THE FREQUENCY AND SEVERITY OF MENOPAUSAL SYMPTOMS AMONG IRANIAN MENOPAUSAL WOMEN

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A R T I C L E  I N F O

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A B S T R A C T

Introduction: It is estimated that about 75% of women experience acute symptoms after menopause. Some women have severe symptoms that profoundly affect their personal and social functioning, and quality of life (QOL). In this study the objective was determining the frequency and severity of menopausal symptoms in women resident of Borujerd city.

Materials & Methods: This cross-sectional study was conducted through cluster sampling among 200 menopausal women who referred to different outpatient clinics. The menopausal symptoms was assessed by using the modified menopause specific quality of life questionnaire (MENQOL). Data was collected by face to face interview with subjects.

Results: Most of the complaints were concerned with the hot flushing (95.5%) and leg pain or cramps (95.5%). Vasomotor symptoms and psychosocial domains were the highest (4.65 ± 1.79) and the lowest (2.65 ± 1.07) complaints respectively.

Conclusion: Most of the complaints were concerned with the vasomotor symptoms in subjects.

INTRODUCTION

Menopause is a biological event rising from ovary failure, for which a diagnosis is retrospectively made after 12 consecutive months of amenorrhea that is not explainable through pathological causes.\(^1,2\)

Postmenopausal women are at risk of symptoms and complications due to the reduction of sex steroids especially estrogen. It is estimated that about 75% of women experience acute symptoms after menopause.\(^3,4\)

The most common symptom of menopause is hot flashes, which have been very uncomfortable and is predicted to continue for years.\(^5\) Atrophy of urogenital system, heart and cerebrovascular diseases, osteoporosis, cancer and endometrial hyperplasia, mood reactions, behavior and sleep disorders are the major complications of menopause, which constitute an important cause of morbidity and mortality in this age group of women in any society.\(^6,7,8,9,10\)

The duration, severity, and impact of these symptoms vary from person to person, and population to population. Some women have severe symptoms that profoundly affect their personal and social functioning, and quality of life (QOL).\(^11\) It is estimated that in 2030 1.2 billion women will be peri or postmenopausal and this will increase by 4.7 millions a year.\(^12\)

While the proportion of people with 60 years old age and above in Iran was 5.4% in 1975, it will increase to 10.5% in 2025 and 21.7% in 2050. Because the world population is aging, social scientists consider the 21st century as the century of aging of the world’s population.\(^9\) Due to the increased longevity and life expectancy, the quality of life (QoL) has been considered as an important tissue.\(^13\)

Quality of life (QOL) has been defined by the World Health Organization as the “individual’s perceptions of their position in life in the context of the cultural and value systems in which they live and in relation to their goals, expectations, standards and concerns”. Various validated tools have been used to determine the frequency and severity of menopausal symptoms, one of these tools is the menopause-specific quality of life questionnaire (MENQOL) proposed by Hilditch et al.\(^11\)

Unfortunately, there has been no research on this relationship in our city. So we conducted a study to determine the common symptoms of menopause in women resident of Borujerd city in Lorestan province in the west of Iran.

MATERIAL AND METHOD

Purposes

In this study the objectives was as follows: 1) The frequency and severity of women’s menopausal symptoms in following four domains: vasomotor, psychosocial, physical and sexual aspects. The study was approved by Islamic Azad University of Iran, Borujerd branch.
Research Design and Study Subjects

In this cross-sectional study 200 peri and postmenopausal women referred to various outpatient clinics in Borujerd city from May to August 2014 were randomly selected. Natural menopausal women aged 40 to 70 who were eligible and agreed to participate in study were recruited by cluster sampling method. Women who had changes during the menstrual cycle for at least 7 days of baseline or changes in menstrual flow (less or more than the base rate) for the last three months ago were categorized as premenopausal women. Women who their last menstrual period had happened at least 12 months before participating in our research were classified in post menopausal group. Also postmenopausal women were divided into two groups: 1) early post menopause: women who have experienced menopause for < 5 years. 2) late post menopause: women who have experienced menopause for ≥ 5 years. Women with mental illness and with a history of cardiovascular disease, musculoskeletal disease, cerebrovascular accidents, and spinal cord injuries and also with a history of hormone therapy after menopause were excluded from the study.

Instruments

The data collection instrument was a questionnaire consisting two parts: 1 - questions related to demographic characteristics including menopause age, education level, occupation, marital status, and economic status satisfaction. 2 - Questions related to investigation the menopausal symptoms.

In order to assess the menopausal symptoms, we used the standard and modified the menopause specific quality of life questionnaire (MENQOL) proposed by Hilditch et al. Subjects’ data was collected by oral interview. This questionnaire contained following four domains: vasomotor (3 items), psychosocial (7 items), physical (19 items), and sexual (3 items). The systematic scoring for each of the four MENQOL domains was identical. The seven-point Likert scale used during the administration of the MENQOL was transformed for scoring and data analysis. For each of the 32 items, this seven-point Likert scale ranged from 0 to 6. A “zero” was equivalent to a woman responding “no”, indicating that she had not experienced this symptom in the past month. Scores “one” through “six” indicated symptoms that the women experienced and increasing levels of bother experienced that corresponded to “1” through “6” check boxes on the MENQOL. Once each item has been manipulated into a 0–6 score, each domain was scored by averaging the manipulated values. Hence, the average for each domain was constrained between 0 (not at all a problem; respondent selected “no” for each item in the domain) and 6 (respondent reported experiencing each symptom in the domain at the highest degree of bother). Content validity was used to assess the validity of questionnaire, and Cronbach's alpha was used to assess the reliability. By using modified questionnaire, we did a pilot study on 20 menopausal women referring to an outpatient clinic and Cronbach α approved the reliability of questionnaire (0.85).

Study Analyses

Data analysis was performed using descriptive and Inferential statistics. The descriptive statistics were used to calculate the mean, percentage, standard deviation, the inferential statistics T - student test was used determine the severity of menopausal symptoms. Data were analyzed using SPSS software Version 16. A p-value less than 0.05 were considered as statistical significant for this study.

Ethical Issues

The study subjects provided a verbal consent. 2) The right was kept for respondents to refuse study participation in all of the research time, 3) Subject’s identification was not revealed, 4) The data were kept strictly confidential, 5) Acknowledgment of each participants and all of dears who helped us in this study.

RESULTS & DISCUSSION

According to Table (1) Results indicate that the mean age and the mean menopausal age of subjects were 47± 3.75, and 56.61± 7.85 years respectively. Most people were married (75.5%) and the majority of women were housewives (86%) and illiterate (49.5%).

Table (2) suggests common symptoms of menopause. The most severe symptoms of vasomotor, gastrointestinal, musculoskeletal, skin, and genitourinary and sleep were respectively: hot flashes (95.5), flatulence (47.5%), pain or leg cramps (95.5%), decreased skin tone (86.5%), urinary frequency (77%) and lack of energy (95%).

In relation to psychosocial and sexual symptoms, the most common symptoms were associated with reduced ability to perform tasks (93%) and changes in sexual desire (75%).

The findings indicate that the most common symptoms of menopause were vasomotor symptoms with the highest severity (4.65± 1.79) and psychosocial symptoms had the lowest severity (2.65± 1.07) (Table 3).

Menopause is a physiological event that occurs in 95% of women between 39 to 51 years. The average age of menopause (47± 3.75) in our study was similar to other studies in Iran and Asia. In our research, flushing symptom has been reported in a high number (95.5 %) that is higher than numbers reported in other investigations. Higher rates of vasomotor symptoms reported in our study can be associated with factors such as ethnic differences, dietary changes like reducing intake of foods rich in Phytoestrogens, women’s lack of knowledge about the food, notable number of illiterate women in the study, increased consumption of western diet among Iranian families like fast food, increasing social deprivation due to inflation and decreasing financial power of families and living on the psychologically stressful environment. It seems that this issue requires further investigation. It is Results are expressed as number and percentage; SD: standard deviation

Necessary to recall that interaction among genetic, social and environmental factors are determinant factors of women’s experience of menopause. Musculoskeletal, skin, sexual, and psychosocial MENQOL, menopause-specific quality of life questionnaire; SD, standard deviation; score ranges from 2 to 8.
Table 1 Sociodemographic characteristics of study participants.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N (200)</th>
<th>%</th>
<th>Mean ± SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>28</td>
<td>14</td>
<td>56.61 ± 7.83</td>
</tr>
<tr>
<td>50-59</td>
<td>97</td>
<td>48.5</td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>75</td>
<td>37.5</td>
<td></td>
</tr>
<tr>
<td>Menopause age</td>
<td></td>
<td></td>
<td>47 ± 3.75</td>
</tr>
<tr>
<td>Menopausal status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perimenopause</td>
<td>40</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Postmenopause</td>
<td>160</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Postmenopause (&lt; 5 year)</td>
<td>61</td>
<td>30.5</td>
<td>44.3 ± 4.43</td>
</tr>
<tr>
<td>Postmenopause (≥ 5 year)</td>
<td>99</td>
<td>49.5</td>
<td>50.48 ± 3.22</td>
</tr>
<tr>
<td>Literacy level</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>99</td>
<td>49.5</td>
<td></td>
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<tr>
<td>Under diploma</td>
<td>65</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>30</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>151</td>
<td>75.5</td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Widow</td>
<td>48</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>1</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>172</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Retired</td>
<td>16</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>12</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Economic status satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete dissatisfied</td>
<td>5</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>45</td>
<td>22.5</td>
<td>4.16 ± 2.89</td>
</tr>
<tr>
<td>Satisfied</td>
<td>146</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Complete satisfied</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

SD: standard deviation

That 40% to 48% of all of premenopausal and postmenopausal women have sleep disorders reports. 16, 18

The research findings revealed that vasomotor symptoms were the most common menopausal symptoms. Also vasomotor and psychosocial symptoms had the highest and the lowest severity respectively. In Abedzadeh et al study (2011) in Tehran, obtained scores of vasomotor (2.82±1.64), psychosocial (2.71±1.2), physical (2.46±0.99) and sexual domains (2.89±1.73) were lower than our results. Also research findings of Chedraui and Colleagues (2010) showed that in the scale MRS, scores range of somatic, psychological and urogenital symptoms were respectively (7.2±4.5), (6.9±4.8) and (5.9±3.4). Symptoms of menopause among perimenopausal women were more severe in terms of

Table 3 Score for each MENQOL domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Vaso</th>
<th>Psychos</th>
<th>Physical</th>
<th>Sexual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean ± SD</td>
<td>4.65 ± 1.79</td>
<td>2.65 ± 1.07</td>
<td>2.97 ± 0.89</td>
<td>2.94 ± 1.82</td>
</tr>
</tbody>
</table>

(n = 200)

Symptoms among women in this study have been reported with high frequency and moderate or severe degree. These symptoms in several researches in Iran and other world areas had been reported lower than our findings. 5, 6, 12, 13, 14, 15, 16, 17

Several studies that indicate having more severe symptoms of menopause in premenopausal women. 6, 19, 15

Several methodological limitations should be considered when interpreting the findings of this study. First, errors
associated with any self-report of participants may have attenuated the findings, so future prospective studies are needed to verify our finding. Second, the low number of perimenopausal women in study could affect on study results and it requires further research. Third, the sample size was relatively small due to the nature of used study design (cross-sectional study based on a convenience sample).

CONCLUSIONS

The results of our study showed that the frequency and severity of vasomotor symptoms were high in subjects. Also the cultivars mentioned in relation to symptoms of pain and leg cramps, sleep disturbances, reduced ability to perform tasks, decrease of skin turgor and sexual disorders were notable that further study about causes of frequency and severity of symptoms is required.

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References


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