





This work is licensed under a Creative Commons Attribution-Non Commercial 4.0 international license

Van Tıp Derg 29(2):217-223,2022 DOI: 10.5505/vtd.2022.65148

A Comparison of the Quality of life and Personal Traits in Menopausal Women

Menopozal Dönemdeki Kadınların Yaşam Kalitesi ile Kişisel özelliklerinin Karşılaştırılması

Aliye Bulut¹, Handan Özcan², Esra Arbağ³

¹Gaziantep Islamic Science and Technology University, Faculty of Medicine, Dept. of Public Health, Gaziantep, Turkey ²Health Sciences University, Hamidiye Faculty of Health Sciences, Dept. Of Midwifery, İstanbul, Turkey ³Bıngol University, Faculty of Health Sciences, Dept. of Nursing, Bıngol, Turkey

Abstract

Introduction: This study was planned to compare the quality of life and personal traits in menopausal women.

Methods: The population of the study comprised women who applied to Family Health Centers (FHC) in the city center of Bingol (n=157). A survey form, which was prepared by the researcher as a result of evaluating the relevant literature and comprised three sections, was applied to the women who met the inclusion criteria. The first section of the survey consisted of a questionnaire questioning the participants' sociodemographic characteristics, obstetrical, gynecological, chronic disease history, information about the menopausal period and general health behaviors. The second section consisted of the "Menopause-Specific Quality of Life Questionnaire (MSQLQ)" and the third section consisted of the Cervantes Personality Scale (CPS).

Results: There was a positive significant correlation between the scores, obtained by the women who participated in the study, from the CPS emotional stability/neuroticism subscale and the MSQLQ scores, whereas there was a negative significant correlation between their sincerity/insincerity scores and MSQLQ scores. There was no statistically significant correlation between the extroversion/introversion subscale and MSQLQ symptoms.

Conclusions: It was determined that the women had no adequate knowledge of this period which comprises nearly one third of their life, there were deficiencies in coping with menopausal symptoms and the quality of life of the women in the menopausal period was not at the required level. In the personality development phases, women should be encouraged for positive, emotionally stable and extrovert personality development and to use of healthy defense mechanisms.

Keywords: Menopause; personality inventory; quality of life.

Introduction

One of the important stages in woman's life, menopause comprises one third of women's life. With menopause, woman's reproductive period is over and hormonal withdrawal signs emerge (1). In this period, women may experience some changes arising from estrogen deficiency like vasomotor changes (such as night sweating, hot flushes and sleep problems), psychological

Öze

Amaç: Bu araştırma; menopozal dönemdeki kadınların yaşam kalitesi ile kişisel özelliklerinin karşılaştırılması amacıyla planlandı.

Gereç ve Yöntem: Araştırmanın evrenini Bingöl il merkezinde Aile Sağlığı Merkezlerine başvuru yapan kadınlar oluşturmaktadır (n=157). Çalışmaya alınma kriterlerini karşılayan kadınlara, araştırmacı tarafından konu ile ilgili literatür değerlendirilmesi sonucu hazırlanan ve üç bölümden oluşan anket formu uygulanmıştır. Anketin birinci bölümünü, katılımcıların sosyo-demografik özellikleri ile obstetrik, jinekolojik, kronik hastalık öyküsü, menopoz dönemine ait bilgiler ve genel sağlık davranışlarını sorgulayan soru formu oluşturmaktadır. İkinci bölümü, "Menopoza Özgü Yaşam Kalitesi Ölçeği (MÖYKÖ)" ve üçüncü bölümü ise Cervantes Kişilik Ölçeği (CKÖ) oluşturmaktadır.

Bulgular: Çalışmaya katılan kadınların CKÖ duygusal denge/nörotizm alt boyutundan almış oldukları puanlar ile MÖYKÖ puanları arasında pozitif yönde anlamlı bir ilişki varken tutarlı/tutarsız olma alt boyutu ile MÖYKÖ puanları arasında negatif yönde anlamlı bir ilişki mevcuttur. Dışa/içe dönük olma alt boyutu ile MÖYKÖ semptomları arasında istatistiksel olarak anlamlı bir ilişki saptanmamıştır (p<0.05).

Sonuç: Kadınların yaşamının neredeyse üçte birini kapsayan bu dönemi yeterince tanımadığı ve yeterli bilgiye sahip olmadığı, menopozal semptomlarla baş etmede eksikliler görüldüğü ve menopozal dönemdeki kadınların yaşam kalitesi düzeylerinin istenilen düzeyde olmadığı saptanmıştır. Kişilik gelişimi aşamalarında kadınlar, olumlu, duygusal dengeli ve dışa dönük kişilik gelişimi açısından ve sağlıklı savunma mekanizmaları kullanmaları konusunda desteklenmelidir.

Anahtar Kelimeler: Menopoz; kişilik envanteri; yaşam kalitesi.

changes (such as anxiety, depression, restlessness and decrease in sexual desire), and atrophic changes (such as vaginal atrophy, stress incontinence, and dyspareunia) (2). In order to understand menopause thoroughly, it is necessary to take into account psychological, social, cultural factors and personal traits, besides biological factors. This is because women experience menopause differently although they go through similar biological changes in this period (3).

Individuals respond to events in line with their personal traits and determine coping ways accordingly. The menopausal period perception of women may impair their quality of life in this period. In this context, it is very important to understand women's personal traits for the quality of life. Personality can be considered as a whole of properties, instincts, motivations, physical tendencies and acquired experiences (4). When examining universal personal traits; it can be said that personality comprises of two basic parts as extroversion/introversion and emotional stability/neuroticism The Cervantes Personality Scale (CPS) has three subscales that comprise these two basic personal traits and crosscheck these two subgroups. Thev extroversion/introversion, emotional stability/neuroticism, and sincerity/insincerity. As the CPS comprises basic personal traits, can be completed easily, and is a likert type scale and its sample consisted of women in the menopausal period when developed, it can determine personal traits and evaluate the effects of these traits on the quality of life (6). Quality of life is the satisfaction of people feel with domestic and social life, physical and mental well-being and health. To sum up briefly, quality of life is a comprehensive concept including the person's social life, physical, physiological and social health concepts (7). In the literature, there are study findings demonstrating that the menopausal period affects women's quality of life (8-10). This study was planned to compare the quality of life and personal traits in menopausal women.

Material and Method

Population and Sample of the Study

The population of this study comprised women who applied to Family Health Centers (FHC) in the city center of Bingol. This study was approved by Bingol University Ethics Committee (approval number: E.26633, date: 30.12.2019). The study was conducted without sampling selection and women, who applied to FHC between 01.01.2020 and 30.03.2020 and met the inclusion criteria, were included in the study. The inclusion criteria were; being aged 40 to 59 years, being in the menopausal period, agreeing to participate in the study voluntarily, being able to speak and understand Turkish, and having no psychiatric disorder.

Data Collection Tools

- 1. Personal Information Form (includes independent variables): The form aims to determine some characteristics of the participants. It includes questions such as age, gender, educational level, occupation, habits, and chronic disease status.
- 2. Menopause-Specific Quality of Life Questionnaire (MSQLQ): The scale was developed by John R. Hilditch, Jacqueline Lewis et al., in 1996 to prepare a quality of life scale specific to state of health in menopause via psychometric characteristics based on women's experiences. It was adapted into Turkish society by Kharbouch and Sahin in 2007 and its validity and reliability were conducted (11). In the MSQLQ each subfield score is ranged from one to eight. One point indicates that there is no problem about the subject in question. Two points indicate that the subject exists and is experienced but it is not disturbing at all. Scores between three and eight points indicate the intensity and increasing levels of the existing problem. The scale has four domains as vasomotor, psycho-social, physical, sexual. In this and study, Cronbach's Alpha reliability coefficients were; It was found as 0.88, 0.85, 0.87, 0.84.
- 3. Cervantes Personality Scale Developed by Castelo-Branco et al., in 2008 to evaluate the personal traits of menopausal women (12). The Turkish adaptation, validity and reliability study of the CPS was conducted by Bal and Sahin in 2011 (13). The scale is a six-point likert scale comprising 20 questions. It has three subscales (extroversion/introversion, emotional stability/neuroticism insincerity/sincerity). Each question in the scale is answered according to the person's experiences. Each item in the scale is scored from 0 to 5 and evaluation is made according to the answers given. As the score obtained in each subgroup decreases, the quality of extroversion, emotional stability and sincerity increases. In this study, Cronbach's Alpha reliability coefficients were; It was found as 0.77, 0.78, 0.75.

Data Assessment Descriptive statistics for the studied variables were presented as mean and

Table 1: Specific conditions of the participants regarding the menopausal period (N:157)

| Duration of the menopause | n | 0/0 |
|--|-----|------|
| 1-5 years | 81 | 51.6 |
| 6-10 years | 44 | 28.0 |
| 11 years and above | 32 | 20.4 |
| State of doing exercise | | |
| Yes | 47 | 29.9 |
| No | 110 | 70.1 |
| State of receiving treatment regarding menopause | | |
| Yes | 79 | 50.3 |
| No | 78 | 49.7 |
| Treatment type | | |
| HRT | 16 | 20.8 |
| Alternative treatments | 61 | 79.2 |
| State of receiving healthcare service in the menopausal period | | |
| Yes | 93 | 59.2 |
| No | 64 | 40.8 |
| State of having a problem with menopause | | |
| Yes | 153 | 97.5 |
| No | 4 | 2.5 |
| State of receiving information about the menopausal period | | |
| Yes | 113 | 72.0 |
| No | 44 | 28.0 |
| Sources of information (n: 113) | | |
| Neighbor, friend, relative | 41 | 36.3 |
| Medical personnel | 62 | 54.9 |
| Tv, radio, social media | 10 | 8.8 |

Table 2: The mean scores obtained by the menopausal women from MSQLQ and CPS

| MSQLS subscales | n | Median (95% CI) |
|---------------------------------|-----|------------------------|
| Vasomotor Symptoms | 157 | 14.00 (12.10-13.77) |
| Psychosomatic Symptoms | 157 | 26.00 (24.50-27.59) |
| Physical Symptoms | 157 | 70.00 (66.25-71.53) |
| Sexual Symptoms | 157 | 11.00 (9.59-11.30) |
| Total | 157 | 118.00 (113.69-122.97) |
| CPS subscales | n | Median (95% CI) |
| Extroversion/introversion | 157 | 15.00 (13.01-15.23) |
| Emotional stability/neuroticism | 157 | 17.00 (16.09-18.25) |
| Sincerity/insincerity | 157 | 19.00 (18.24-20.26) |

MSQLQ: Menopause-Specific Quality of Life Questionnaire, CPS: Cervantes Personality Scale CI: Confidence Interval

standard deviation or median and 95% CI. Normality assumption of the variables was tested with Kolmogov-Simirnov test. Mann-Whitney or Kruskal-Wallis test was used for non-normal distributed variables. For determination linear relations among the variables, correlation analysis was carried out. The data obtained as a result of the studywere assessed by SPSS-22 software and error checks, tables and statistical analyses were performed.

Results

Of the women who participated in the study, 26.1% were aged 40 to 50 years, 59.9% were illiterate, 80.9% were married, and 82.8% were housewife, 51% had an income equal to expenditure and 69.4% had social security. 58.6% of the women lived with their partner and children and 79.6% were smokers. When considering the obstetrical history of the menopausal women who participated in the study, 81.5% of them had 4 and

Table 3. Comparison of the scale scores

| | | Vasomotor | Psychosomatic | Physical | Sexual | Total |
|---------------------------|---|-----------|---------------|----------|----------|--------|
| | | symptoms | symptoms | symptoms | symptoms | |
| Extroversion/introversion | r | 051 | .131 | .015 | -019 | .060 |
| | р | .525 | .103 | .852 | .818 | .456 |
| Emotional | r | .327** | .653** | .438** | .237** | .553** |
| Stability/neuroticism | р | 0.001 | 0.001 | 0.001 | .003 | 0.001 |
| Sincerity/insincerity | r | 319** | 399** | 317** | -156 | 382 |
| | р | 0.001 | 0.001 | 0.001 | .051 | 0.001 |

r: Correlation analysis

more children, 13.4% had 1-3 children and 5.1% had no children. 59.9% of the women had no miscarriages and abortions, 37.6% had 1-3 miscarriages and abortions and 2.5% had four and more miscarriages and abortions. 70.1% of the participants had 4 and more living children, 24.8% had 1-3 living children, and 5.1% had no living children. Table 1 shows information about the menopausal period of the women. In MSQLQ, the women had the highest score from the physical symptoms subscale and the lowest score from the sexual symptoms subscale. In CPS, the women obtained the highest score from the sincerity/insincerity and the lowest score from the extroversion/introversion subscale (Table 2). There was a positive significant correlation between the scores, obtained by the women who participated in the study, from the CPS emotional stability/neuroticism subscale and the MSQLQ scores, whereas there was a negative significant correlation between their sincerity/insincerity scores and MSQLQ scores. There was no statistically significant correlation between the extroversion/introversion subscale and MSQLQ symptoms (Table 3, p<0.05). It was determined that there were significant differences between the age and menopause year of the women. It was found that physical and psychosomatic symptoms were higher among the women who were aged 60 years and above, and physical symptoms were higher among the women who had been in the menopausal period for 11 years and above at a statistically significant level (Table 4, p<0.005). There were no significant differences between the women's marital status, state of doing exercise, state of receiving treatment and state of obtaining information in the menopausal period and (Table menopausal symptoms 4). symptoms were statistically significant among the married women, physical symptoms and total symptom scores were statistically significant among the illiterate women and vasomotor

symptoms were statistically significant among the smoking women (p<0.005).

Discussion

Age of entering menopause may affect women in terms of certain diseases and mortality in the long term. Of the participants, 72% obtained information about the menopausal period and nearly half of them (54.9%) obtained that information from the medical personnel. In a study conducted by Erkin et al., in Gumushane to examine the impacts of the menopausal period on women's quality of life, they determined that 10.7% of the women obtained no information regarding menopause from any source and 48% of those who received information obtained that information from the medical personnel (14). Menopausal complaints are encountered in 60-90% of women in the menopausal period and affect their daily life and quality of life negatively (15-17). Almost all of the women (97.5%) had problems about menopause. The results of our study are consistent with the literature. When considering the mean scores obtained by the participants from the MSQLQ; it was calculated that the vasomotor subgroup total mean score related to the MSQLQ was 13.01±5.22, the psycho-social subgroup total mean score was 26.24±9.81, the physical subgroup total mean score was 68.89±16.58 and the sexual subgroup total mean score was 10.52±5.37. In the MSQLQ, the women obtained the highest score from the physical symptoms and the lowest score from the sexual symptoms. In parallel with the present study, in the study by Bozkurt it was calculated that the vasomotor subgroup total mean score of MSQLQ was 12.58±5.39, the psycho-social subgroup total mean score was 25.74±11.77, the physical subgroup total mean score was 57.09±17.61 and the sexual subgroup total mean score was 11.36±5.90 (18). In a study conducted by Ganapathy and Furaikh with 140 women aged

Table 4: Comparison of MSQLQ scores and some variables in the women

| | Vasomotor symptoms | Psychosoma tic symptoms | Physical symptoms | Sexual symptoms | Total |
|------------------------|-----------------------|-------------------------------|-------------------|--------------------|-------------|
| | Median | Median | Median | Median | Median |
| Employment | | | | | |
| Employed/Retire | 12.00 | 30.50 | 76.50 | 9.00 | 127.00 |
| d | | | | | |
| Housewife | 14.00 | 25.00 | 69.50 | 11.00 | 114.00 |
| Test value | U: 1689.000 | U: 1262.000 | U: 1348.000 | U: 1529.000 | U: 1415.500 |
| | p: 0.758 | p: 0.022 | p: 0.127 | p: 0.290 | p: 0.231 |
| Social security status | 3 | | | | |
| Yes | 14.00 | 24.00 | 68.50 | 11.00 | 114.00 |
| No | 12.50 | 31.00 | 76.50 | 10.00 | 130.00 |
| Test value | U: 2428.000 | U: 1793.000 | U: 2055.000 | U: 2570.000 | U: 2042.000 |
| | p: 0.478 | p: 0.002 | p: 0.056 | p: 0.860 | p: 0.050 |
| Income status | | | | | |
| Low income | 15.00 | 29.00 | 71.00 | 12.00 | 126.00 |
| Middle income | 13.00 | 24.00 | 69.00 | 10.50 | 11.00 |
| High income | 15.00 | 29.00 | 70.00 | 10.00 | 128.00 |
| Test value | KW: 7.565 | KW: 6.902 | KW: 2.032 | KW: 2.320 | KW: 6.023 |
| | p: 0.023 | p: 0.032 | p: 0.362 | p: 0.313 | p: 0.049 |
| Duration of the mer | opause | | | | |
| 1-5 years | 13.00 | 25.500 | 68.00 | 10.00 | 112.00 |
| 6-10 years | 13.00 | 25.00 | 69.00 | 11.50 | 118.50 |
| 11 years and | 15.00 | 28.500 | 77.50 | 12.50 | 130.00 |
| above | | | | | |
| Test value | KW: 3.765 | KW: 2.225 | KW: 7.454 | KW: 2.082 | KW: 7.593 |
| | p: 0.152 | p: 0.329 | p: 0.024 | p: 0.353 | p: 0.022 |
| Age status | | | | | |
| 40-46 years | 14.00 | 27.50 | 70.50 | 10.50 | 113.00 |
| 47-53 years | 14.00 | 24.00 | 68.00 | 10.00 | 112.00 |
| 54-59 years | 13.00 | 30.00 | 77.00 | 13.00 | 130.00 |
| Test value | KW: 0.183 | KW: 6.809 | KW: 8.427 | KW: 4.370 | KW: 7.168 |
| | p: 0.912 | p: 0.033 | p: 0.015 | p: 0.113 | p: 0.028 |
| | | | | | |

KW: Kruskal Wallis Test, U: Man Whitney U Test

40 to 60 years, they determined that MSQLQ vasomotor subgroup mean score of the 4.08 ± 0.79 , the psycho-social participants was subgroup mean score was 12.01±0.27, the physical subgroup mean score was 27.1±0.72 and the sexual subgroup mean score was 3.89±0.59, which were lower compared to the results of the present study (19). In a study conducted by Devi et al., in India to compare the quality of life in postmenopausal women living in rural and urban regions, it was determined that the MSQLQ vasomotor subgroup mean score was 13.7±4.9, the psycho-social subgroup mean score was 31.3±8.47, the physical subgroup mean score was 75.6±17 and the sexual subgroup mean score was 14.5±4.4. The results were higher in all areas compared to the present study (20). In the study, the women's CPS extroversion/introversion subscale mean score was 14.12±7.02, emotional stability/neuroticism subscale mean score was 17.17±6.84 and sincerity/insincerity subscale mean score was 19.25±6.41. In CPS, the women highest obtained the score from sincerity/insincerity and the lowest score from the extroversion/introversion subscale. In a study conducted by Ergin, it was determined that the CPS extroversion/introversion subscale mean 12.69 ± 6.46 , emotional score was stability/neuroticism subscale mean score was 14.35±4.97, and sincerity/insincerity subscale mean score was 20.28±5.08 (21). In the study by Bal it was found that the mean score of the scale was 15.95±9.1 in the extroversion/introversion subscale, 18.83 ± 7.3 in the stability/neuroticism subscale, and 18.12±6.44 in the sincerity/insincerity subscale (22). In addition

when comparing MSQLQ and CPS scores obtained by the participants in the present study, there was a positive significant correlation between the scores obtained by the women from the CPS emotional stability/neuroticism subscale and the MSQLQ scores, whereas there was a negative significant correlation between the scores they obtained from the sincerity/insincerity subscale and the MSQLQ scores. There was no statistically significant correlation extroversion/introversion subscale and MSQLQ symptoms (p<0.05). In the present study, it was determined that psychosomatic symptoms were higher among the employed or retired women. The studies revealed that women's presence in working life reduces menopausal symptoms and affects their quality of life positively (14). In the study conducted by Bal, it was stated that the unemployed women had higher somatic and psychological complaints (22). It was determined that there were significant differences between the age and menopause years of the women. Physical and psychosomatic symptoms were higher among the women aged 60 years and above and physical symptoms were higher among the women who were in the menopausal period for 11 years and above at a statistically significant level (p<0.005). In a study conducted by Fallahzadeh with the Iranian women, it was indicated that the women who were in menopausal period for 5 years and below had lower psycho-social, physical and sexual values compared to the women who had been in menopause for more than 5 years (23). It was determined that there were no significant differences between the women's marital status, state of doing exercise, state of receiving treatment and state of obtaining information in the menopausal period and menopausal symptoms (p>0.005). In the literature, the results related to correlation between marital status and intensity of menopausal symptoms and the quality of life are inconsistent. In a study conducted by Dennerstein in 2001, it was stated that the married women had more positive attitudes toward menopause, whereas the women who separated or divorced from their husband had more negative attitudes and their quality of life was also affected negatively (24). When considering the state of doing exercise; the literature has a variety of studies investigating the correlation between the quality of life and physical activity level. In a study conducted with healthy postmenopausal women, it was demonstrated that exercise provided an important psychological recovery for the women and the necessity of sustaining exercise in the long

term to preserve the recovery in the quality of life, was stressed (25). It was determined that sexual symptoms were statistically significant among the married women, physical symptoms and total symptom scores were statistically significant among the women who were illiterate and vasomotor symptoms were statistically significant among the smoking women (p<0.005). In the study by Bozkurt (18) it was found that education did not create any significant difference on the vasomotor, psycho-social and sexual quality of life; however, educational level created a significant difference on physical life.

Conclusion

In the study, it was determined that the women had no adequate knowledge of this period which comprises nearly one third of their life, there were deficiencies in coping with menopausal symptoms and the quality of life of the women in the menopausal period was not at the required level. In MSQLQ, the women had the highest score from the physical symptoms subscale and the lowest score from the sexual symptoms subscale. In CPS, the women obtained the highest score from the sincerity/insincerity and the lowest score from the extroversion/introversion subscale. Women of childbearing age should be prepared for menopause by determining their personality traits, thus enabling them to be stronger in coping with possible problems. Women in this period should be addressed from their perceptions of menopause to their complaints, from their personality characteristics to their quality of life.

Ethics Committee Approval: This study was approved by Bingol University Ethics Committee (approval number: E.26633, date: 30.12.2019).

Informed Consent: Written informed consents were obtained from all participants.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

Author Contributions: Concept – AB; Supervision– AB; Materials – AB, HÖ, EA; Data Collection and/or Processing – AB, HÖ, EA; Analysis and/ or Interpretation – AB, HÖ; Writing - AB, HÖ, EA.

References

1. Uludağ A, Güngör Çakır AN, Gencer M, Şahin EM, Coşar E. Another period of women's life: menopause and its impact on quality of life. Turkish Journal of Family Practice 2014;18(1):25-30.

- Turfanda A, Topuz S. Menopause. In: Berkman, S. (Editor). Gynecology Nobel Medicine. Istanbul, Nobel Medicine Bookstores 2004: p87-95.
- 3. Tortumluoğlu G. Asyalı ve Türk kadınlarında menopoz. International Journal of Human Sciences 2004;1(1):1-11.
- 4. Soysal A. Personality types in working life: A literature review. Cement Employer Magazine 2008;1(2):24-19.
- 5. Bouchard TJ Jr, Loehlin JC. Genes, evolution, and personality. Behav Genet 2001; 31(3):243-273.
- 6. Castelo-Branco C, Palacios S, Ferrer-Barriendos J, Parrilla JJ, Manubens M, Alberich X ve ark. Understanding how personality factors may influence quality of life: development and validation of the Cervantes Personality Scale. Menopause 2008;15(5):914-918.
- 7. Yurdakul M, Eker A, Kaya D. Evaluating the life quality of the women in the menopausal period. Firat University Journal of Health Sciences (Medicine) 2007;21 (5):187-193.
- 8. Abdullah B, Moize B, Ismail BA, Zamri M, Mohd NN. Prevalence of menopausal symptoms, its effect to quality of life among Malaysian women and their treatment seeking behaviour. Med J Malezya 2017;72(2):94-99.
- 9. Rathnayake N, Lenora J, Alwis G, Lekamwasam, S. Prevalence and severity of menopausal symptoms and the quality of life in middle-aged women: A study from Sri Lanka. Nurs Res Pract 2019; 2019:2081507
- 10. Smail L, Jassim G, Shakil A. Menopause-specific quality of life among emirati women. Int J Environ Res Public Health 2020;17(1):40.
- 11. Kharbouch SB, Şahin NH. Determination of the quality of life during menopausal stages. Florence Nightingale Journal of Nursing 2007;15(59):82-90.
- 12. Castelo-Branco C, Palacios S, Ferrer-Barriendos J, Parrilla JJ, Manubens M, Alberich X and et al. Understanding how personality factors may influence quality of life: development and validation of the Cervantes Personality Scale. Menopause 2008;15(5):914-918.
- 13. Bal MD, Şahin NH. The effects of personality traits on quality of life. Menopause 2011;18(12):1309-1316.

- 14. Erkin Ö, Ardahan M, Kert A. Effect of menopause on women's quality of life. Gümüşhane University Journal of Health Sciences 2014;3(4):1095-1113.
- 15. Özkan S. Climacterium and Menopause. In: Şirin A, Kavlak O (Editors). Women's Health, Extended 2nd Edition. Istanbul, Nobel Medicine Book Houses 2015:p.154-68.
- 16. Çelik SA, Pasinlioglu T. Women's menopausal sypmtoms and factors affecting it during climacteric period. Hacettepe University Faculty of Health Sciences Nursing Journal 2014;5(2):16-29.
- 17. Santoro N, Epperson CN, Mathews SB. Menopausal symptoms and their management. Endocrinol Metab Clin 2015; 44(3): 497-515.
- 18. Bozkurt ÖD. The investigation of hopelessness levels and quality of life in climacterium of the women. Master Thesis. İzmir: Ege University Institute of Health Sciences; 2004.
- 19. Ganapathy T, Al Furaikh S. Health-related quality of life among menopausal women. Arch Med Health Sci 2018;6(1):16-23.
- 20. Devi B, Karki P, Chhetry R, Sharma N, Niroula M, Lepcha PC. et al. Quality of life of post-menopausal women residing in rural and urban areas of Sikkim, India. Int J Reprod Contracept Obstet Gynecol 2018;7(12):5125-5133.
- 21. Orhan Ergin I, Yağmur Y. The correlation between menopausal complaints and personality traits. Perspect Psychiatr Care 2018;54(3):365-370.
- 22. Bal MD. The effects of women's personality on menopausal complaints and quality of life. Istanbul University, Institute of Health Science, Department of Obstetric and Gynecologic Nursing; Doctoral Dissertation Istanbul: 2011.
- 23. Fallahzadeh H. Quality of life after the menopause in Iran: a population study. Qual Life Res 2010;19(6):813-819.
- 24. Dennerstein L, Lehert P, Dudley E, Guthrie J. Factors contributing to positive mood during the menopausal transition. J Nerv Ment Dis 2001;189(2):84-89.
- 25. Asbury EA, Chandruangphen P, Collins P. The importance of continued exercise participation in quality of life and psychological well-being in previously inactive postmenopausal women: a pilot study. Menopause 2006;13(4):561-567.