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Research Article

Efficacy of Body-Oriented Psychotherapy in Alleviating Climacteric Symptoms and Menopause Manifestations

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ABSTRACT

The climacteric symptoms experienced by menopausal women significantly affect their quality of life. These changes can lead to sexual dysfunction, an increased risk of osteoporosis, cardiovascular disease, cancer, psychiatric disorders, and chronic kidney disease. The psychological impact of menopausal symptoms is also high, including mood swings, depression and anxiety. In our study, we evaluated the effectiveness of body-oriented psychotherapy in alleviating menopausal symptoms in women aged 45 years and older. Twelve women with menopausal symptoms were interviewed in a structured survey based on the Menopause-specific Quality of Life Questionnaire (MENQOL). After diagnostic evaluation, study participants underwent three months of body-oriented psychotherapy. A pre- and post-intervention survey was administered to assess changes in symptom severity. Significant changes were found in the severity of psychosocial and physiological symptoms as well as in the overall quality of life score ($p<0.01$). Moderate changes in the severity of vasomotor and sexual symptoms were also detected ($p<0.05$). The results of this study contribute to our understanding of the effectiveness of body-oriented psychotherapy and suggest its potential as a non-pharmacological treatment option for reducing climacteric symptoms and menopause manifestations.

Keywords: Body-Oriented Psychotherapy, Menopause, Climacteric Symptoms, Quality of Life, Non-Pharmacological Therapy.

INTRODUCTION

Menopause is a naturally occurring stage of ontogenesis in a woman's life, which marks the "aging" of the reproductive system and leads to a decrease in ovarian function and deficiency of sex hormones [1, 12].

On the other hand, menopause is defined as the point in time after a woman's last menstruation, which is confirmed after twelve consecutive months of no menstruation. Menopause marks the end of a woman's reproductive period, and the period following it is often referred to as postmenopause [15].

Currently, there is a global trend toward increasing life expectancy, and therefore the number of postmenopausal women in the population is increasing. An estimated 1.02 billion women worldwide were postmenopausal in 2021, and 1.65 billion women are expected to be postmenopausal by 2050 [19].

Climacteric complaints, grouped into menopausal syndrome, commonly occur between the ages of 45-55 years. Approximately 7% of women enter menopause early between the ages of 40 and 45 years, and 1.9% enter it before the age of 40 years, which is considered premature menopause [19]. During this age interval, women experience a progressive decline in ovarian activity and physiologic dysfunction of the hypothalamic-pituitary ovarian system associated with hormonal changes [7]. Menopausal symptoms begin to appear for the first time: hot flashes, mood swings, weight gain, decreased physical strength, skin changes, decreased efficiency, headaches, decreased libido, and urogenital discomfort.

Menopausal and menopausal symptoms have been shown to significantly affect women's quality of life. A literature review published in 2024 emphasizes that most postmenopausal women experience side effects from hormonal changes, including both physical and mental health problems [16]. These changes can lead to sexual dysfunction, an

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increased risk of osteoporosis, cardiovascular disease, cancer, psychiatric disorders, and chronic kidney disease, all of which can significantly affect an older person's quality of life [16].

One of the most common and disruptive signs of the menopausal transition is vasomotor symptoms (VMS). Up to 80% of women experience vasomotor symptoms such as hot flashes, sweating, BP and pulse lability, and respiratory distress [2, 3], and most women rate them as moderate to severe [6]. These symptoms can significantly affect a woman's daily life and general well-being.

The Study of Women's Health Across the Nation (SWAN) found that frequent IUD episodes last an average of 7.4 years [5]. The Penn Ovarian Aging Study showed that the average duration of any IUD is 10 years [4].

A direct correlation between the frequency of complaints of cognitive function deterioration and the duration of menopause has been revealed [8]. Cognitive impairment is associated with problems in decision-making, learning and retaining new information, concentration issues and increased forgetfulness. The influence of menopausal status on the development of symptoms such as unexplained anxiety, depressed mood, restlessness, memory impairment and sleep dysfunction has been noted [9, 10]. These symptoms can affect a woman's emotional well-being and social interactions.

Changes in hormonal levels affecting the physical, emotional and psychosocial state of a woman also affect her sexual life. The prevalence of sexual dysfunction (SDF) in postmenopausal women is significantly higher than in women of reproductive age. Decreased sexual desire, arousal and pain syndrome are the most obvious symptoms of SDF in postmenopausal women [13]. The listed symptoms make middle-aged and elderly women to avoid sexual contacts.

According to studies, 68-87% of women report various forms of sexual dysfunction after the onset of menopause [14]. These figures vary depending on the research methodology chosen and the definition of sexual dysfunction.

All of the described symptoms cause significant discomfort to menopausal women, reducing their quality of life. Having achieved certain professional and family stability by this stage of life, a woman may lose the opportunity to fully enjoy the well-being she has built.

Recognizing the changes that can occur and taking a proactive approach to improving one's condition can significantly improve women's quality of life during this period. With the right support and strategies, the negative effects associated with menopause can be minimized.

Despite the prevalence and impact of these symptoms, treatment options remain limited. Hormone replacement therapy (HRT) remains the mainstay of treatment for menopausal symptoms. A 2023 study showed that HRT is the most effective treatment for classic menopausal symptoms such as vasomotor symptoms and sleep disturbances [17]. However, the use of ZHT requires careful consideration. The decision to use MST should be based on an individualized risk assessment [17].

Recent studies emphasize the importance of comprehensive strategies for the management of menopausal symptoms that include both traditional and complementary therapies [18]. This holistic approach takes into account the complex nature of menopausal symptoms and their impact on women's overall well-being. Although numerous studies have emphasized the importance of a healthy lifestyle and a comprehensive approach to the management of menopausal symptoms, the latter remains neglected by health care providers [19].

To date, insufficient research has been conducted on the effectiveness of using various psychotherapeutic techniques for menopausal symptoms. A systematic review in 2016 concluded that due to the small number of studies, there was little evidence for the long-term effectiveness of psychotherapeutic techniques for the relief of vasomotor symptoms in healthy menopausal women and breast cancer patients [20].

A 2021 meta-analysis examined the effectiveness of mindfulness-based interventions on quality of life and symptoms during menopause. This study suggests that mindfulness-based approaches may be useful for managing menopausal symptoms and improving quality of life [21]. A 2016 systematic review of psychophysiologic interventions for vasomotor symptoms in healthy menopausal women and breast cancer survivors found strong evidence for the effectiveness of CPT in alleviating unpleasant vasomotor symptoms. This review suggests that CPT may be an effective non-medication treatment for hot flashes and night sweats [20].

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The complex method of treatment including psychotherapy and menopausal hormone therapy demonstrates persistent high efficacy in relation to anxiety-depressive complaints, which is confirmed by a decrease in the levels of depression, anxiety, and a significant improvement in the quality of life [22].

Either way, the importance of research into psychotherapeutic approaches to treating menopause and supporting women through this period remains clear. There are several reasons for the vulnerability of women during this period. The period of life after the age of 50 is traditionally associated with a change in priorities, life summarization, and existential crisis [23]. Moreover, due to the physiological changes that accompany aging, many women face body image problems. Body image correlates with menopausal symptoms [24].

The reciprocal influence of a woman's psychological state and the severity of somatic and vasomotor symptoms during menopause remains evident. While treatments such as MST and CBT address some symptoms, few studies have examined how psychotherapeutic approaches, particularly body-oriented psychotherapy, can influence both psychological and physical symptoms. This gap underlies our hypothesis: whether the use of body-oriented psychotherapy techniques is effective in reducing psychological, somatic, and vasomotor symptoms of menopause and menopause.

We found no studies on such a topic, although the efficacy of body-oriented psychotherapy in the correction of various psychogenic disorders has been studied quite well. Body-oriented psychotherapy showed a moderate effect in reducing psychopathology (g = 0.56) and psychological distress (g = 0.52) compared to control conditions. This suggests that body-oriented psychotherapy may be useful for stress-related symptoms [25]. Body-oriented psychotherapy showed a moderate to significant effect on improving the ability to cope with stress (g = 0.68) in 5 studies. This suggests that body-oriented psychotherapy can improve stress management skills [25]. However, we were unable to find any studies on the effectiveness of body-oriented psychotherapy in reducing menopausal symptoms.

MATERIALS AND METHODS

12 women experiencing climacteric symptoms and menopause manifestations were recruited for the study. All women participated voluntarily and provided written consent. The average age of the participants was 54 years. At the beginning of the study, all participants underwent testing to assess the severity of symptoms. MENQOL (Menopause Specific Quality of Life Questionnaire) was used, which assesses vasomotor, psychosocial, physical and sexual symptoms, as well as general quality of life impairments (total score).

Following the initial diagnosis, the participants underwent a course of body-oriented psychotherapy using remote technologies (online sessions). The original method, *Woman's Mainstay*, was applied during the sessions that were held over a period of three months, five days a week. Each session lasted between 40 to 45 minutes. Upon completion of the course, we conducted a follow-up diagnosis. Survey results were processed using the IBM SPSS Statistics software package, version 27.1.

Based on global practice, we developed the *Woman's Mainstay* method, integrating fundamental principles of body-oriented psychotherapy.

The core of the developed method is the cultivation of self-acceptance, which is cultivated during the sessions. Before each session, the instructor emphasizes the importance of gentle care for one's body, attentiveness to one's sensations, avoidance of pain during exercises, and a mindset of self-care.

The second important component of the proposed method is mindfulness or meditation. The practice begins with observing the breath and bodily sensations. During the exercises, the instructor regularly reminds participants of the importance of observing their sensations and staying in the present moment.

The third component of the proposed method is conscious "diaphragmatic" breathing. During the practice, participants learn to be aware of their breathing, making it deeper and slower.

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Other important components of the practice include various exercises aimed at muscle relaxation, muscle tone development, and joint mobility. We use a combination of different types of exercises, alternating between relaxation and tension. Special attention is given to the pelvic muscles, pelvic floor, and lower abdominal muscles.

An additional tool in the developed method includes various cyclic movements that have previously proven effective in different body-oriented therapy systems. This includes several exercises from the *Key* method by Hasaya Aliev, as well as wave-like movements.

RESULTS

In this study, we evaluated four groups of symptoms: vasomotor, psychosocial, physiological and sexual in menopausal women by determining the mean score. Since the data variables did not significantly deviate from normal distribution, mean values and standard deviation were calculated, and parametric statistical criteria were used in statistical processing of data.

The significance of changes in the mean values of menopause symptoms before and after body-oriented training was assessed using Student's T test criterion for two related samples (see the table).

Table 1: Analysis of changes in mean menopausal quality of life (MENQOL) symptoms before and after women underwent CBT

Symptoms	**Mean ± standard deviation**	**P value. T-test**	
	Before	After	
Vasomotor symptoms	3,31±1,31	2,14±0,86	0,018*
Psychosocial symptoms	3,59±1,36	2,38±0,70	0,006**
Physiologic symptoms	3,25±0,96	2,17±0,62	0,002**
Sexual symptoms	3,53±1,33	2,69±1,28	0,011*
Quality of life disorders during menopause (total score)	3,37±0,96	2,27±0,62	0,001**

Note: * Differences are reliable at the level of $p<0.05$; ** Differences are reliable at the level of $p<0.01$

We observe significant changes in the severity of psychosocial and physiological symptoms as well as the overall quality of life impairment score ($p<0.01$).

Moderate changes in the severity of vasomotor and sexual symptoms were also found ($p<0.05$).

Figure - Significant changes in mean menopausal quality of life (MENQOL) symptoms before and after women underwent CBT.

Psychosocial 2.38 (to 3.59) and physiologic 2.17 (to 3.25) symptoms significantly decreased and vasomotor 2.14 (to 3.31) and sexual 2.69 (to 3.53) symptoms moderately decreased.

Before undergoing body-oriented psychotherapy, symptoms of impaired quality of life were expressed at an average level (3.25 to 3.59 with a maximum of 6 points), with psychosocial symptoms being more pronounced than others at 3.59 and physiological symptoms being less pronounced than others at 3.25.

After completing body-oriented psychotherapy in a remote format, all symptoms of quality of life impairment are expressed at levels below average (from 2.14 to 2.69 with a maximum of 6 points). At that, sexual symptoms are most pronounced 2.69, and vasomotor symptoms are least pronounced 2.14.

It is important to note that before the course of body-oriented therapy, 50% of women reported such a symptom as lack of energy, 41.67% of women reported difficulty sleeping, 33.33% of women noticed that they achieve less results

than before, and the same number of women admitted to loss of sexual desire. The severity of these symptoms was noted by the respondents as severe. Notably, none of the respondents reported high severity for these symptoms after receiving CBT.

The MENQOL Menopausal Women's Quality of Life Questionnaire included a list of 29 symptoms with a scale rating each symptom from 1 to 6, where 1 = not at all bothersome and 6 = very bothersome.

The internal consistency of the MENQOL overall and domain scores were supported using Cronbach's alpha and McDonald's omega, and MENQOL construct validity was supported for overall and domain scores [26].

Given the sufficient reliability, it is appropriate to conduct further evaluation and comparative analysis of the new variables, symptoms of Menopause, before and after the training, based on the total scores of 29 symptoms. Accordingly, a minimum score of 29 points on the questionnaire, an average score of 87 points, and a maximum score of 174 points.

After receiving body-oriented psychotherapy, women experienced a significant decrease in mean menopausal symptom severity scores to 68 [32-93] points compared to pre-training scores of 100.67 [48-129].

CONCLUSIONS

The findings from this study indicate that body-oriented psychotherapy can be an effective intervention for reducing the severity of climacteric and menopausal symptoms. Participants experienced significant improvements across several symptom categories, particularly in psychosocial and physiological symptoms, and moderate reductions in vasomotor and sexual symptoms. These results suggest that integrating body-oriented therapy may provide a valuable non-pharmacological approach to managing menopause-related symptoms, potentially enhancing the quality of life for women in this transitional period.

The strengths of this study include a structured, consistent therapeutic approach and the use of a validated assessment tool (MENQOL) to evaluate outcomes. However, certain limitations must be acknowledged. The sample size was relatively small, which limits the generalizability of these findings, and the absence of a control group restricts the ability to attribute improvements solely to the therapy. In addition, this study focused on short-term outcomes, so the long-term effects of body-oriented psychotherapy remain unknown.

In practical terms, these findings underscore the potential for body-oriented psychotherapy to complement existing treatment strategies for menopausal women. As part of a holistic care plan, this approach could offer accessible, non-invasive support for managing the diverse and complex symptoms associated with menopause.

Future research directions should focus on larger, randomized controlled trials to confirm the efficacy of body-oriented psychotherapy for menopausal symptoms. Studies exploring the therapy's long-term benefits and its impact when combined with other therapeutic approaches would also be valuable. Further investigation into specific techniques within body-oriented psychotherapy that yield the most benefit could refine its application and enhance its effectiveness for women navigating the challenges of menopause.

REFERENCES

[1] Gasparyan S.A., Chotchaeva A.M., Karpov S.M., Cog-nitive and psychoemotional disorders in women of meno-pausal transition: possibilities of medication correction, Problems of Endocrinology, 1, 2023, pp. 86-95, DOI: https://doi.org/10.14341/probl13205 (date of address: 26.11.2024).
[2] Woods NF, Mitchell ES, Symptoms during perimeno-pause: prevalence, severity, trajectory, and significance in women's lives, Am J Med, 118, 2005, pp. 14-24, DOI: 10.1016/j.amjmed.2005.09.031 (date of address: 26.11.2024).
[3] Gold EB, Colvin A, Avis N, et al., Longitudinal analysis of the association between vasomotor symptoms and race/ethnicity during the menopausal transition: the Nation, Am J Public Health, 7, 2006, pp. 1226-35, DOI: 10.2105/AJPH.2005.066936 (date of address: 26.11.2024).

[4] Freeman EV, Sammel MJ, Sanders RJ, Risk of long-term hot flashes after natural menopause: evidence from the University of Pennsylvania Ovarian Aging Cohort Study, Menopause, 9, 2014, pp. 924-32, DOI: 10.1097/GME.0000000000000196 (date of address: 26.11.2024).
[5] Avis N.E., Crawford S.L., Greendale G., et al., Duration of menopausal vasomotor symptoms during the menopausal transition, JAMA Intern Med, 4, 2015, pp. 531-9, DOI: 10.1001/jamainternmed.2014.8063 (date of address: 26.11.2024).
[6] Freeman E.W., Sammel M.D., Lin H., et al., Duration of hot flashes during menopause and associated risk factors, Obstet Gynecol, 5, 2011, pp. 1095-1104, DOI: 10.1097/AOG.0b013e318214fode (date of address: 26.11.2024).
[7] Gasparyan SA, Vasilenko IA, Papikova KA, et al., Men-opause: up the stairs leading down, Medical Council, 13, 2020, pp. 76-83, DOI: https://doi.org/10.21518/2079-701X-2020-13-76-83 (date of address: 26.11.2024).
[8] Reuben R, Karkaby L, McNamee C, et al., Menopause and cognitive complaints: are ovarian hormones linked with subjective cognitive decline?, Climacteric, 4, 2021, pp. 321-332, DOI: https://doi.org/10.1080/13697137.2021.1892627 (date of address: 26.11.2024).
[9] Dotlic J, Radovanovic S, Rancic B, et al., Mental health aspect of quality of life in the menopausal transition, J Psy-chosom Obstet Gynaecol. 1, 2021, pp. 40-49, DOI: https://doi.org/10.1080/0167482X.2020.1734789 (date of address: 26.11.2024).
[10] Morgan KN, Derby CA, Gleason CE., Cognitive Changes with Reproductive Aging, Perimenopause, and Menopause, Obstet Gynecol Clin North Am., 4, 2018, pp. 751-763, DOI: https://doi.org/10.1016/j.ogc.2018.07.011 (date of address: 26.11.2024).
[11] Avis NE, Crawford SL, Green R. Vasomotor symptoms during the transition to menopause: differences among women, Obstet Gynecol Clin North Am, 4, 2018, pp. 629-640, DOI: 10.1016/j.ogc.2018.07.005 (date of address: 26.11.2024).
[12] Maki PM, Thurston RC. Menopause and brain health: hormonal changes are only part of the story, Front Neurol, 6, 2020, pp. 421-427, DOI: https://doi.org/10.3389/fneur.2020.562275 (date of ad-dress: 26.11.2024).
[13] Kozlov P. V. Female sexual dysfunction in postmeno-pause, Medical Business, 3, 2023, DOI: https://cyberleninka.ru/article/n/zhenskaya-seksualnaya-disfunktsiya-v-postmenopauze (date of address: 26.11.2024).
[14] Khashukoeva A. Z., Burdenko M. V., Overko A. V., Ryzhova T. E., Safonina M. S. Sexual function disorders in postmenopausal female patients, 3, 2021, DOI: https://cyberleninka.ru/article/n/narusheniya-seksualnoy-funktsii-u-patsientok-v-postmenopauze (date of address: 26.11.2024).
[15] Sandakova E. A., Zhukovskaya I. G. Gynecological aspects of sexual dysfunction in the postmenopausal period, RMZh. Mother and Child, 1, 2023, pp. 24-29, DOI: https://cyberleninka.ru/article/n/ginekologicheskie-aspekty-seksualnoy-disfunktsii-v-postmenopauzalnom-periode (date of address: 26.11.2024).
[16] Blümel JE, Lavín P, Vallejo MS, Sarrá S. Menopause or climacteric, just a semantic discussion or has it clinical implications? Climacteric, 3, 2014, pp. 235-41, DOI: 10.3109/13697137.2013.838948 (date of access: 04.12.2024).
[17] Helda H, Latifah MM, Komalasari DP, Utami F, Rajab NM, Utami RP, et al. The Impact of Hormonal Changes in Elderly Women: A Literature Review, J INFO Kesehat, 1, 2024, pp. 1-15., DOI:10.31965/infokes. Том 22.Исс1.1411 (date of address: 26.11.2024).
[18] Munro C, Mehasseb M, Briggs P. Managing menopau-sal symptoms in women who have a history of pelvic cancer: Is hormone replacement therapy appropriate?, Post Reprod Health, 1, 2023, pp. 53-6., DOI:10.1177/20533691231158876 (date of address: 26.11.2024).
[19] Cananéa Neto SFC, Bevenuto BB, Dantas IHS, Melo Neto FDP, Oliveira BESD, The importance of nonpharmacological strategies and the management of depression in patients with multiple sclerosis: an integrative review, São Paulo Med J, 2023, pp. 29-29, DOI: 10.1007/s00068-024-02737-y (date of address: 26.11.2024).
[20] Duralde ER, Sobel TH, Manson JE., Management of perimenopausal and menopausal symptoms, BMJ, 2023, DOI: 10.1136/bmj-2022-072612 (date of address: 26.11.2024).
[21] Stefanopoulou E, Grunfeld EA., Mind-body interven-tions for vasomotor symptoms in healthy menopausal wom-en and breast cancer survivors. A systematic review., J Psy-chosom Obstet Gynaecol, 3, 2017, pp. 210-225, DOI: 10.1080/0167482X.2016.1235147 (date of address: 26.11.2024).

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[22] Chen TL, Chang SC, Huang CY, Wang HH., Effective-ness of mindfulness-based interventions on quality of life and menopausal symptoms in menopausal women: A meta-analysis, J Psychosom Res, 2021, DOI: 10.1016/j.jpsychores.2021.110515 (date of address: 26.11.2024).
[23] Tabolina A. A., Baikova I. A., Evaluation of clinical and economic effectiveness of a complex method of psycho-therapy and menopausal hormone therapy in perimenopau-sal women, Medical News, 9, 2017, DOI: https://cyberleninka.ru/article/n/otsenka-klinicheskoy-i-ekonomicheskoy-effektivnosti-kompleksnogo-metoda-psihoterapii-i-menopauzalnoy-gormonalnoy-terapii-u-zhenschin-v (date of address: 26.11.2024).
[24] Katsounari I., Older Adults' Perceptions of Psycho-therapy in Cyprus, 2019, DOI: 10.3390/bs9110116 (date of address: 26.11.2024).
[25] Nazarpour S, Simbar M, Majd HA, Torkamani ZJ, Andarvar KD, Rahnemaei F., The relationship between postmenopausal women's body image and the severity of menopausal symptoms, BMC Public Health, 1, 2021, pp. 15-99, DOI: 10.1186/s12889-021-11643-6 (date of ad-dress: 26.11.2024).
[26] Rosendahl S, Sattel H, Lahmann C., Effectiveness of Body Psychotherapy. A Systematic Review and Meta-Analysis, Front Psychiatry, 2021, pp. 709-798, DOI: 10.3389/fpsyt.2021.709798 (date of address: 26.11.2024).
[27] Neil M. Schultz, Antonia Morga, Emad Siddiqui et al. Psychometric evaluation of the MENQOL instrument in women experiencing vasomotor symptoms associated with menopause, 2023, PREPRINT (Version 1) available at Re-search Square. DOI: https://doi.org/10.21203/rs.3.rs-2953085/v1 (date of address: 26.11.2024).