Available online at www.medicinescience.org

ORIGINAL RESEARCH

Medicine Science International Medical Journal

Medicine Science 2018;7(3):507-10

Evaluation of psychiatric symptoms and automatic negative thoughts among menopausal women

Hulya Ertekin[1], Fatma Beyazit[2], Basak Sahin[1]

[1]*Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Canakkale, Turkey*
[2]*Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Gynecology and Obstetrics, Canakkale, Turkey*

Received 28 December 2018; Accepted 27 February 2018
Available online 18.04.2018 with doi: 10.5455/medscience.2018.07.8771

Copyright © 2018 by authors and Medicine Science Publishing Inc.

Abstract

In this study, we aimed to evaluate psychiatric symptoms and associations with automatic negative thoughts in menopausal women. This prospective descriptive study performed in gynecology and obstetrics clinic of Çanakkale Onsekiz Mart University Medicine Faculty Hospital. A Demographic information form, Brief Symptom Inventory (BSI), and Automatic Thoughts Scale (ATS) were administered to all individuals. The present study consist of 105 menopausal women. The mean age of participants was 60.42±8.43 years old. There were a statistically significant positive correlation between mean total scores of ATS and mean total scores of somatization, obsessive compulsive (OC) , Interpersonal Sensitivity (IS), depression, anxiety, hostility, phobic anxiety (PA), paranoid subscales, and additional materials (AM) (poor appetite, trouble falling asleep, thoughts of death or dying, feeling of guilt), and BSI total. Also there was a statistically significant positive correlation between total scores of AM and mean age of participants. Our results suggest that automatic negative thoughts are related with all psychiatric disorders in postmenopausal women.

Keywords: Menopause, automatic negative thoughts, psychiatric symptoms

Introduction

Menopausal changes cause significant changes in the biological, social and psychological status of women. Vasomotor symptoms, sexual dysfunction, urogenital atrophy, cognitive difficulty, sleep disturbance, somatic symptoms, depressive and anxiety symptoms are common in menopause and in transition period to menopause [1,2]. Recent studies have shown that depression, panic attacs and generalized anxiety disorders may be induced by sleep disturbances as a result of hormonal changes in menopausal women. Development of depression may be related to changes in the perception of body image and alterations in sexual life [3].

Automatic negative cognitions are the structures of past experiences that influence the processing and organizing of current information structures which the theory of automatic negative cognitions stresses the importance of structures. The cognitive products are in the form of reasoning and prediction made by the individual about oneself, the world, and the future. The nature of the automatic negative cognitions are repetitive and escape immediate control [4-6]. Certain studies have shown that automatic negative thoughts, simultaneously occurring with a stressful situation, lead to depression as well as with one's coping styles, with the problem solving process. Furthermore, automatic negative thoughts, which occur simultaneously with a stressful situation, lead to depression. Some studies associate the automatic negative thoughts with depression, problem solving processes and one's coping styles [7].

We aimed to evaluate psychiatric symptoms and associations with automatic negative thoughts in menopausal women in this study.

Material and Method

Subjects

This study is a prospective descriptive study performed in gynecology clinic of Çanakkale Onsekiz Mart University Medicine Faculty Hospital, between May 2016 and October 2016. The approvel of this study was given by the local ethics committee of Çanakkale Onsekiz Mart University (desicion number: 2016-08, 27.04.2016).

The study participants were selected from gynecology outpatient unit with menopausal complaints and signed an informed consent form in accordance with the Declaration of Helsinki. Those with known psychiatric disorders, who refused to participate in the study, with known history of organic brain disease, and who had a degree of mental retardation that would hinder the understanding of the tests were excluded from the study.

A Demographic information form, Brief Symptom Inventory

***Coresponding Author:** Hulya Ertekin, Inonu University, Canakkale Onsekiz Mart University, Faculty of Medicine, Department of Psychiatry, Canakkale, Turkey
E-mail: md.ertekin@gmail.com

(BSI), and Automatic Thoughts Scale (ATS) were administered to all individuals. Automatic thoughts were assessed by ATS while psychiatric symptoms were assessed with BSI.

Materials

BSI: This scale consists of 53 items with nine symptom dimensions: Depression, Anxiety, Obsession-Compulsion, Somatization, Interpersonal Sensitivity, Hostility, Phobic anxiety, Paranoid ideation and Psychoticism; and three global indices of distress. Turkish validity reliability study conducted by Şahin et al. in 1994 [8].

ATS: This scale was developed by Hollon and Kendal which is made up of 30 items that measure the frequency of dysfunctional and irrational automatic negative thoughts about oneself. The answers of questions are given on a 5-step Likert scale (1: never, 5: almost always), according to the frequency of these thoughts during the last four weeks. The height of the total scores from the scale indicates that the individual's negative self-esteem frequently occurs. The validity and reliability study of ATS was performed by Şahin et al [9].

Statistical analysis

The PASW Statistics 19 statistical program was used for data analysis. Descriptive data are expressed as numbers, and percentages. A P value of <0.05 was considered statistically significant. Associations between various parameters were investigated by Pearson's correlation analysis.

Results

The present study consist of 105 menopausal women. The mean age of participants was 60.42±8.43 years old. The menopause onset age was 47.15±5.48 years old. Mean postmenopause duration was 12.88±9.74 years. 7.6% of patients were taking hormone replacement therapy. 14.3% of patients had surgical menopause. 11.4 % of patients were smoking (Table I).

Table 1. Demographic characteristics

	n	%
Marital status		
single	3	2,9
married	82	78.1
widowed	19	18.1
Working status		
working	12	54.3
not working	57	32.4
retired	34	67.6
Education		
primary school	71	67.6
middle School	10	9.5
high school	13	12.4
university	8	7.6
post graduate	1	1
Smoking		
Yes	12	87.6
No	92	11.4
Natural menopause	86	81.9
Surgical menopause	15	14.3
Hormone replacement therapy		
Yes	3	7.6
No	97	92.4

The BSI mean score of participants was 38.15±24.61. The mean scores of symptom dimensions were 1.02±0.72, 0.91±0.62, 0.80±0.68, 0.73±0.72, 0.76±0.65, 0.61±0.57, 0.44±0.57, 0.79±0.75, 0.29±0.42, 0.77±0.62 respectively [somatization , obsessive compulsive (OC), Interpersonal Sensitivity (IS), depression, anxiety, hostility, phobic anxiety (PA), paranoid subscales, and additional materials (AM)](Table II).

There were a statistically significant correlation between scores of ATS and somatization, OC, IS, depression, anxiety, hostility, PA, paranoid subscales, and AM (poor appetite, trouble falling asleep, thoughts of death or dying, feeling of guilt) BSI total. Also there was a statistically significant correlation between scores of AM and age (Table III).

Table 2. Results of Brief Symptom Inventory

	mean	Std deviation
Somatization	1.02	0.72
OC	0.91	0.62
IS	0.80	0.68
Depression	0.73	0.72
Anxiety	0.76	0.65
Hostility	0.61	0.57
PA	0.44	0.57
PI	0.79	0.75
Psychoticism	0.29	0.42
AM	0.77	0.62
BSI total	38,15	24,61
ATS	44.77	17.96

* ATS: Automatic Thoughts Scale, AM: Additional Materials, BSI: Brief Symptom Inventory, GSI:
Global Severity Index, IS: Interpersonal Sensitivity, PA: Phobic anxiety, PI: Paranoid ideation, OC: Obsessive compulsive

Discussion

This was a descriptive study which evaluate psychiatric symptoms and automatic negative thoughts in menopausal women. In this study we found a correlation between automatic negative thoughts and psychiatric symptoms in menopausal women. Additionally age may be an important factor for some psychiatric symptoms in the menopausal period according to this presented study.

Depressive schema makes people weak and vulnerable against depression according to Beck. Automatic thoughts are produced in many ways and cognitive distortions are created when depressive schema is active and people who have more negative thoughts may be more depressed according to Beck's theory [10]. According to recent study we found a correlation between age and total scores of AM which including poor appetite, trouble falling asleep, thoughts of death or dying, and feeling of guilt. These psychiatric symptoms are important for psychiatric disorders especially for depression. Another important finding of this study that there was a strong correlation between automatic negative thoughts and scores of depression. Rana et al showed that negative automatic thoughts were significantly higher in patients with depression than healthy controls [11]. Paloş et al. found a correlation between negative automatic thoughts and depression symptoms in patients with rheumatoid arthritis [12]. In another study Riley et al. reported that

Table 2. Correlations

	Somatization	OC	IS	depression	anxiety	Hostility	PA	PI	Psychoticism	AM	BSI total	ATS
Age												
r	0.06	0.005	-0.02	0.12	0.1	0.06	-0.08	0.06	-0.1	**0.23***	0.05	0.1
p	0.51	0.96	0.85	0.21	0.29	0.54	0.39	0.50	0.28	**0.02**	0.58	0.33
Menopause age												
r	-0.12	-0.15	-0.11	-0.08	-0.15	-0.13	-0.11	-0.15	-0.15	-0.04	0.11	-0.4
p	0.193	0.12	0.26	0.38	0.15	0.17	0.27	0.13	0.13	0.65	0.27	0.7
postmenopausal duration												
r	0.03	0.12	-0.08	0.03	0.03	0.05	0.003	0.05	-0.04	-0.07	0.009	0.05
p	0.78	0.24	0.41	0.74	0.77	0.63	0.97	0.63	0.68	0.45	0.93	0.61
number of chronic diseases												
r	0.19	0.04	-0.06	-0.05	0.04	0.15	0.01	-0.03	0.02	-0.04	0.09	0.02
p	0.04	0.63	0.95	0.59	0.67	0.12	0.88	0.77	0.86	0.68	0.35	0.81
Number of children												
r	0.12	0.08	0.16	0.09	0.14	0.15	0.15	0.08	**0.22***	0.12	0.17	0.15
p	0.2	0.38	0.08	0.36	0.13	0.13	0.10	0.41	**0.02**	0.20	0.08	0.14
ATS												
r	**0.34***	**0.36***	**0.40***	**0.61***	**0.45***	**0.44***	**0.30***	**0.46***	**0.42***	**0.35***	**0.58***	
p	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.002**	**0.00**	**0.00**	**0.00**	**0.00**	

*Significant results (i.e. $p < 0.05$) are in bold. r: correlation coefficient. ATS:automatic thoughts scale, AM: Additional Materials, BSI: Brief Symptom Inventory, , IS: Interpersonal Sensitivity, PA: Phobic anxiety, PI: Paranoid ideation, OC: Obsessive compulsive

decreases in ATS were followed by decreases in depression people living with HIV [13]. The prevalence of depressive symptoms have been demonstrated in 5.9%–23.8% of menopausal women [14-16]. Studies have shown an increased risk of depression in women during perimenopause. A cohort study found that increased depressive symptoms during the menopausal transition, and decreased after menopause [17]. Depression in menopausal women have been studied repeatedly. Previous studies have shown an association between depression and automatic negative thoughts in chronic physical disorders. In our study, we also found that menopausal patients with (depressive complaints were more likely to have automatic negative thoughts.

There were correlations between anxiety, PA, OC symptoms and automatic negative thoughts in our study. In the postmenopausal period, non-specific symptoms such as anxiety, emotional lability, depression, dizziness, insomnia, loss of libido, confusion and decreased pleasure from life could be seen [18]. In a study of with 8000 menopausal women aged 45-54, 23% of women were diagnosed with anxiety during the last 6 months [19]. In another retrospective study, it was reported that obsessive-compulsive disorder symptoms flared up after menopause in half of menopausal patients [20].

When the BSI were evaluated, mean somatization and OC scores were found to be the highest scores. In a retrospective study, it was reported that OC disorder symptoms flared up after menopause in half of menopausal patients [20]. Terauchi et al. found that somatic symptoms were related to depression and anxiety symptoms in menopausal women [21].

This study had some limitations. First limitation was that the diagnostic scales used do not diagnose psychiatric disorders but only provide general information about psychiatric symptomatology. The second limitation was small number of postmenopausal patients have been recruited in this study.

Conclusion

This was the first study evaluating automatic negative thoughts and psychiatric symptoms in postmenopausal patients to our best knowledge. Our results suggest that automatic negative thoughts are associated with all psychiatric disorders in postmenopausal women.

Competing interests: *The authors declare that they have no competing interest.*
Financial Disclosure: *There are no financial supports*

Ethical approval: *The approvel of this study was given by the local ethics committee of Çanakkale Onsekiz Mart University (desicion number: 2016-08, 27.04.2016).*

References

1. Yazici K, Pata O, Yazici A. The effect of hormon replacement therapy in menopause on symptoms of anxiety and depression. Turk Psikiyatri Derg. 2003;14:101-5.
2. Stoppe G. Critical apprasisal of effects of estrogen replacement therapy on symptoms of depressed mood. Arch Women Ment Health. 2002;5(2):39-47.
3. Alpay N, Kivanc EZ, Ulasoglu C. The Relationship Between Hormonal profile and depressive symptoms in menopausal women. Dusunen Adam. 2013;26:171-6.
4. Beck AT. Cognitive models of depression. J Cogn Psychother. 1987;1:5-57.
5. Cribbie CA, Cribbie RA. Psychological correlates of fatigue: examining depression, perfectionism, and automatic negative thoughts. Pers. Ind. Diff. 2007;43:1310-20.
6. Clarke D, Goosen T. The mediating effects of coping strategies in the relationship between automatic negative thoughts and depression in a clinical sample of diabetes patients. Pers. Ind. Diff. 2009;46;460-4.
7. Garland EL, Fredrickson B, Kring AM, et al. Upward spirals of positive emotions counter downward spirals of negativity: insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. Clin Psychol Rev. 2010;30:849-64.

8. Şahin HN, Durak A, Ugurtas S. The validity, reliability and factor structure of the Brief Symptom Inventory (BSI). Turk Psikiyatri Derg. 2002;13:125-35.

9. Şahin NH, Şahin N. Reliability and validity of the turkish version of the automatic thoughts questionnaire. J Clin Psychol. 1992;48:334-40.

10. Bozkurt N. The relationship between depression, automatic thoughts and school achievements in high school students. Doctoral dissertation, Dokuz Eylül University, İzmir, 1998.

11. Rana M, Sthapit S, Sharma VD. Assessment of Automatic Thoughts in patients with depressive illness at a Tertiary Hospital in nepal. J Nepal Med Assoc. 2017;56:248-55.

12. Paloş R, Vîşcu L. Anxiety, automatic negative thoughts, and unconditional self-acceptance in rheumatoid arthritis: a preliminary study. ISRN rheumatology. 2014;2014:1-5.

13. Riley KE, Lee JS, Safren SA. The relationship between automatic thoughts and depression in a cognitive-behavioral treatment for people living with HIV/AIDS: Exploring temporality and causality. Cognit Ther Res. 2017;41:712-9.

14. Santoro N, Epperson CN, Mathews SB. Menopausal symptoms and their management. Endocrinol Metab Clin North Am. 2015;44:497-515.

15. Campbell KE, Dennerstein L, Finch S, et al. Impact of menopausal status on negative mood and depressive symptoms in a longitudinal sample spanning 20 years. Menopause. 2016;24:490-6.

16. De Kruif M, Spijker AT, Molendijk ML. Depression during the perimenopause: a meta-analysis. J Affect Disord. 2016;206:174-80.

17. Freeman EW, Sammel MD, Liu L, et al. Hormones and menopausal status as predictors of depression in women in transition to menopause. Arch Gen Psychiatry. 2004;61(1):62-70.

18. Kaplan HI, Sadock BJ: Synopsis of Psychiatry. Eleventh edition, Baltimore, Williams&Wilkins, 2015;839.

19. Kessler RC, Mc Gonagle KA, Swartz M. Sex and depression in the National Comorbidity Survey. Lifetime prevalance, chronicity and recurrence. J Affect Disord. 1993;29:85-96.

20. Vulinc NC, Denys D, Bus L, et al. Female hormones affect symptom severity in obsessive-compulsive disorder. Int Clin Psychopharmacol. 2006;21:171-5.

21. Terauchi, Hiramitsu S, Akiyoshi M, et al. Associations among depression, anxiety and somatic symptoms in peri-and postmenopausal women. J Obstet Gynaecol Res. 2013;39:1007-13.