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Abstract: Objectives: The aim of the study is to assess whether women who choose to star menopausal hormone therapy (MHT) have lower quality of life (QoL) than those who do not initiate it using Cervantes short form scale (C-SF) and analyze sociodemographic factors associated with lower QoL.
Study design: Four hundred and eighty women with climacteric symptoms were consecutively and prospectively analyzed.
Results: Mean age was 51.1 years. Two hundred and sixty-one women (54.3%) started MHT. The sample´s global mean in C-SF score was 51.3 ± 13.9. Women who choose to star MHT have higher impairment in C-SF (lower QoL) than women who reject it (58.7 ± 15.9 vs 46.7 ±12.8; p<0.0001). We found higher impairment in women with early menopause (53.7 ± 15.9 vs 49.7±13.1; p=0.037); with no obesity (<30 vs >30 BMI) (52.8 ± 13.5 vs 41.0 ± 8.2; p=0.002); with previous malignancies (56.2 ± 18.2 vs 50.2 ± 13.5; p=0.020) and without sexual activity (58.0 ±25.4 vs 50.4 ± 13.1; p=0.009. No differences were found in C-SF score with respect to tobacco habits or physical activity.
Conclusion: Women who choose to start MHT, with early menopause, with no obesity (<30 BMI), without sexual activity and with previous malignances have lower QoL measured by C-SF scale.

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To the editor-in-chief of European Journal of Obstetrics & Gynecology and Reproductive Biology: Professor Janesh K. Gupta

We hope that you find our manuscript entitled "*Women with low quality of lifeby Cervantes-Short form scale choose menopause hormone therapy*" to be considered for publication in European Journal of Obstetrics & Gynecology and Reproductive Biology.

The manuscript has been prepared following the Instruction to Authors of Journal and we provide assurance that all the listed authors have participated actively in the conception and design, analysis and interpretation of data, and on final approval of the version to be published

The decision to initiate or continue hormone therapy involves a careful assessment and nowadays women want to participate in their health. Majority of symptomatic women improve their quality of life with hormone use in menopausal transition but sometimes women do not want to use it.

We investigate why women choose or reject hormonal therapy when they are informed. We evaluate their quality of life by Cervantes short form scale (CF-SF). This scale is an easy and fast-to-handle (can be filled it in less than 2 min) way to evaluate the QoL in climacteric women in absolute numbers. This self-administered questionnaire has 16 items in four domains (menopause, psychic, sexual and couple) scored on a Likert-type scale ranging from 0 to 5.

What do the results of this study add?

Women who choose to start MHT have lower QoL than women who reject it measured by C-SF scale. We added other demographics factors related to low QoL

Our team are working in future research about use C-SF to assess whether women who started treatment improved their quality of life scores by successive scales.

This study could open the door for a new type of prescriptions and management of MHT.

Further studies analyzing the role of C-SF scale and its domains are necessary to better understand options of treatment to relieve menopausal symptoms.

We hope that you will find it suitable for publication in the journal

Sincerely yours,

Maria Fasero Laiz MD, PhD

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Women with low quality of life by Cervantes-Short form scale choose menopausal hormone therapy

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Highlights

1. Menopause is a physiological period in which the women quality of life is affected.

2. Healthy lifestyle associated with pharmacological treatment improve the quality of life in mid-life women.

3. It is necessary to have valid and objective tools that allow us to know if the woman is eligible to start the hormonal treatment in this period.

Women with low quality of life by Cervantes-Short form scale choose menopausal hormone therapy

Maria Fasero Laiz, Antonio Hernández Sánchez, David Varillas Delgado, Pluvio J. Coronado Martin.

Objectives: The aim of the study is to assess whether women who choose to star menopausal hormone therapy (MHT) have lower quality of life (QoL) than those who do not initiate it using Cervantes short form scale (C-SF) and analyze sociodemographic factors associated with lower QoL.

Study design: Four hundred and eighty women with climacteric symptoms were consecutively and prospectively analyzed.

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Conclusion: Women who choose to start MHT, with early menopause, with no obesity (<30 BMI), without sexual activity and with previous malignances have lower QoL measured by C-SF scale.

Keywords. Climacteric symptoms; QoL; Cervantes short form scale; menopause; hormonal treatment

MANUSCRIPT

1. Introduction

Up to 70% of postmenopausal women suffer climacteric symptoms deteriorating their quality of life (QoL) and decreasing their resilience (1). Some authors have found the most frequent symptoms with high impact on QoL are fatigue, depression and hot flashes (2, 3). Symptoms affect women in different ways depending on education level, socioeconomic status, weight and physical activity (3, 4). Decreasing levels of estrogens is the most frequent cause for symptoms in this period, being menopause hormone therapy (MHT) (5-7) the most effective treatment for the climacteric symptoms . In addition, some authors have found that MHT could prevent some diseases (cardiovascular disease, osteoporosis, cognitive decline or vulvovaginal atrophy) in postmenopausal women (8, 9). However, many women reject MHT due to unfounded ideas about their safety (10).

The decision to initiate or continue MHT involves a careful assessment (11, 12) and women´s choice. This decision can be supported by tools that could help identify the appropriate women for MHT or for others therapeutic alternatives (13, 14). Several questionnaires have been described to measure the QoL in postmenopausal women (15-21), but few are easy and fast to handle in a clinical setting. The Cervantes scale is a self-completed questionnaire designed to measure QoL in peri- and post-menopausal women (22, 23). The original questionnaire includes 31 items, but it was reduced to 16 items (Cervantes short form ;C-SF) preserving the original structure and maintaining the original properties of the extended version (24, 25). This questionnaire maintaining the original four main dimensions: Menopause and health, psychic health, Sexuality, and Couple Relationship, being the first dimension composed by 3 sub-dimensions: Vasomotor Symptoms, Health, and Aging. The C-SF scale include sexual domain and couple domain in postmenopausal period based on findings derived from the development of the MENCAV scale (21) that identified these domains as relevant for the Spanish society. Other Spanish short questionnaire assessing the QoL in postmenopausal women exclude its domains and do not preserve the psychometric characteristics of original Cervantes scale (26).

BMI: Body Mass Index, C-SF: Cervantes short-form, MHT: menopause hormone therapy, QoL: Quality of life, SD: standard deviation.

The aim of the study is to assess whether women who choose to star MHT have lower QoL than those who do not initiate it using C-SF and analyze the sociodemographic factors associated with lower QoL.

2. Methods

2.1 *Patients*

A total of 480 women with climacteric symptoms were consecutively and prospectively analyzed at Zarzuela hospital in Madrid (Menopausal Unit) between March 2018 and June 2019. We included women between 45 and 65 years old and women with early menopause (menopause < 45 years old) with climacteric symptoms. Women reported these symptoms before filling the questionnaire. Participants were asked about MHT or natural therapies to avoid hot flashes and if they took it in the last six months they were excluded. All women with hysterectomy were included in study if they had a previous blood sample to confirm changes in reproductive axis in estradiol and follicle-stimulating hormones following the statement of Spanish menopause society (27). Early menopause was considered in those women under 45 without a menstrual period for more than year, and in women without uterus who started with climacteric symptoms before the age of 45 and a blood sample to confirm changes in reproductive axis in estradiol and follicle-stimulating hormones (27). Women with previous malignant conditions were also included if they had finished their oncological treatments. We excluded women without climacteric symptoms, without uterus and no climacteric symptoms, without blood sample in selected cases, women who did not want to participate, women who were not willing or able to give their consent, woman who did not understand the Spanish language, woman who had severe psychological disorders, and those with recent malignant diseases. Protocol of study was approved by Puerta de Hierro Hospital Ethics Committee in Madrid, Spain, and complied with the Declaration of Helsinki for Human Research of 1974 (last modified in 2000). All patients signed an informed consent to participate.

2.2 *Cervantes short-form scale administration*

C-SF scale was administered and filled out by all women during the consultation. C-SF has been validated to assess the impact of climacteric symptoms on health related QoL in peri and postmenopausal Spanish women (25). This scale is an easy and fast-to-

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handle (can be filled it in less than 2 min) way to evaluate the QoL in climacteric women in absolute numbers. This self-administered questionnaire has 16 items in four domains (menopause, psychic, sexual and couple) scored on a Likert-type scale ranging from 0 to 5. For menopause and psychic domains (negative domains), 0 means the best state and 5 the worst. For sexual and couple domains (positive domains), 0 means the worst state and 5 the best. For the sake of better management, we divided each C-SF item (menopause and psychic domain) in three grades (low affectation=0-1; moderate affectation=2-3 and high affectation=4-5) and for sexual and couple domains (low affectation=4-5; moderate affectation=2-3 and high affectation=0-1). The total score range in C-SF is 20 to 100, where 20 is the best QoL and 100 the worst QoL menopause-related. So, the C-SF scale is a scale of bad QoL, being the higher score the worse QoL. The questionnaire is considered invalid if 3 or more items are left without answer (25). Women without couple or sex intercourse could fill out all items except the 2 items of couple domain and the 1 item of sexual domain. Sexual activity was considered at least one sex relation or one masturbation in the last month. Metrics of C-SF sale are shown in table 1.

All women received advice about climacteric symptoms and lifestyle from a team composed by gynecologist, physiotherapist, nutritionist and psychologist; all of them are integrated into Menopause Unit in Zarzuela Hospital. After the advice about MHT and other modalities of treatment, the final treatment prescribed to women with climacteric symptoms was based on the desire of the women and the medical criteria. Always, guidelines of Menopausal Societies were followed (28-30).

2.3 *Statistical analysis*

The statistical analysis was performed using IBM SPSS Statistic 21.0 for Windows (*IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp*). Sample size was set to achieve 80% power and a 5% alpha error determined by the Epidat 4.2 software. Qualitative variables were summarized by their frequency distribution and quantitative variables by their mean and standard deviation (SD). Categorical variables were compared using the chi-squared or Fisher's test. The Student´s t-test or ANOVA was used to compare continuous variables. Non-parametric continuous variables were compared using Mann-Whitney test or Kruskal-Wallis test.

Bonferroni's test was used to analyze the association among continues variables with 3 or more categories. For all test, a significance value of 5% was used.

3. Results

The mean age of all women was 51.1±3.5 years. Mean of years from menopause was 3.0±1.4 years. The types of treatments prescribed were: MHT (oral and transdermal) in 261 (54.3%) and No MHT (vaginal hormonal treatment for genitourinary syndrome in 55 (11.5%), natural therapies in 81 (16.9%) and nonpharmacological treatment in 83 (17.3%)). Demographical features and types of treatment are shown in table 2.

The sample´s global mean in C-SF score was 51.3±13.9. Women who choose to star MHT have higher impairment in C-SF (lower QoL) than women who reject it (58.7 ±15.9 vs 46.7 ±12.8; p<0.0001). We found higher impairment in women with early menopause than natural menopause (53.7 ±15.9 vs 49.7±13.1; p=0.037); with no obesity (<30 vs >30 BMI) (52.8 ±13.5 vs 41.0±8.2; p=0.002); with previous malignancies (56.2±18.2 vs 50.2±13.5; p=0.020) and without sexual activity (58.0 ±25.4 vs 50.4±13.1; p=0.009. No differences were found in C-SF score with respect to tobacco habits or physical activity. Data are show in table 3

Women with early menopause had more psychic symptoms before starting THM than natural menopause; nervousness (38,3% vs 22,8%; p=0.005); fatigue (39.5% vs 25.5%; p=0.003) and sleep complaints (45.3% vs 33.5%; p=0.004). Data are show in figure 1.

The climacteric symptoms most common in sample which had high impairment in the QoL by C-SF in menopausal domain (scores related to high impairment are 4-5) were dry skin (41.6%), sleep complaints (36.8%), hot flashes (34.8%) and night sweats (30.8%). In psychic domain the symptoms most common which had high impairment were fatigue (28.1%) and nervousness (25.6%).

In sexual domain and couple domain (scores related to high impairment are 0-1) 31,4% of women were unsatisfied with their sexual live and only 10.6% were unhappy in their couple relationship. Climacteric symptoms in relation with the different C-SF scale domains are shown in table 4.

4. Discussion

We present this paper to assess whether women who choose to star THM have lower quality of life than those who do not accept it, as measured by C-SF. We present a sample which mean age of onset of menopause agrees with the European mean as noted by Palacios et al. in their study (31) and with Sanchez Borrego et al. (32). This may allow us to extrapolate our results to the European population.

With respect to the mean of years from menopause until treatment was demanded in the menopausal unit, our study shows shorter time than Sanchez Borrego et al (32) (3.0 ±1.4 years vs 5.3 ±4.9) probably because nowadays women have more information about treatments for their menopausal symptoms and demand earliest some type of treatment..

MHT was initiated in 54.3% [of women] in our study. Other Spanish studies reported that 9.8% of postmenopausal women used MHT. The percentage of treatment prescribed in our menopause unit is higher than usual in Spain (33). Reasons for this have been described previously by other authors like Mendoza et al. (34); these authors found in their study that women with menopausal symptoms and high levels of education and who visit private clinics were more likely to use of MHT, these characteristics being present in our unit .

The global score in C-SF in the study was 51.3±13.9 and there is no general population-based study that allow us to know the meaning of this score in relation to the menopausal symptoms. With our study we can establish differences on C-SF for sociodemographic factors and for woman who demand menopausal treatment.

We found higher impairment in C-SF in women with early menopause than in natural menopause, and in women who initiated menopausal hormonal treatment, and we cannot find other studies to compare our results with.

We found more impairment in C-SF among women without sexual activity, but this might be due to misleading factors like sleep disturbances or other menopausal symptoms that affect the QoL.

With respect to adiposity we found that greater adiposity was associated with a lower impairment by C-SF, this is in agreement with SWAN study that found higher adiposity

as a risk factor for menopausal symptoms in the menopausal transition, but this relation is reversed once women became postmenopausal (35).

We also found higher impairment in C-SF in woman with previous malignancies and this is in agreement with Oliva et al. (36), but we found higher values (lower QoL) in global C-SF score in these women than Oliva et al. (56.2 vs 45 respectively) (36), probably because the mean age of our sample was lower than their sample (51.3 vs 58, respectively) and climacteric symptoms that affect the QoL, as hot flashes, mood disorders, etc., decrease in the later menopause.

No differences were found in C-SF score with respect to smoking habits and in this item we are probably in disagreement with other authors (26, 37) due to our small sample of smokers that could affect the results; because it is known that there is a negative relationship between smoking and QoL and the magnitude is proportional to the number of cigarettes smoked (37).

With respect to menopausal symptoms, we found in our study that the vasomotor symptoms like hot flashes (30.4%) or night sweats (29.6%) had impairment in the QoL (scores related to high grade) in natural menopause but the most frequent symptoms among these women are dry skin (40.3%) and sleep compliances (33.5%). This is in disagreement with the prevalence of menopausal symptoms in other series (31, 38), where the most frequent symptoms are hot flashes and night sweats. The reason why our study shows different percentages than to those in others countries could be that there are wide geographical differences in the prevalence of vasomotor symptoms (31). Regarding menopausal symptoms in women with early menopause, these women had significative more psychic symptoms by C-SF than natural menopause (feel nervous (38,3% vs 22,8%; p=0.005); feel tired (39.5% vs 25.5%; p=0.003) and sleep complains (45.3% vs 33.5%; p=0.04) which allows us to conclude that natural menopause have more classic menopausal symptoms by C-SF than early menopause. In this respect, we don't have any studies to compare with.

A drawback of both C-SF and Cervantes scales with regards to the sexual domain comes from the fact of their limited reach in women without sexual activity. However, the woman can comment on her own sexuality and fill out sexuality domain. We found in this sexual domain a higher impairment (low QoL) among women with previous

malignances, in this domain we agree with Oliva et al. (36). This finding may be explained by the fact that sexuality perception may be affected by the general health and the psychological drive, both of which would have been involved in these women. Nevertheless, the sample of women with previous malignances is low hence these results have limited foundation.

In these domains (sexual domain and couple domain) of C-SF we agree with Palacios et al (31) that the Cervantes Scale assesses the impact of menopause on couple relationships and, in this sense, differs from most of the instruments (39-41) which do not contemplate this domain as independent domain. The identification of a couple as an independent domain is coincidental with the experience of the questionnaire in Spanish MENCAV (21), that argue the importance of the couple in our country´s Sociocultural structure.

With respect to this domains we found a high grade of satisfaction among participant in sexual domains as well as their couple relationship, and this is an important factor to elevate their QoL, and we are in agreement with the SWAN study that found 75% of SWAN women at baseline reporting sex as moderately to extremely important (41). No other short scales about QoL in peri and menopause have analyzed these items to be compared. Authors that do not include these domains argue that the female sexuality requires a more sophisticated and specific approach than just assessing the items contained in the Cervantes scale (26).

As far as we know, this is the first study that use C-SF in clinical practice to measure the QoL in women who choose menopausal hormone therapy. In this sense, C-SF scale successive could help doctor to decide whether treatment is right for women. Our team is working on successive scales in the same woman to guide menopausal treatment.

The study has been carried out in a specialized menopause unit where women are referred from other centers. That have allowed us to prescribe more MHT than usual in Spain and have allowed us to establish differences between women who demand treatment and those who do not demand it.

Our team are working in future research about use C-SF to assess whether women who started treatment improved their quality of life scores by successive scales.

This study could open the door for a new type of prescriptions and management of MHT. Further studies analyzing the role of C-SF scale and its domains are necessary to better understand options of treatment to relieve menopausal symptoms

At the present time there is no general population score in Spain that allows us to establish a cut-off point impact on the quality of life by C-SF or a cut-off to star MHT.

On the other hand, this sample contains many patients with medium-high socioeconomic level, and scores may be reflecting how menopausal symptoms impact on that social strata, which may be different from the lower middle strata. we mean, a high socioeconomic level may be more demanding for their quality of life.

Conclusions: Women who choose to start MHT due to menopausal symptoms have low quality of life measured by C-SF scale. Women with early menopause, with no obesity (<30 BMI), without sexual activity and with previous malignances have low quality of life measured by C-SF scale. Women with early menopause had significative more psychic symptoms like nervousness, fatigue and sleep complaints by C-SF than natural menopause.

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TABLES

Table 1: Metrics of Cervantes short form scale.

	Metrics	Maximum score
Global score	40 + (items 1-12) - (items 13-16)	100
Menopause and health domain	Addition of item 1-9	45
• **Vasomotor subdomain**	Addition of item 1 and 2	10
• **Health subdomain**	Addition of item 3-5	15
• **Aging subdomain**	Addition of item 6-9	20
Psychic domain	Addition of item 10-12	15
Sexual domain	Addition of item 10 – (13 + 14)	0
Couple domain	Addition of item 10 – (15 + 16)	0

This self-administered questionnaire has 16 items in four domains (menopause, psychic, sexual and couple) scored on a Likert-type scale ranging from 0 to 5. For menopause and psychic domains (negative domains), 0 indicates de best state and 5 the worst. For sexual and couple domains (positive domains), 0 means the worst state and 5 the best. The total score range in C-SF is 20 to 100, where 0 is the best QoL and 100 the worst. The C-SF needs a rescaling factor to match the results to 31 Cervantes scale items. With this rescaling factor the sexual and couple domains results 0 for the lowest QoL. The correction factor is shown in table 1 and is as follows (40 + (items 1-12) - (items 13-16) (24).

Table 2. Demographic descriptors of sample in 480 climacteric women. Data are present as mean and SD or frequencies (%).

Age years, mean (SD)	51.1(4.9)
Age of menopause	
Early menopause (< 45 years) n: 86, mean (SD)	40.2 (3.9)
Menopause (45 or more years) n: 394, mean (SD)	49.9 (2.7)
Body Mass Index (kg/m^2), mean (SD)	23 (2.9)
Sexual activity (yes)* n (%)	445 (92.7)
Smoker, n (%)	34 (7.1)
Physical activity **, n (%)	264 (55.0)
Previous malignance, n (%)	17 (3.5)
• **Breast**	11
• **Others*** **	6
Types of treatment, n (%)	
• Menopause hormone therapy (MHT)	261 (54.3)
• NO menopause hormone therapy (no MHT)	219 (45.7)
• No therapy	83 (17.3)
• Vaginal therapy	55 (11.5)
• Natural therapy (based in plants)	81 (16.9)

* In sexual activity, was considered at least one sex relation or one masturbation in the last four weeks.

** Practice any type of physical activity or sport at least twice a week.

*** Include gynecological cancer and other tumors.

Table 3. Global C-SF scale and domains at the beginning of study. Data are present as median and SD

	C-SF global, mean (SD)	Menopause domain, mean (SD)	Psychic domain, mean (SD)	Sexual domain, mean (SD)	Couple Domain, mean (SD)
Early menopause (Age<45)					
- Yes	53.72 (15.9) [a]	18.86 (9.9)	7.48 (4.1)	4.71 (2.8)	2.53 (2.8)
- No	49.75 (13.1)	16.91 (8.8)	5.96 (4.1)	4.65 (2.7)	2.23 (2.5)
Smoker					
- Yes	53.25 (14.5)	18.91 (8.4)	5.94 (4.0)	4.56 (2.6)	3.31 (3.3)
- No	50.28 (13.6)	17.13 (9.1)	6.26 (4.2)	4.67 (2.7)	2.20 (2.5)
BMI					
- <30	52.8 (13.5) [b]	18.04 (9.2)	6.90 (4.4)	5,10 (2.5)	3.01 (2.8)
- >30	41.00 (8.2)	10.25 (8.4)	3.50 (2.0)	4.50 (2.3)	2.75 (0.9)
Previous malignancies					
- Yes	56.20 (18.2) [c]	20.18 (10.1)	6.82 (4.9)	6.44 (3.5)	2.73 (3.0)
- No	50.29 (13.5)	17.15 (9.0)	6.21 (4.1)	4.60 (2.7)	2.27 (2.5)
Sexual activity					
- Yes	50.42 (13.6) [d]	17.26 (8.9)	6.26 (4.2)	4.63 (2.7)	2.27 (2.5)
- No	58.00 (25.4)	17.31 (11.0)	5.94 (4.1)	5.40 (2.9)	3.80 (4.8)
Physical activity					
- Yes	50.27 (13.7)	16.89 (8.9)	6.28 (4.1)	4.84 (2.7)	2.28 (2.6)
- No	50.77 (13.8)	17.72 (9.2)	6.18 (4.2)	4.45 (2.7)	2.28 (2.6)
Treatment					
- No MHT	46.75 (12.7) [e]	13.54 (8.1)	5.19 (3.9)	4.78 (2.6)	2.64 (2.7)
- MHT	58.71 (15.9)	23.54 (10.4)	7.69 (4.7)	4.44 (3.2)	2.57 (3.4)

C-SF. Cervantes sort form scale. MHT: menopausal hormonal therapy.

[a] p=0.037; [b] p=0.002; [c] p=0.020; [d] p=0.009; [e] p<0.001

T-Student test and ANOVA test were carried out.

Scores in different subdomains separately do not add up to the C-SF global one because a rescaling factor is needed in C-SF scale to match it to the original Cervantes scale

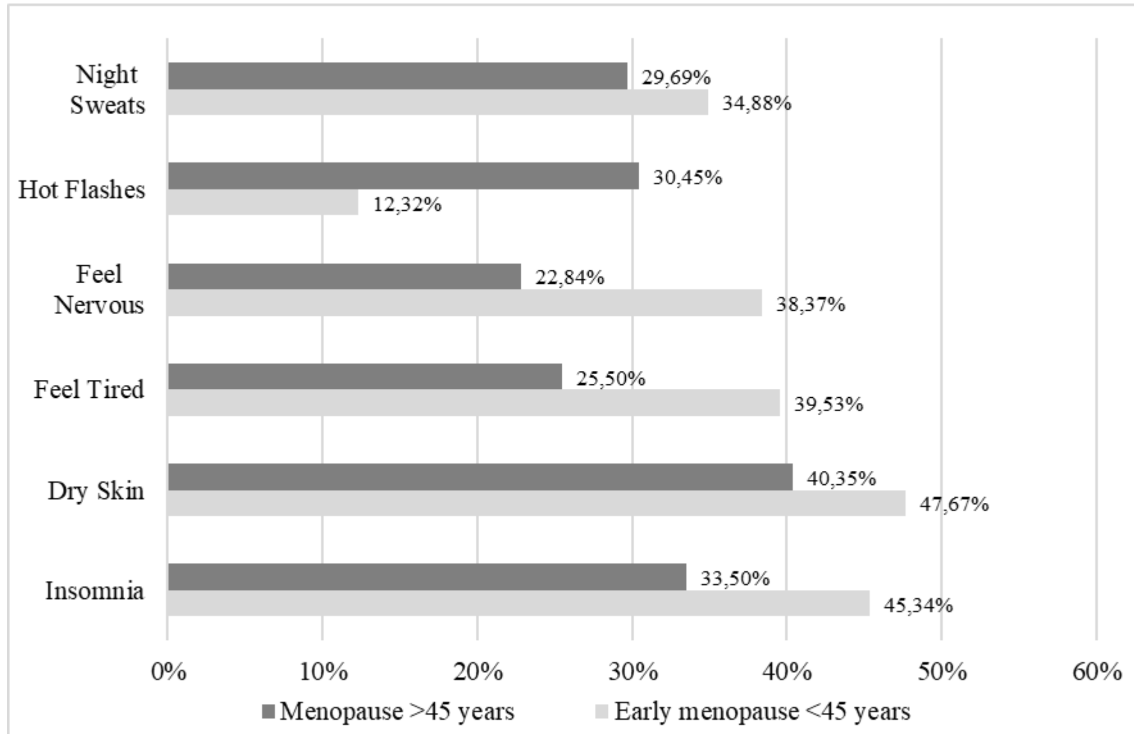
Table 4: C-SF domains. Data show in frequencies (%) or mean and SD.

Item		Low n, (%)	Moderate, n (%)	High, n (%)	Mean (SD)
	Menopause domain				
1	Night sweats	141 (29.3)	191 (39.7)	148 (30.8)	2.53 (1.6)
2	Hot flashes	146 (30.1)	187 (39.0)	167 (34.8)	2.48 (1.6)
3	Headache	280 (58.3)	125 (26.0)	75 (15.6)	1.51 (1.6)
4	Sleep disturbances/insomnia	124 (25.8)	184 (38.4)	171 (36.8)	2.76 (2.1)
5	Hearts beats	277 (57.7)	126 (22.3)	77 (20.0)	1.51 (1.6)
6	Tingling in hands or feet	295 (61.5)	125 (25.2)	64 (13.3)	1.35 (1.5)
7	Urinary incontinence	314 (65.4)	104 (22.7)	52 (13.8)	1.28 (1.5)
8	Difficulties doing the housework	354 (73.8)	67 (14.9)	59 (12.3)	1.01 (1.5)
9	Dry skin	120 (25.0)	160 (38.3)	200 (41.6)	2.83 (1.7)
	Psychic domain				
10	Nervous	182 (37.9)	175 (37.5)	123 (25.6)	2.21 (1.6)
11	Lost interest	241 (50.2)	151 (31.4)	91 (18.9)	1.75 (1.7)
12	Fatigue/feel tired	187 (38.9)	158 (32.9)	135 (28.1)	2.27 (1.7)
		High n, (%)	**Moderate n, (%)**	**Low n, (%)**	**Mean**
	Sexual domain				
13	Satisfied with my sex life	151 (31.4)	170 (35.4)	143 (29.7)	2.45 (1.7)
14	Sex is an important part	73 (20.5)	195 (41.2)	181 (38.2)	2.89 (1.5)
	Couple domain				
15	Happy in my relationship	48 (10.6)	111 (24.6)	291 (64.6)	3.68 (1.4)
16	My role as a wife is important	31 (6.6)	74 (16.4)	345 (76.6)	4.04 (1.3)

C-SF scale range in Menopause Domain and Psychic Domain from 0 to 5: Low impact on QoL=0-1; Moderate impact on QoL=2-3 and High impact on QoL=4-5 and for Sexual Domain and Couple Domain from 0 to 5: High impact on QoL=0-1; Moderate impact in QoL=2-3 and Low impact in QoL=4-5.

FIGURES

Figure 1. Comparison in symptoms between women with early menopause and women with natural menopause by C-SF. Data show in %.



Night sweats; p=0.382; Hot flashes; p<0.001; Feel nervous; p=0.005; Feel Tired; p=0.032; Dry skin; p=0.626 and Insomnia; p=0.041.

Conflict of interest

The authors report no conflict of interest.