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The Menopausal Age, related Factors and Climacteric Complaints in Turkish Women

Idade da Menopausa, Factores relacionados e Queixas Climatéricas em Mulheres Turcas

Nevin Hotun Sahin*
Anahit Coskun**

Resumo

Objectivo: Determinar a idade de ocorrência de menopausa, factores relacionados e queixas climatéricas nas mulheres turcas.
Método: estudo transversal, com utilização de um questionário, preenchido em casa. Foi utilizada uma amostra de conveniência de 321 elementos, de acordo com o método de amostra estratificado, residentes na área rural de Istambul, com idades compreendidas entre os 45-54 anos. Foram excluídas as mulheres com menopausa cirúrgica. Foram avaliadas a idade da ocorrência da menopausa natural, a prevalência de queixas climatéricas e as atitudes perante a menopausa. Análise estatística: Foi desenvolvido o Climacteric Complaint Tool (CCT), e a sua validade e fiabilidade foram testadas. A análise de factor foi utilizada para testar a validade de constructo. A consistência interna do CCT foi testada pelo uso do Alfa de Cronbach (Alfa= .86). O item total da correlação variou entre .35 e .84.
Resultados: As queixas climatéricas mais frequentes foram músculos e articulações doridas (75.7%), irritabilidade (74.5%), afrontamentos (72.9%), dificuldade em dormir (68.8%), sensação de cansaço (53.6%), sentirem-se deprimidas (49.8%) e perda de desejo sexual (47.4%) e não estavam relacionadas com a idade de ocorrência de menopausa nem atitudes perante a menopausa.
Conclusões: A idade média da menopausa nas mulheres turcas é inferior do que nas mulheres caucasianas. Embora as mulheres turcas apresentem muitas queixas, não procuram cuidados médicos para o seu alívio.

Palavras-chave: **climatério, queixas climatéricas, menopausa, mulheres turcas.**

Abstract

Objective: The purpose of this study was to determine menopausal age, related factors and climacteric complaints in Turkish women.
Method: A population based, cross-sectional study was executed using questionnaire in their home. A convenience sample of 321 was chosen, according to stratified sampling method who live in Istanbul rural area and aged 45-64 years. Women who had surgical menopause were excluded. Main Outcome Measures: Natural menopause age, prevalence of climacteric complaints and attitudes toward menopause. Statistical analysis: Climacteric Complaint Tool (CCT) was developed by researcher and validity and reliability of CCT was tested. Factor analysis was used to test construct validity. Internal consistency of the CCT was tested by use of Cronbach's Alpha (Alpha= .86), Item-total item correlation ranged from .35 to .84
Results: The most prevalent climacteric complaints were aching muscle and joints (75.7%), irritability (74.5%), hot flushes- flashes (72.9%), difficulty in sleeping (68.8%), feeling tired (53.6%), feeling depressed (49.8%) and loss of sexual desire (47.4%) and didn't found to be related with menopausal age and attitudes toward menopause.
Conclusions: The median age of menopause in Turkish women is lower than Caucasian. Although Turkish women had many complaints, they didn't apply for a medical care to relief them.

Keywords: **Climacterium, Climacteric complaints, Menopause, Turkish women.**

* PhD, Assistant Professor, Istanbul University, Florence Nightingale School of Nursing, Department of Obstetric and Gynaecologic Nursing (nevinsahin34@istanbul.edu.tr)
** PhD, Professor, Turkish Family Health & Planning Foundation

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1. Introduction

Climacterium is a period between reproductive years and senium. Approximately, five million women in 33, 5 million women population in Turkey are between ages 45--64 (Turkish Statistics Yearbook, 2004). Today, average life expectancy has risen to seventy one in Turkish women. So that, they have one third of their lives in climacterium. The climacteric is not an illness, but the menopause is an event that troubles a woman's present life and puts her future life at risk. One would like to think that, for the woman of the new millennium, the menopause has simply become what it is: a feminine milestone that marks the transition and path to another period of life (Lachowsky, 2002, Sahin, 1998).

The age of natural menopause and frequency of various menopausal symptoms differ in different societies (Avis et al, 2001, Blumel, 2000, Freeman et al, 2001, Hunter, 1993, Lock and Kaufert 2001, Yahya and Rehan, 2002). Culturally mediated life styles affect both the menopausal experience and the health of women as they age (Lock, 1998, Kaufert et al, 1986). Webster suggests that menopause may have a positive effect on the lives of Aboriginal women with respect to increasing their freedom within the community (Webster, 2002). Cross-cultural research is argued that socio/cultural variables, including language usage and expectations about the menopausal experience, do not fully account for these differences, and that biological variation must also be taken into account (Avis, 2001, Blumel, 2001, Freeman et al, 2001, Lock and Kaufert 2001, Lock, 2002, Malacara 2002). It is important to think in terms of "local biologies", which reflect the very different social and physical conditions of women's lives from one society to another (Lock and Kaufert, 2001). Crawford et al, (2000) conclude that general symptom reporting, attitudes toward menopause and lifestyle factors can explain some of the individual variation in symptom reporting (Crawford et al., 2000). Ethnic, socio-cultural and environmental factors are involved in the appearance of complaints (Crawford et al, 2000, Freeman et al, 2001, Malacara, 2002).

The purpose of this study was to determine menopausal age, related factors and climacteric complaints in Turkish women.

2. Subject and Methods

The population of this research was consisted of women living in Istanbul rural area and aged 45-64 years. Sample size was calculated with a sample error of ± 5% and 95% confidence interval. Research sample was formed with 321women chosen non-randomly through "Stratified Sampling Method" among women who lived in Istanbul. Women who had surgical menopause were excluded.

For gathering the data of the study "Participant Information Form (PIF)" and "Climacteric Complaint Tool (CCT) "were used. Ethical approval was obtained from local ethical committee and participants. Women who met the eligibility criteria were included to the study. All participants were face to face interviewed and verbal instructions were given by the researcher in their homes.

2.1. Questionnaires

2.1.1. Participant Information Form (PIF)

The variables established in this interview included: education level, employment, marital status, total number of children, gynaecological operations, menarche, weight, height, body mass index (BMI), their partnership and their occupation. The women were asked about their beliefs and attitudes about menopause, aging and role.

2.1.2. Climacteric Complaint Tool (CCT)

CCT contained a list of specific symptoms of menopause. Fifteen symptoms (hot flushes, difficulty sleeping, headache, irritability, feeling depressed, aching muscle-joint, gaining weight, flatulence or constipation, palpitation, dry and itching skin, increased facial hair, vaginal dryness, loss of sexual desire, frequent urination, menstrual irregularity, feeling tired) were identified based on the literature and panel experts.

2.2. Statistical analysis

The analysis of the data was performed with SPSS (version10.0) for Windows. Descriptive analyses were computed for demographic characteristics. Reliability was assessed by using item-total item correlations and Cronbach alpha coefficients. The desired criteria of item-total item correlation were greater than .30 and alpha level of .80 or greater were considerable.

To test for construct validity of the scale, a principal component factor analysis with varimax rotated. Factor matrix was performed to discover theoretically meaningful factors of the scale. Factor analysis of 15 climacteric complaints identified five factors. Five factor clusters were psychological, musculoskeletal/ gastrointestinal, non-specific somatic, respiratory and vasomotor complaints. Factor loading greater than .40 were considered to be significant in the present study. Internal consistency of the CCT was tested by using Cronbach's Alpha (Alpha= .86); Guttman Split-Half Correlation Coefficient: .88, Spearman-Brown Correlation Coefficient: .89. Item-total item correlation ranged from .35 to .84. The MCT showed adequate reliability and validity for use in middle aged Turkish women.

3. Results

Demographic Characteristics

Participants of this cross-sectional study were nonrandomly assigned 321 premenopausal, perimenopausal and naturally menopausal women aged 45-64 years from Istanbul rural area, and the majority of them (56%) were between ages 45-50 ($\overline{X}$ = 51.55±5.84). Of the participants, 77.9 % have lived altogether with husband and children. Most of them (80.7%) were housewives, married (76.3%9) and primary school graduates (14.3%) (Table 1). Table 1 demonstrates the characteristics of participant women in Istanbul. Preventive health care practices like routine gynaecologic exams (28.3%), pap smear tests (17.8) and self-breast examinations (26.4%) were not sufficient among these women. However smoking, alcohol and caffeine addiction were very restricted. The mean Body Mass Index of women were 27.04±4.19

Table 1. Characteristics of participant women in Istanbul

Demographic Characteristics	Mean	SD
Age	51.55	5.84
Menarche ages	13.86	3.46
Menopause ages	46.78	4.20
BMI	27.04	4.19
Number of Pregnancy	4.72	2.45
Number of Gravity	3.5	2.0
Number of induced abortion	1.84	1.65
Other Characteristics	**n**	**%**
Marital Status		
Marriage	245	76.3
Partner died	68	21.2
Other (Single, divorced, widowed....)	8	2.5
School Years		
5 year and↓	128	39.9
5 year	122	38.0
8-12 year	44	13.7
12 year	27	8.4
Work		
House wives	259	80.7
Civil servant	49	12.5
Worker	13	4.0
Worker	9	2.8
Retired		
Smoking (5-20 /daily)	73	22.7
Alcohol consumption (l goblet/daily)	8	2.5
Caffeine consumption (5 cup/daily)	3	0.9
Lactation (>2 year)	91	28.8

Menopausal ages

Median menopause age was 46.78±4.2 in the sample of this study. Menopausal age was not found to be related with menarche age (t: 0.034), number of pregnancy (F: 1.196), number of parity (F: 0.260) and long breastfeeding (2e" years) (t: 2.36). Mean menopausal age of women was found to be related with their mothers' mean menopausal ages (t: 0.192, p<.01).

Attitude towards menopause

Table 2 demonstrates the menopausal characteristics of participant women. Of the participants, 23.4% were premenopausal, 14.6% were perimenopausal and 62% were postmenopausal. Most of them (45.8%) had one-five menopausal years.

Table 2. Menopausal characteristics of participant women

Menopausal years	n	percent
1 year↓	75	23.4
1-5 years	147	45.8
6-10 years	49	15.3
11-15 years	29	9.0
16 years and↑	21	6.5
Menopausal Perception	n	percent
Loss	109	34.0
Changing/alteration	163	50.1
Development/Growing up	51	15.9
Menopausal information Resources	n	percent
Doctor	58	18.1
Media	39	9.7
Nurses and Midwives	31	12.1
Friends	2	0.6
Many resources	54	16.8
No information	137	42.7
Use of HT period	n	percent
None	221	68.8
0-12 month	54	16.8
13-24 month	25	7.8
25-36 month	14	4.4
36 and month↑	7	2.8

59.8% of women had positive attitudes to their menopause (cessation of menstruation, natural, relief, growing) and 24.9% had a negative one (trouble, depression, deficiency, disability, aging) (Table 2). Positive attitudes toward menopause increased significantly with the education of women. ($\overline{X}$ = 12.372; p<.01) The answers of women for the term menopause were feelings of loss (33.3%), growing up (15.9%) and changing/ difference (50.1%). Women described menopause as a loss (33, 3%), changing (50, 1%) and growing (15.9%). Women who described menopause as a loss significantly had more negative attitudes toward menopause(x^2=5.961 p<.001). Being married or working was not related with their description of menopause.

Most of the participants (42.7%) had not known anything about menopause.

Majority of women (57.0%) didn't hear about hormone therapy. Other reasons for not taking hormone therapy were contraindications (2.7%), not supplied (25.6%), not recommended by her doctor (9.0%) and fear of cancer (5.7%).

Use of hormone increased significantly with their education status. ($\overline{X}$ = 25.585; p < .01). The mean ages of women who used hormone were significantly younger (t=-2.81; p<0.01).

Climacteric Complaints

Table 3 demonstrates climacteric complaints in participant women in Istanbul rural area. The most prevalent menopausal complaints were aching muscle and joints (75.7%), irritability (74.5%), hot flash-flashes (72.9%), difficulty in sleeping (68.8%), tiredness (53.6%), feeling depressed (49.8%), and loss of sexual desire (47.4%). Climacteric complaints weren't found to be related with menopausal age and attitudes toward menopause.

Table 3. Climacteric complaints in participant women in Istanbul

Climacteric complaints	N	%
Aching muscle and Joint	243	75.7
Irritability	239	74.5
Hot flash- flushes	234	72.9
Difficulty in sleeping	229	71.3
Headache	221	68.8
Feeling tired	172	53.6
Feeling depressed	160	49.8
Loss of sexual desire	152	47.2
Weight Gain	142	44.2
Vaginal dryness	136	42.2
Frequent urination	113	35.2
Flatulence or constipation	82	25.5
Increased facial hair	82	25.9
Menstrual irregulation	82	25.9
Dry and itching skin	67	20.9
Increased facial hair	82	25.9
Menstrual irregulation	82	25.9
Dry and itching skin	67	20.9

When the relations between menopausal years and menopausal complaints were examined, it was found that difficulty in sleeping (x^2=13.464; p< .01) and loss of sexual desire (χ^2=11.008; p< .01) complaints were experienced significantly more in menopausal 1-5 years. Irregular menses (χ^2=20.925; p<.001) complaints were significantly higher in women who had been in menopause less than one year.

Weight gain (χ^2=11.153; p<.001) and loss of sexual interest (χ^2=6.605; p<.01) were higher in women who used hormone and frequent urination (χ^2= 8.930; p< .05) complaints were higher in women who didn't use hormone.

Table 4 - Number of total climacteric complaint of participant women in Istanbul

Number of Total Complaint	n	%
0	12	3.7
1-3	32	10.0
4-6	82	25.5
7 and ↑	195	60.8
Total	321	100.0

Number of complaints were significantly higher in women who described menopause as a loss (c^2=12.764 p<.05).

4. Discussion

Demographic Characteristics

Demographic characteristics of the participants in Istanbul were similar to the demographic characteristics of Turkish women population in this age group (Turkish Statistics Yearbook. [TSY], 2004). Smoking, alcohol and caffeine addiction were very restricted. Preventive health care practices like routine gynaecologic controls, Pap smear tests and breast examinations were not sufficient among these women. Women in our study group were overweight according to Body Mass Index (BMI) - (World Health Organization. [WHO], 1997).This situation increase the peripheral estrogen levels in women. Kaplan et al, (2002) reported the average BMI in Israel population as 25.3±4.2 (Kaplan et al., 2002).

Menopause age

Menopausal age differs in cultures although it is mentioned as 51 years universally. Median age of natural menopause in Caucasian women occurs between 50-55 years of age (Mc Kinlay, 1996). Median ages of natural menopause was reported as 50.8 in England (Mc Kinlay, 1996), 50 in Czech population (Nedstrand, Pertl and Hammar, 1996), 48 in Singapore (Fuh et al., 2001), 49, 1 in China (Chim et al., 2002), 48 in Mexico (Malacara et al, 2002), 49± 3.6 in Lahor (Yahya et al, 2002), 48.7 ± 3.8 in Greek women (Adamopoulos et al, 2002). Similar to the findings of our study, Carda et al, (1998) reported the median age of menopause as 47, 8 in Turkish women (Carda et al., 1998). The median age of menopause in our study is lower than that reported for Caucasian.

Contrary to the literature, no relationship was found between menopause age and obstetric characteristics, menarche age or number of births. Similar to our study, Parazzi et al. found no relationship between menarche and menopause age (Parazzini, Negri and La Vechia, 1992). Significant relationship between mean menopause age and their mothers' menopause age ($t=0.192$; $p<0.001$) supports literature about that genetic characteristics effect the menopause ages of women. (Lock and Kaufert 2001; Mc Kinlay 1994). No other factors appear to have an independent effect on age at menopause (McKinlay, 1996).

Attitudes Toward Menopause

The majority of women's attitudes were positive or neutral toward menopause while 1/3 of women had negative attitudes. Studies on menopausal attitudes report similar negative perceptions with women in our study group, like feeling depressed, irritability, worry for their loss, not to feel as a real women and deficiency (Avis and Mc Kinlay 1991; Bloch 2002; Dumbrell, 1995; Kaufert and Lock, 1997).

Differing perceptions of menopause, cross culturally; multi-disciplinary prospective data that can link various processes into coherent patterns (McKinlay,1996).In a society that glorifies youth and beauty, the transition through menopause can cause needless anxiety and apprehension for many women (Dumbrell,1995).

Answers of the participants for their perceptions of the term menopause described menopause as a loss (33, 3%), alteration/ changing (50, 1%) and growing (15.9%). Total number of complaints was significantly higher in women who described menopause as a loss. Similar to our study, several studies have proved that a negative attitude towards the menopause has an increasing effect on the severity of specific menopausal symptoms and therefore leads to more complaints (Holte and Mikkelsen, 1991B). The attitude towards oneself as well as the personal style of coping has great influence on the severity of the complaints during the menopause (Avis and Mc Kinlay 1993; Bloch 2002).

Similar to our findings, Bloch reported more symptoms in women with negative attitudes towards menopause (Bloch, 2002). Negative attitudes towards menopause were related to general symptom reporting and depression. Additionally, negative attitudes prior to menopause were related to subsequent symptom reporting during menopause. These results suggest that the so-called menopause syndrome may be more related to personal characteristics than to menopause per se (Avis and Kaufert, 1993).

Turkish family structures have protecting characteristics for women in this period against stressful events like divorcing, partner's death and loneliness. In Turkey, women take an important and better position in the family when they get older because of the social values like living children and parents altogether until children's marriage sometimes even after their marriage, close family bonding, family support in events like divorcing or partner's death and cultural and religious values that consider mothers very important (Sahin,1998). For this reason, ¾ of women had positive attitudes towards menopause and 2/3 described menopause positively. Significant relationship between menopausal attitudes and women's education status demonstrate that negative attitudes towards menopause can be reduced with the education of women. The lack of knowledge of the menopause shown by the population studied demonstrates the need for Health Education on this stage of life (Garcia Padilla et al., 2000). Informal sources of information are very limited in Turkey. Turkish media has just started to show interest to this subject in the recent years. Kaufert et al found that the single main source of women's

information on menopause was a health professional (49%) (Kaufert et al., 1998). However, 42.7% of the participant women in our study did not have any information from a source. Although nurses are expected to be an important source for information on menopause, the rate of nurses as an information source for women was only 10%. Nurses can have positive influence on these women by being knowledgeable about the numerous causes of stress–physical, psychological, sociocultural and developmental- that menopausal women face. The nurse is the unique person to educate and counsel women on how to lower their risks for midlife health problems (Sahin, 1998). The nursing team has the potential to influence the quality of life of women in menopause through modifying their attitudes toward menopause (Rotem et al., 2002).

Hormone therapy, which is used for the treatment of menopausal symptoms and potential pathologies, is not used commonly in Turkey (Sahin, 1998). Hormone use was higher in more educated and younger women. Genazzi et al's (2002) findings from 2906 Italian menopausal women support our findings that hormone users were younger than non users (Genazzi, Nicolucci and Campagnoli, 2002). Kaplan et al's study on Israeli women gynaecologists also had similar findings with our study. The main reason for stopping or avoiding hormone was equally bleeding, fear of cancer and adverse reaction towards hormone therapy in Israeli Women gynaecologists (Kaplan et al, 2002). The frequency of use of medical service for menopause is low (Obermayer et al., 2002).

Climacteric Complaints

The most prevalent climacteric complaints were aching muscle and joints (75.7%), irritability (74.5%), hot flash-flashes (72.9%), difficulty in sleeping (68.8%), being tired (53.6%), feeling depressed (49.8%) and loss of sexual desire (47.4%). The most common complaints were headaches in Japanese (27.5%), Canadian (33%) and USA (37.2%) (Holte and Mikkelsen, 1991A). It's an interesting result that we found the rate of the hot flash complaints (73.9%) in women who had not applied for a medical help similar to Carda et al's study on Turkish women who applied to a menopause clinic with this complaint (68,84%) (Carda et al.1998). This result shows that Turkish woman view menopause as a natural period and don't seek a medical treatment. 3.7% of Turkish woman in our study didn't report any complaints. The rate of women without any menopausal complaints was reported as 26, 7% in Japan, 13, 8% in Canada and 15, and 4% in America. (Holte and Mikkelsen, 1991A). 10% of women reported only 1-3 complaints, 25.5% reported 4-6 complaints and 60.8% reported 7 or more complaints. The rate of women with 1-3 complaints was 63, 4% in Japan, 60% in Canada and 50, and 3% in America (Holte and Mikkelsen 1991B). Turkish women with seven or more complaints (60.8%) were much more than Japanese (9.7%), Canadian (26.2%) and American (34.1%) women with 5 and more menopausal complaints. (Holte 1992, Holte and Mikkelsen 1991A).

Prevalence of climacteric complaints was higher than that reported for Japanese, Canadian and American women. The number of complaints of women was more similar to Norwegian women. (Avis and Kaufert 1993; Holte 1992; Holte and Mikkelsen 1991A). The socio cultural environment may explain the differences. It is known that sociocultural environment has a significant impact on perceptions and symptomatic manifestations. Also, the samples, age groups and the time of researches were different in studies on menopause and its effecting factors (Avis and McKinlay, 1991,

Kauert et al., 1986). Another important factor is the difference between data gathering tools and methods. Climacteric complaints of Turkish women were obtained by self reports in this study. All of the complaints were recorded without rating the degree of complaints. Complaints was rated in different degrees in Holte's study (Holte and Mikkelsen, 1991B)

Menopausal Complaints and Related Factors

Holte demonstrated a relationship between menopause age and menopausal complaints like hot flashes, difficulty in sleeping, aching muscles and joints, palpitation and irritability (Holte and Mikkelsen, 1991B) However, menopause age was found similar in all complaints in our study. No statistically significant difference was found between menopause age and these complaints.

When the relations between menopausal years and menopausal complaints were examined, it was found that difficulty in sleeping and loss of sexual desire complaints were experienced significantly more in menopausal 1-5 years. Irregular menses complaints were significantly higher in premenopause. This finding was parallel with Holte and Mikkelsen's study (Holte and Mikkelsen, 1991A). Perimenopausal women had the highest reports of symptom complaints compared with pre and post menopausal women (Ho et al., 1999; Chim et al, 2001). Menopausal complaints were not found to be related with menopausal stages in our study. It might be a result of that most of the participants (62%) was postmenopausal.

Conclusion

The median age of menopause in our study is lower than that reported for Caucasian. The prevalence of menopausal complaints and total number of complaints among the participant women in our study was very high. Women health preventive and promoting behaviours of women were insufficient. The majority of women do not seek additional help concerning menopause, and their attitudes toward it are, overwhelmingly, positive or neutral. Care of the climacteric women doesn't only require a medical care. Counselling, guidance and care of personal needs are also needed. Nurses can have positive influence on these women by being knowledgeable about the numerous causes of stress-physical, psychological, sociocultural and developmental-that menopausal women face. Providing them with appropriate information whether at the bedside, in the community or around the kitchen table can lead to a better perception and acceptance of this natural life transition.

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