to 2017: A systematic analysis from the Global Burden of Disease Study 2017. J Am Acad Dermatol. 2021;84(1):46-52. doi:10.1016/j.jaad.2020.04.139.
2. Nestle FO, Kaplan DH, Barker J. Psoriasis. N Engl J Med. 2009;361(5):496-509. doi:10.1056/NEJMra0804595.
3. Korman NJ. Management of psoriasis as a systemic disease: what is the evidence?. Br J Dermatol. 2020;182(4):840-848. doi:10.1111/bjd.18245.
4. Blackstone B, Patel R, Bewley A. Assessing and Improving Psychological Well-Being in Psoriasis: Considerations for the Clinician. Psoriasis (Auckl). 2022;12:25-33. Published 2022 Mar 25. doi:10.2147/PTT.S328447.
5. Schwartz J, Evers AW, Bundy C, Kimball AB. Getting under the Skin: Report from the International Psoriasis Council Workshop on the Role of Stress in Psoriasis. Front Psychol. 2016;7:87. Published 2016 Feb 2. doi:10.3389/fpsyg.2016.00087.
6. Montgomery K, Norman P, Messenger AG, Thompson AR. The importance of mindfulness in psychosocial distress and quality of life in dermatology patients. Br J Dermatol. 2016;175(5):930-936. doi:10.1111/bjd.14719.
7. Tan C, Jiang J, Deng X, Xiang W, Hu T. Effect of cognitive behavioral therapy on anxiety and depression in patients with psoriasis: A protocol for systematic review and meta-analysis. Medicine (Baltimore). 2021;100(46):e27720. doi:10.1097/MD.0000000000027720.
8. Mrowietz U, Sümbül M, Gerdes S. Depression, a major comorbidity of psoriatic disease, is caused by metabolic inflammation. J Eur Acad Dermatol Venereol. 2023;37(9):1731-1738. doi:10.1111/jdv.19192.
9. Piaserico S, Marinello E, Dessi A, Linder MD, Coccarielli D, Peserico A. Efficacy of Biofeedback and Cognitive-behavioural Therapy in Psoriatic PatientsA Single-blind, Randomized and Controlled Study with Added Narrow-band Ultraviolet B Therapy. Acta Derm Venereol. 2016;96(217):91-95. doi:10.2340/00015555-2428.
10. Federico A, Hautanen V, Christian N, Kremer A, Serra A, Greco D. Manually curated and harmonised transcriptomics datasets of psoriasis and atopic dermatitis patients. Sci Data. 2020;7(1):343. Published 2020 Oct 13. doi:10.1038/s41597-020-00696-8.
11. Griffiths CEM, Armstrong AW, Gudjonsson JE, Barker JNWN. Psoriasis. Lancet. 2021;397(10281):1301-1315. doi:10.1016/S0140-6736(20)32549-6.
12. Takeshita J, Grewal S, Langan SM, et al. Psoriasis and comorbid diseases: Implications for management. J Am Acad Dermatol. 2017;76(3):393-403. doi:10.1016/j.jaad.2016.07.065.
13. Lebwohl M. Psoriasis. Lancet. 2003;361(9364):1197-1204. doi:10.1016/S0140-6736(03)12954-6.
14. Armstrong AW, Schupp C, Wu J, Bebo B. Quality of life and work productivity impairment among psoriasis patients: findings from the National Psoriasis Foundation survey data 2003-2011. PLoS One. 2012;7(12):e52935. doi:10.1371/journal.pone.0052935.
15. Hayes J, Koo J. Psoriasis: depression, anxiety, smoking, and drinking habits. Dermatol Ther. 2010;23(2):174-180. doi:10.1111/j.1529-8019.2010.01312.x.
16. Kimball AB, Jacobson C, Weiss S, Vreeland MG, Wu Y. The psychosocial burden of psoriasis. Am J Clin Dermatol. 2005;6(6):383-392. doi:10.2165/00128071-200506060-00005.
17. Maddock A, Hevey D, D'Alton P, Kirby B. A Randomized Trial of Mindfulness-Based Cognitive Therapy with Psoriasis Patients. Mindfulness. 2019;10:2606. Epub 2019 Sept 14. doi: 10.1007/s12671-019-01242-3, 10.1007/s12671-019-01242-3.
18. Korman AM, Hill D, Alikhan A, Feldman SR. Impact and management of depression in psoriasis patients. Expert Opin Pharmacother. 2016;17(2):147-152. doi:10.1517/14656566.2016.1128894.
19. Foggin E, Cuddy L, Young H. Psychosocial morbidity in skin disease. Br J Hosp Med (Lond). 2017;78(6):C82-C86. doi:10.12968/hmed.2017.78.6.C82.
20. Muftin Z, Gilbert P, Thompson AR. A randomized controlled feasibility trial of online compassion-focused self-help for psoriasis. Br J Dermatol. 2022;186(6):955-962. doi:10.1111/bjd.21020.
21. Fleming P, Bai JW, Pratt M, Sibbald C, Lynde C, Gulliver WP. The prevalence of anxiety in patients with psoriasis: a systematic review of observational studies and clinical trials. J Eur Acad Dermatol Venereol. 2017;31(5):798-807. doi:10.1111/jdv.13891.
22. Dalgard FJ, Gieler U, Tomas-Aragones L, et al. The psychological burden of skin diseases: a cross-sectional multicenter study among dermatological out-patients in 13 European countries. J Invest Dermatol. 2015;135(4):984-991. doi:10.1038/jid.2014.530.
23. Brenaut E, Horreau C, Pouplard C, et al. Alcohol consumption and psoriasis: a systematic literature review. J Eur Acad Dermatol Venereol. 2013;27 Suppl 3:30-35. doi:10.1111/jdv.12164.
24. Fortes C, Mastroeni S, Leffondré K, et al. Relationship between smoking and the clinical severity of psoriasis. Arch Dermatol. 2005;141(12):1580-1584. doi:10.1001/archderm.141.12.1580.
25. All-Party Parliamentary Group on Skin. Mental Health and Skin Disease [Internet]. Available from: http://www.appgs.co.uk/wp-content/uploads/ 2020/09/Mental_Health_and_Skin_Disease2020.pdf. It was accessed on November 20, 2023.
26. Khoury B, Ammar J. Cognitive behavioral therapy for treatment of primary care patients presenting with psychological disorders. Libyan J Med. 2014;9(1):24186. Published 2014 Mar 31. doi:10.3402/ljm.v9.24186.
27. Revankar RR, Revankar NR, Balogh EA, Patel HA, Kaplan SG, Feldman SR. Cognitive behavior therapy as dermatological treatment: a narrative review. Int J Womens Dermatol. 2022;8(4):e068. Published 2022 Dec 23. doi:10.1097/JW9.0000000000000068.
28. Alipour A, Hossein Z, Seyyed Naser E, Hassan A. The impact of group cognitive behavioral therapy on the disease severity and mental health of psoriasis patients. jdc 2013; 4 (4) :196-204.
29. Bundy C, Pinder B, Bucci S, Reeves D, Griffiths CE, Tarrier N. A novel, web-based, psychological intervention for people with psoriasis: the electronic Targeted Intervention for Psoriasis (eTIPs) study. Br J Dermatol. 2013;169(2):329-336. doi:10.1111/bjd.12350.
30. Faridhosseini, F., torkamani, M., layegh, P., nehedi, Y., nahidi, M. Effectiveness of cognitive-behavioral stress management on anxiety, depression and quality of life in patients with psoriasis. medical journal of mashhad university of medical sciences, 2016; 59(5): 337-344. doi: 10.22038/mjms.2016.9305.
31. van Beugen S, Ferwerda M, Spillekom-van Koulil S, et al. Tailored Therapist-Guided Internet-Based Cognitive Behavioral Treatment for Psoriasis: A Randomized Controlled Trial. Psychother Psychosom. 2016;85(5):297-307. doi:10.1159/000447267.
32. Koulil SS, Ferwerda M, van Beugen S, et al. Tailored Therapist-guided Internet-based Cognitive-behavioural Treatment for Psoriasis and Rheumatoid Arthritis: Two Case Reports. Acta Derm Venereol. 2018;98(2):225-233. doi:10.2340/00015555-2803.
33. Zill JM, Christalle E, Tillenburg N, et al. Effects of psychosocial interventions on patient-reported outcomes in patients with psoriasis: a systematic review and meta-analysis. Br J Dermatol. 2019;181(5):939-945. doi:10.1111/bjd.17272.
34. Sijercic I, Ennis N, Monson CM. A systematic review of cognitive and behavioral treatments for individuals with psoriasis. J Dermatolog Treat. 2020;31(6):631-638. doi:10.1080/09546634.2019.1690625.
35. Esmalian Khamseh, L., Asadi Mofarah, M., Toorani, S. The effectiveness of cognitive behavioral therapy based on Cash's eight-step model in body image of women with psoriasis. Iranian Journal of Dermatology, 2020; 23(1): 1-8. doi: 10.22034/ijd.2020.108061.
36. Dehghan Nayeri M, Bayazi M. Comparing the effectiveness of cognitive behavioral and emotion-oriented group therapy on reducing the symptoms of Psoriasis, psychological distress and perception of body image. jdc 2023; 14 (1) :29-41.
37. Xiao Y, Zhang X, Luo D, et al. The efficacy of psychological interventions on psoriasis treatment: a systematic review and meta-analysis of randomized controlled trials. Psychol Res Behav Manag. 2019;12:97-106. Published 2019 Feb 7. doi:10.2147/PRBM.S195181.


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# THE TREATMENT WITH ANTIPSYCHOTIC MEDICATIONS CAN CONCEAL HUNTINGTON'S DISEASE SYMPTOMS: A CLINICAL CASE REPORT

# Gydymas neuroleptikais gali maskuoti Huntingtono chorėjos simptomus: klinikinio atvejo analizė

**Milda MUSNECKYTE, Laura JARUTIENE**

**Lithuanian University of Health Sciences, Department of Psychiatry, Kaunas, Lithuania**

**SUMMARY**

Huntington's disease (HD) is a rare neurodegenerative autosomal dominant disorder of the central nervous system. It is characterised by involuntary choreiform movements with behavioural, psychiatric and cognitive disturbances progressing to dementia. This case study describes a 49-year-old female patient with acute psychosis, choreiform movements and a history of depression and anxiety symptoms lasting two years, who was hospitalised at the psychiatry clinic. The treatment included oral risperidone and intramuscular diazepam, resulting in the quick disappearance of choreiform movements. The absence of neurological changes during examination complicated the diagnosis. Laboratory tests showed no abnormalities, but a brain computed tomography (CT) scan revealed a small hypodense lesion in the right nucleus lentiform area. Further investigation using magnetic resonance imaging (MRI) indicated a frontal horn to cranial caudate ratio (FH)/CC) of approximately 1,95, suggestive of Huntington's disease. Additionally, dilatation of ventricles, brain sulci, and basal cisterns was observed. Genetic testing confirmed the diagnosis of HD with 45 CAG repeats in the HTT gene. This case underscores the challenges in diagnosing a rare neurodegenerative disease that initially presented with psychiatric symptoms and was complicated by antipsychotic treatment.

**Keywords:** Huntington's Disease, choreiform movements, antipsychotics.

**SANTRAUKA**

Huntingtono chorėja – reta neurodegeneracinė centrinės nervų sistemos liga, paveldima autosominiu dominantiniu būdu. Ligos klinikiniam vaizdui būdingi nevalingi chorėjiniai judesiai, lydimi psichikos, elgesio bei kognityvinių sutrikimų, progresuojančių į demenciją. Šis klinikinis atvejis aprašo 49 metų pacientę, kuri apie du metus gydėsi dėl depresijos bei nerimo sutrikimo, o atsiradus ūmios psichozės bei nevalingų judesių simptomatikai buvo stacionarizuota į psichiatrijos kliniką. Pacientei buvo taikytas gydymas tabletuota risperidono forma ir diazepamo injekcijomis. Chorėjiforminiai judesiai greitai redukavosi skirto gydymo fone. Neurologinės apžiūros metu nestebint nevalingų judesių kilo diagnostinių iššūkių. Pacientei buvo atlikti tyrimai: laboratoriniai – be žymesnių pakitimų, galvos smegenų kompiuterinėje tomografijoje (KT): dešinėje n. lentiformis srityje stebėtas smulkus hipodensinis židinukas. Atliktame magnetinio rezonanso tyrime (MRT) stebėtas FH/CC santykis ~1,95 (tai neprieštarautų Huntingtono ligos diagnozei) ir dėl amžinių involiucinių pakitimų saikiai praplitusios smegenų vagos bei bazalinės cisternos. Atliktame genetiniame tyrime HTT geno pirmame egzone nustatytas trinukleotidinių CAG pasikartojimų skaičius – 45, tai patvirtino Huntingtono ligos diagnozę. Šis klinikinis Huntingtono chorėjos atvejis įdomus tuo, kad liga manifestavo psichikos sutrikimais, o ligos diagnozavimą apsunkino chorėjinių judesių išnykimas dėl skirto antipsichotinio gydymo.

**Raktiniai žodžiai:** Huntingtono liga, chorėjiforminiai judesiai, antipsichotikai.

**Autorius susirašinėjimui:** Milda Musneckyte, Lithuanian University of Health Sciences, Medical Academy, A. Mickeviciaus g. 9, LT-44307 Kaunas, E-mail: mildmuse@gmail.com

## INTRODUCTION

Huntington's disease (HD) is a rare neurodegenerative autosomal dominant disorder of the central nervous system characterised by involuntary choreiform movements with behavioural, psychiatric and cognitive disturbances progressing to dementia [1]. HD symptoms commonly affect patients between 30 and 45 years of age. HD occurs when cytosine, adenine, and guanine (CAG) trinucleotide repeats on the short arm of chromosome 4p16.3 in the Huntingtin (HTT) gene. This mutation causes an abnormally long expansion of the polyglutamine in the HTT protein, which leads to neurodegeneration [2]. The pathological pathway of HD includes selective degeneration of GABAergic medium spiny neurons in the striatum nuclei of basal ganglia. Choreiform movements and behavioural symptoms seem to be connected with an imbalance of neurotransmitters such as dopamine, acetylcholine, adenosine and GABA in the basal ganglia region of the midbrain [3]. In Huntington's disease, brain imaging reveals atrophy in the caudate nucleus. CT scans and MRIs show atrophy of the basal ganglia years before the development of symptoms [4]. However, the final diagnosis is made by genetic testing, so the patient and their family require genetic counselling since the disease is dominantly inherited [5]. Treatment of HD is symptomatic and supportive, as there are no disease-modifying therapies available yet. The prognosis of HD is adverse since it is a relentlessly progressive disorder, leading to disability and death, usually from comorbid conditions. Most patients survive 10 – 25 years after the onset of illness [6]. In this clinical case report we present a patient with HD, who also experienced anxiety, psychosis symptoms, and choreiform movements and was referred to the department of psychiatry where HD was suspected and later confirmed. This clinical case report is unique as it shows an example of a rare neurodegenerative disorder – Huntington's disease which first manifested in psychiatric symptoms and had a complicated diagnosis due to treatment with antipsychotics.

## CASE REPORT

A 49-year-old female patient was hospitalised at the university hospital psychiatry ward with psychotic and anxiety symptoms, behavioural disturbance and episodic choreiform movements. According to the medical records, the first psychiatric symptoms such as anxiety, depression, irritability, and anger outbursts appeared approximately two years prior. At that time, the patient consulted an outpatient care psychiatrist and was diagnosed with mixed anxiety – depressive disorder. The patient's care consisted of pharmacotherapy (escitalopram, bromazepam, carbamazepine) and psychological assistance. The treatment was partially effective as the patient's mood increased and anxiety symptoms decreased. However, irritability and anger outbursts remained. Also, during the past three months, the patient noticed memory problems, difficulty concentrating, episodes of disorientation, reduced appetite, weight loss, mood swings, irritation, aggression, dizziness, insomnia, involuntary whole body movements, and difficulty walking and swallowing. She reconsulted a psychiatrist and was recommended to continue treatment in a psychiatric-profile day care unit. A few days later, the patient developed delusions of poisoning, persecution, and harm, so she was sent to the university hospital for a more detailed examination. From life anamnesis, the patient was born on time, developed normally, graduated from school, worked as a tailor, got married and gave birth to two children. In her words, after giving birth to the second child, she experienced much stress, felt desperate, lacked energy and was afraid to seek help. Consequently, she turned to heavy alcohol consumption, during which she experienced seizures a few times after abstaining. The patient struggled with alcohol abuse for approximately five years. This led to the development of physical and psychological alcohol dependence. Afterward, she sought help, completed the Minnesota program twice and thereafter, remained alcohol-free for nine years. Furthermore, the patient said that she assumed that her mother died quite young from Parkinson's disease. The patient's clinical picture revealed paranoid, nihilistic delusions, visceral hallucinations, impaired cognition, anxiety, flat affect and involuntary movements. Blood investigations (complete blood count (CBC), renal function test (RFT), liver function test (LFT), thyroid function test (TFT), vitamin B12 concentration test) were normal, the patient was negative for HIV, and antibodies for T. pallidum. The mini-mental status examination (MMSE) score was 26 meaning that cognitive impairment was not detected. However, the MMSE test showed weakened short-term memory (STM) and reduced attention concentration. A brain CT scan showed a small hypodense lesion in the right nucleus lentiform area. The patient's treatment started with a 2 mg daily dose of oral risperidone and a 30 mg daily dose of intramuscular diazepam. Involuntary movements quickly faded away after administering treatment with D2 receptor antagonists. The patient was consulted by a neurologist, but since there were no involuntary movements during the examination, HD was not suspected, and further outpatient monitoring was recommended. The patient received treatment with a 3 mg daily dose of oral risperidone and a 30 mg daily dose of intramuscular diazepam, which later switched to oral administration, the dose slowly lowered and eventually discontinued. Treatment was partially effective: hallucinations, delusions, aggressive behaviour, anxiety, and insomnia symptoms regressed but memory problems, difficulty walking, and deteriorated focus remained. The patient was discharged from the hospital with further recommendations such as an MRI of the brain, geneticist counselling, psychopharmacotherapy (3 mg daily dose of oral risperidone), and a neurologist consultation in case choreiform movements appear again.

The patient continued treatment in the outpatient care centre. An MRI of the brain was performed. The results showed a frontal horn to cranial caudate ratio (FH)/CC) of ~ 1,95, suggestive of Huntington's disease. Also, there was the dilatation of ventricles, brain sulci, and basal cisterns. The patient was consulted by a geneticist. The genetic testing showed 45 CAG repeats in the HTT gene, confirming HD. During outpatient psychiatric care, the daily oral risperidone dose was increased to 6 mg due to insomnia, anxiety and increasing choreiform movements. One year after the first

signs of the disease appeared, the patient was readmitted to the psychiatry ward. She was suffering from insomnia, anxiety, memory impairment and choreiform movements despite using 6 mg of risperidone daily. According to her husband, the patient's cognitive abilities were worsening, she required assistance with feeding, medication and maintaining hygiene skills. The patient's clinical picture showed high levels of anxiety, cognitive disturbances, mood swings and choreiform movements of the hands, legs and face. An MMSE was repeated – the score was 19 which meant mild cognitive impairment so Huntington's disease-associated dementia was diagnosed. Treatment was adjusted by discontinuing oral risperidone and starting oral olanzapine. Olanzapine dose was titrated to 15 mg daily. With this dose the patient's sleep improved, and her anxiety symptoms and choreiform movements of the hands and legs decreased. However, involuntary face movements were still visible. Therefore, she was consulted by a neurologists, and they suggested a 12,5 mg oral tetrabenazine. The patient was recommended to continue treatment with a 15 mg daily dose of olanzapine and a 12,5 mg daily dose of tetrabenazine, and was discharged from the hospital.

## DISCUSSION

This clinical case is about a patient who experienced psychosis, behavioural disturbances, anxiety, and involuntary movements and was diagnosed with Huntington's disease. Even though HD is recognised as a neurological condition, it can also amount to a number of psychiatric components, with recent studies suggesting that these components can occur years before the first neurological symptoms [7]. Depression is one of the most common psychiatric disorders seen in HD. Other accompanying disorders are anxiety, irritability characterised by impatience, loss of control, impulsivity, aggressive behaviour, hallucinations and delusions [8]. In this clinical case, HD manifested with psychiatric symptoms and the first point of contact with the healthcare system was an outpatient psychiatrist. The patient was diagnosed with mixed anxiety–depressive (MADD). She undertook psychiatric care for two years, but HD was not suspected until psychotic symptoms and involuntary movements appeared. The literature shows a comparable case report with a patient who visited the emergency department (ED) eight times in four months with symptoms that seemed to be anxiety and hypochondria. HD was suspected just after the onset of obvious psychotic and motor symptoms. [9].

One more important point to discuss is the patient's history of alcohol abuse. The manifestation of HD with psychiatric symptoms in our case might not be a coincidence. A retrospective observational study using the international HD observation project "Enroll HD" found that patients with current or previous alcohol abuse, were more likely to exhibit a psychiatric symptom as their initial clinical feature of HD (55.3% and 30.7%) compared to those who do not drink excessively (4.9%). The study also revealed that HD motor symptoms were more severe in individuals with previous alcohol abuse [10]. Another research suggests that alcohol abuse may hasten the age of motor onset (AMO) of HD. The average AMO of individuals with alcohol abuse was one year earlier compared to the control group [11].

A major aspect of this case is that choreiform movements quickly vanished after giving a D2 receptor antagonist (risperidone) for psychosis, making it difficult to determine the diagnosis. Although we are not aware of other clinical cases in which antipsychotics concealed HD symptoms, we present some comparisons with cases using antipsychotics to treat both chorea and psychosis. One of the cases include a woman with HD whose psychotic and motor symptoms reduced after treatment with 4 mg daily dose of risperidone [12]. Another research describes the 5 case series representing the first report of the use of long-acting injectable (LAI) risperidone in the patients with HD. The risperidone LAI seemed to improve chorea, psychiatric and behavioural disturbances, and general functioning in these five patients over an average of 1 year [13]. Further case report of the HD patient describes the successful treatment with 10 mg daily dose of olanzapine as psychotic symptoms and involuntary movements decreased after a few days [14]. These findings suggest that treatment with antipsychotics decreases choreiform movements and improves patient's quality of life. The antipsychotics mechanism of action is thought to be related to the blocking of dopamine D2 receptors, reducing the effect of dopamine in the brain and leading to the suppression of chorea [15]. Since there there are no disease-modifying treatments available yet and HD management is basically symptomatic, various treatment modalities are currently undergoing evaluation for their potential efficacy in clinical trials [16]. International guidelines for the symptomatic treatment of HD states that tetrabenazine is one of the first-line treatments for the chorea unless the patient suffers from depression or suicidal thoughts, and the atypical antipsychotics are first-line treatments for chorea when the patient has comorbid psychiatric disorders [8]. VMAT-2 inhibitors are the only medications approved by the Food and Drug Administration (FDA) to treat HD chorea, however, antipsychotic therapies are used off-label in the clinical practise. The typical antipsychotics such as haloperidol may affect chorea through strong D2 affinity, but due to common adverse effects (tardive dyskinesia, bradykinesia, and akathisia) are rarely used in the clinical practise. The majority of reports have described the beneficial use of three atypical antipsychotics (risperidone, olanzapine and aripiprazole) for treating chorea in HD patients [17].

In conclusion, this case report showed that HD can manifest with psychiatric symptoms such as depression or anxiety so psychiatrists should be vigilant in considering neurodegenerative diseases during diagnostics. Also, the history of alcohol abuse might have an impact on the onset and progress of the HD. Furthermore, the use of antipsychotics to treat both chorea and psychosis symptoms seems to be a common choice in the clinical practise.

Patient consent for the case report was obtained.

## REFERENCES


1. Pringsheim T., Wiltshire K., Day L., Dykeman J., Steeves T., Jette N.The incidence and prevalence of Huntington's disease: A systematic review and meta-analysis, U.S. National Library of Medicine; 2012 Aug;27(9):1083-91. doi: 10.1002/mds.25075. PMID: 22692795.
2. Ajitkumar A., Jesus O. Huntington Disease. 2023 Jan. PMID: 32644592. Bookshelf ID: NBK559166.
3. Jamwal S., Kumar P. Insight into the emerging role of striatal neurotransmitters in the pathophysiology of Parkinson's disease and Huntington's disease: A review. Curr Neuropharmacol. 2019;17(2):165–75. Available from: http://dx.doi.org/10.2174/1570159x16666180302115032.
4. Petrie W., Kirshner HS. Neurocognitive disorders in Current Diagnosis & Treatment: Psychiatry, 3eEds. McGraw Hill; 2019. Available from: https://accessmedicine-mhmedical-com.ezproxy.dbazes.lsmuni.lt/content.aspx?sectionid=200803252&bookid=2509#200803548.
5. Berkowitz A.L. Movement disorders in Clinical Neurology & Neuroanatomy: A Localization-Based Approach, 2e. McGraw Hill. Available from: https://accessmedicine.mhmedical.com/content.aspxbookid=3206&sectionid=267391016. Accessed November 10, 2023.
6. Fredy J., Revilla M. Huntington disease. Medscape; 2023. Available from: https://emedicine.medscape.com/article/1150165-overview?form=fpf. Accessed November 14, 2023.
7. Halpin M. Diagnosis, psychiatry and neurology: The case of huntington disease. Social Science & Medicine. 2011;73(6):858–65. doi:10.1016/j.socscimed.2011.03.034.
8. Bachoud-Lévi A-C, Ferreira J, Massart R, Youssov K, Rosser A, Busse M, et al. International guidelines for the treatment of Huntington's disease [Internet]. Frontiers; 2019. Available from: https://doi.org/10.3389/fneur.2019.00710. Accessed December 1, 2023.
9. Yeo K., Gupta M., Correll C.U. Huntington's disease with psychotic features. Prim Care Companion CNS Disord. 1628164847;23(4):35631. Available from: https://www.psychiatrist.com/pcc/huntingtons-disease-with-psychotic-features. Accessed December 1, 2023.
10. Symonds A.L., Macerollo A., Foy K., Alusi S.H., Davies R. Genetic and environmental contributors to neurodegeneration: An exploration of the effects of alcohol on clinical features of Huntington's disease using the Enroll-HD global platform. Int J Environ Res Public Health. 2021; 18(10):5113. Available from: https://www.mdpi.com/1660-4601/18/10/5113. Accessed December 2, 2023.
11. Schultz J.L., Kamholz J.A., Moser D.J., Feely S.M.E., Paulsen J.S., Nopoulos P.C. Substance abuse may hasten motor onset of Huntington disease: Evaluating the Enroll-HD database. Neurology; 2017;88(9):909–15. doi:10.1212/WNL.0000000000003661. PMID: 28148631.
12. Cankurtaran E.S., Ozalp E., Soygur H., Cakir A. Clinical experience with risperidone and memantine in the treatment of Huntington's disease. Journal of the National Medical Association. 2006;98(8):1353. PMID:16916137.
13. Johnston T.G. Risperidone long-acting injection and Huntington's disease: Case series with significant psychiatric and behavioural symptoms. Int Clin Psychopharmacol. 2011; 26(2):114–9. DOI:10.1097/YIC.0b013e3283407775. PMID: 21119522/.
14. Huarcaya-Victoria J., Plasencia-Yasuda R., Ñique-Rivas M., Suárez-Agreda K., Cerrato-Huayaney J. Olanzapine in the management of psychosis in Huntington's disease: a case report. Actas Esp Psiquiatr. PMID: 31648344.
15. Venuto C.S., Mcgarry A., Ma Q., Kieburtz K. Pharmacologic approaches to the treatment of Huntington's disease. Mov Disord. 2012;27:31–41. DOI:10.1002/mds.23953. PMID: 21997232.
16. Kim A., Lalonde K., Truesdell A., Gomes Welter P., Brocardo P.S., Rosenstock T.R., et al. New avenues for the treatment of Huntington's disease. Int J Mol Sci; 2021; 22(16):8363. DOI: 10.3390/ijms22168363. PMID: 34445070.
17. Gibson J.S., Claassen D.O. State-of-the-art pharmacological approaches to reduce chorea in Huntington's disease. Expert Opin Pharmacother. 2021;22(8):1015–24. doi:10.1080/14656566.2021.1876666. PMID: 33550875.


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# **Alkoholio, rūkymo ir kitų medžiagų vartojimo atrankos testas** (*angl.* The Alcohol, Smoking and Substance Involvement Screening Test, ASSIST)

**Evelina PALAITYTĖ-URBONĖ**

**Lietuvos sveikatos mokslų universiteto, Neuromokslų institutas, Elgesio medicinos laboratorija, Kaunas, Lietuva**

Priklausomybę sukeliančių medžiagų vartojimas ir paplitimas įvardijamas kaip globali problema [1], tačiau, priklausomybę sukeliančių medžiagų vartojimas skirtingose geografinėse padėtyse skiriasi, dėl kultūrinių, istorinių ir socialinių veiksnių [2]. 2021 metais Lietuvoje per paskutinius 12 mėnesių rūkė 38,5 proc., 15–64 metų amžiaus Lietuvos gyventojų, per paskutines 30 dienų – 34,9 proc., o kasdien – 31,1 proc. Beveik ketvirtadalis (23,7 proc.) Lietuvos gyventojų alkoholį vartojo kartą per savaitę ar dažniau, 14,1 proc. 15–64 metų amžiaus Lietuvos gyventojų bent kartą gyvenime buvo vartoję bent vieną narkotiką, 4,5 proc. gyventojų teigė bent vieną narkotiką vartoję per paskutinius 12 mėnesių, o 1,6 proc. – per paskutines 30 dienų [3–5].

Tyrimai rodo, kad alkoholio, rūkymo ir kitų psichotropinių medžiagų vartojimas koreliuoja su neigiamais fizinės ir psichologinės sveikatos aspektais. Skelbiama, kad rizikingas ir priklausomas alkoholio vartojimas susijęs su aukštu nerimo lygiu, depresijos simptomų intensyvumu, kognityvinių funkcijų pablogėjimu, kepenų ligomis ir kitų nelegalių psichotropinių medžiagų nesaikingu vartojimu, tapusiu ypač pastebimu COVID-19 pandemijos metu [6, 7]. Rūkymas dažniausiai siejamas su kardiologinėmis ir pulmonologinėmis sveikatos problemomis [8, 9]. Kitų narkotinių ar psichotropinių medžiagų rizikingas vartojamas taip pat siejamas su aukštesniu nerimo ir bendro streso lygiu, smegenų struktūrų pokyčiais, kurie veikia kognityvinį funkcionavimą [10].

Ankstyvas rizikingo medžiagų vartojimo atpažinimas prisidėtų prie sveikatos apsaugos išlaidų mažinimo. Šiam tikslui Pasaulinė sveikatos organizacija (PSO) sukūrė alkoholio, rūkymo ir kitų narkotinių medžiagų vartojimo atrankos testą (*angl.* The Alcohol, Smoking and Substance Involvement Screening Test, ASSIST) [11]. Šis instrumentas sukurtas 2002 metais [11], remiantis sėkminga kito instrumento praktika – sutrikimų, atsiradusių dėl alkoholio vartojimo testu (*angl.* Alcohol Use Disorders Identification Test, AUDIT) [12–14]. Instrumentas apima dešimties skirtingų medžiagų vartojimo vertinimą: tabako, alkoholio, kanapių, kokaino, amfetamino stimuliantų, inhaliantų, raminamųjų ar migdomųjų, haliucinogenų, opioidų ir kitų medžiagų (paskutinis klausimas – atviras). 42 šalis (tarp jų ir Lietuvą) apjungęs mokslinis tyrimas, atliktas platesnio projekto „International Sex Survey“ kontekste [15], nurodo, kad ASSIST pasižymi geromis psichometrinėmis savybėmis, panašiai veikia skirtingos kalbos, šalių, amžiaus, lytinės tapatybės ir seksualinės orientacijos grupėse [16].

Klausimyno pranašumai: 1) paprastos instrukcijos, 2) klausimų apie alkoholį ir tabaką įtraukimas, 3) konkrečių narkotinių klasių įvardijimas, leidžiantis diferencijuoti priklausomybę tarp įvairių psichoaktyvių medžiagų, 4) konkretūs klausimai apie dabarties ir praeities skirtingų medžiagų vartojimo ypatumus [11].

ASSIST užpildymas ir įvertinimas trunka iki 15 minučių. Kiekviena subskalė yra vertinama, remiantis penkių balų Likert‘o skale. Tiriamasis pasirenka tinkamą atsakymą remdamasis paskutinių trijų mėnesių patirtimi. Suminis klausimyno balas gali svyruoti nuo 0 iki 40 balų. Didesnis balas kiekvienoje subskalėje rodo didesnę vartojamos medžiagos riziką.

Lietuviška ASSIST klausimyno versija išversta Lietuvos sveikatos mokslų universiteto, Neuromokslų instituto, Elgesio medicinos laboratorijos mokslininkų, naudojant dvigubo atgalinio vertimo procedūrą. Vertimą atliko psichiatras ir klinikinis psichologas.

Apibendrinant, ASSIST instrumentas yra trumpas, pasižymi geromis psichometrinėmis charakteristikomis ir jį lengva naudoti. Instrumentą administruoti gali bet kuris sveikatos priežiūros įstaigos darbuotojas ar savarankiškai užpildyti pats asmuo.

Kaip dažnai per pastaruosius tris mėnesius vartojote toliau išvardytas medžiagas? Kai kurias iš toliau išvardytų medžiagų gali išrašyti gydytojas (pvz., amfetaminus, raminamuosius, vaistus nuo skausmo). Atsakydami į šį klausimą, neįtraukite vaistų, kuriuos vartojate taip, kaip paskyrė gydytojas. Tačiau jei tokius vaistus vartojote dėl kitų nei paskirta priežasčių arba dažniau ar didesnėmis dozėmis, nei skyrė gydytojas, paminėkite tai.

| | Niekada | Kartą ar du | Kartą per mėnesį | Kartą per savaitę | Kasdien ar beveik kasdien |
|---|---|---|---|---|---|
| 1. Tabako produktai (cigaretės, kramtomas tabakas, cigarai ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 2. Alkoholiniai gėrimai (alus, vynas, stiprieji gėrimai ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 3. Kanapės (marihuana, kanapių lapai, „žolė“, hašišas ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 4. Kokainas (uostomas kokainas, krekas ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 5. Amfetaminų tipo stimuliantai (metamfetaminas, liekninamosios tabletės, ekstazis ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 6. Inhaliantai (azoto oksidas, klijai, benzinas, dažų skiediklis ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 7. Raminamieji ar migdomieji vaistai („Diazepamas“, „Oksazepamas“, „Flunitrazepamas“ ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 8. Haliucinogenai (LSD, rūgštis, grybai, PCP, Special K ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 9. Opioidai (heroinas, morfinas, metadonas, kodeinas ir kt.) | 0 | 1 | 2 | 3 | 4 |
| 10. Kita, nurodykite: _____ | 0 | 1 | 2 | 3 | 4 |

Pastaba: skalę galima naudoti nemokamai be papildomo leidimo, tačiau rekomenduotina nurodyti šiuos informacijos šaltinius:

1. R. Humeniuk, S. Henry-Edwards, R. Ali, V. Poznyak, M.G. Monteiro, O. World Health The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Manual for Use in Primary Care World Health Organization, Geneva (2010)
2. WHO ASSIST Working Group The alcohol, smoking and substance involvement screening test (ASSIST): development, reliability and feasibility Addiction, 97 (9) (2002), pp. 1183-1194, 10.1046/j.1360-0443.2002.00185.x
3. Lee CT, Lin CY, Koós M, Nagy L, Kraus SW, Demetrovics Z, et al. The eleven-item Alcohol, Smoking and Substance Involvement Screening Test (ASSIST-11): Cross-cultural psychometric evaluation across 42 countries. J Psychiatr Res. 2023;165:16-27. doi: 10.1016/j.jpsychires.2023.06.033.
4. Palaitytė-Urbonė E. Alkoholio, rūkymo ir kitų medžiagų vartojimo atrankos testas (ASSIST) = : The Alcohol, Smoking and Substance Involvement Screening Test, ASSIST// Biologinė psichiatrija ir psichofarmakologija = Biological psychiatry and psychopharmacology. Kaunas; Palanga : Lietuvos biologinės psichiatrijos draugijos; Lietuvos sveikatos mokslų universitetas, 2023, t. 25, Nr. 2, p. 95-96, ISSN 1648-293X, 1822-3702.

**LITERATŪRA:**


1. Chang KC, Chen HP, Huang SW, Chen JS, Potenza MN, Pakpour AH, Lin CY, Comparisons of psychological distress and self-stigma among three types of substance use disorders receiving treatment-as-usual approaches: real-world data from a 9-month longitudinal study. Ther Adv Chronic Dis. 2022, December. DOI: 10.1177/20406223221140393.
2. United Nations Office on Drugs and Crime. Single convention on narcotic drugs 1961. [Žiūrėta internete 2023-12-08]. Nuoroda: https://www.unodc.org/unodc/en/treaties/single-convention.html.
3. Narkotikų, tabako ir alkoholio kontrolės departamentas. Alkoholio vartojimo paplitimas Lietuvoje, 2023. [Žiūrėta internete 2023-12-08]. Nuoroda: https://ntakd.lrv.lt/lt/statistika-ir-tyrimai/tendencijos-ir-pokyciai-lietuvoje/alkoholio-vartojimo-paplitimas-lietuvoje/.
4. Narkotikų, tabako ir alkoholio kontrolės departamentas. Narkotikų vartojimo paplitimas Lietuvoje, 2023. [Žiūrėta internete 2023-12-08]. Nuoroda: https://ntakd.lrv.lt/lt/statistika-ir-tyrimai/tendencijos-ir-pokyciai-lietuvoje/narkotiku-vartojimo-paplitimas-lietuvoje/ .
5. Narkotikų, tabako ir alkoholio kontrolės departamentas. Rūkymo paplitimas Lietuvoje, 2023. [Žiūrėta internete 2023-12-08]. Nuoroda: https://ntakd.lrv.lt/lt/statistika-ir-tyrimai/tendencijos-ir-pokyciai-lietuvoje/rukymo-paplitimas-lietuvoje/.
6. Shao-Cheng W, Yuan-Chuan C, Shaw-Ji C, Chun-Hung L, Ching-Ming C. Alcohol Addiction, Gut Microbiota, and Alcoholism Treatment: A Review. Int J Mol Sci. 2020 Sep 3;21(17):6413. DOI: 10.3390/ijms21176413.
7. Ceci F, Di Carlo F, Burkauskas J, Martinotti G, & di Giannantonio, M. The COVID-19 Pandemic: A Novel Risk Factor for Exercise Addiction and Related Disorders; Chapter 3. The Body in the Mind: Exercise Addiction, Body Image, & the use of Enhancement Drugs/Edited by Ornella Corazza and Artemisa Rocha Dores. New York: Cambridge University Press, 2023. DOI:10.1007/s11469-022-00815-z.
8. Christenson AS, Smith BM, Bafadhel M, Putcha N. Chronic obstructive pulmonary disease. Lancet, 2022 Jun 11;399(10342):2227-2242. DOI: 10.1016/S0140-6736(22)00470-6.
9. Krabbe B, Espinola-Klein C, Malyer N, Brodmann M, Mazzolai L, Belch JJF, Muller OJ, Heiss Ch. Health effects of e-cigarettes and their use for smoking cessation from a vascular perspective. Vasa, European Journal of Vascular Medicine, 2023, March, Volume 52, Issue 2. DOI: https://doi.org/10.1024/0301-1526/a001056.
10. National Institute on Drugs Abuse, Advancing Addiction Science, Understanding Drug Use and Addiction DrugFacts, 2018. [Žiūrėta internete 2023-12-08] Nuoroda: https://nida.nih.gov/publications/drugfacts/understanding-drug-use-addiction.
11. WHO ASSIST Working Group, The alcohol, smoking and substance involvement screening test (ASSIST): development, reliability and feasibility. Addiction, 97 (9), 2002, pp. 1183-1194, DOI: 10.1046/j.1360-0443.2002.00185.x.
12. Babor T F, & Robaina K. The Alcohol Use Disorders Identification Test (AUDIT): A review of graded severity algorithms and national adaptations. 2016, International Journal of Alcohol and Drugs research, Vol. 5, No. 2. DOI: https://doi.org/10.7895/ijadr.v5i2.222.
13. Horváth Z, Nagy L, Koós M, Kraus SW, Demetrovics Z, Potenza MN, & Bőthe B. Psychometric properties of the Alcohol Use Disorders Identification Test (AUDIT) across cross-cultural subgroups, genders, and sexual orientations: Findings from the International Sex Survey (ISS). Comprehensive Psychiatry, 2023, 127, 152427. DOI: https://doi.org/10.1016/j.comppsych.2023.152427.
14. Gecaite-Stonciene J, Steibliene V, Fineberg NA, Podlipskyte A, Bunevicius A, Liaugaudaite V, & Burkauskas J. Multidimensional Structure of the Alcohol Use Disorders Identification Test: Factorial Validity and Reliability in Patients With Anxiety and Mood Disorders in Lithuania. Alcohol and alcoholism, 2021, 56(1), 109-115. DOI: 10.1093/alcalc/agaa118.
15. Bőthe B, Koós M, Nagy L, Kraus SW, Demetrovics Z, Potenza MN, & Vaillancourt-Morel MP. Compulsive sexual behavior disorder in 42 countries: Insights from the International Sex Survey and introduction of standardized assessment tools. Journal of Behavioral Addictions, 2023, 12(2):393-407. DOI: 10.1556/2006.2023.00028.
16. Lee CT, Lin CY, Koos M, Nagy L, Kraus SW, Demetrovics Z, Potenza MN. The eleven-item Alcohol, Smoking and Substance Involvement Screening Test (ASSIST-11): Cross-cultural psychometric evaluation across 42 countries. J Psychiatr Res, 2023 Sep:165:16-27. DOI: 10.1016/j.jpsychires.