Prevalence of Menopause Symptoms among Iranian Women

Mojgan Asadi; M.D.¹, Zahra Jouyandeh; M.D.¹, Farnaz Nayebzadeh; M.D.²

¹ Endocrine & Metabolism Research Center, Tehran University of Medical Science, Tehran, Iran.
² Mirzakochak Khan Hospital, Tehran University of Medical Science, Tehran, Iran

Received December 2011; Revised and accepted January 2012

Abstract
Objective: The aim of this study was to determine the symptoms associated with menopause among women referred to menopause clinic of Tehran Women General Hospital.

Materials and methods: In this cross sectional study which has been done between January 2011 and January 2012, in menopause clinic of Tehran Women's General Hospital 134 women were studied. For each woman a questionnaire was completed. The data gained from each questionnaire were analyzed using SPSS version 13.

Results: The mean age of natural menopause onset was 47.35 (SE=0.11) year. The symptoms associated with menopause were hot flushes (59.5%), mood swing (42.6%), vaginal dryness (41.1%), sleep problems (40.4%), night sweats (38.2%), memory loss (32.3%), urinary symptoms (18.3%), palpitation (6.6%), anxiety (5.8%), Joint and muscle pain (59.9%), depression (4.4%), Irritability (3.6%).

Conclusion: This study showed that hot flushes, mood swing and vaginal dryness were the most common symptoms associated with menopause.

Keywords: Iranian, menopause, symptoms, hot flashes, mood swing, vaginal dryness

Introduction
Menopause is defined as the permanent cessation of menstruation as a result of the loss of ovarian activity and is diagnosed after 12 months of amenorrhea (1). With increasing life expectancy women are spending one-third of lives in menopause (2). Menopausal symptoms are associated with reduced functioning of the ovaries due to aging, resulting in lower levels of estrogen and other hormones.

Menopause may be associated with vasomotor symptoms, somatic symptoms, sexual dysfunction, psychological symptoms which may have a significant impact on quality of life (3). Among menopausal symptoms, vasomotor symptoms include hot flashes and night sweats are of great clinical importance and can affect women's quality of life (4). Psychological symptoms include feeling tense or nervous, sleeping difficulty, difficulty in concentrating, depression, irritability, anxiety, memory loss and mood swing may considerably impact quality of life of women and wellbeing (5). Somatic symptoms include joint and muscle pain, palpitation, dizziness, fatigue have significant difference prevalence across cultures (6). Sexual dysfunction include loss of interest in sex, vaginal dryness, pain with intercourse, urological symptoms, and reduced sexual activity may impact the quality of life of midlife and older women considerably, and are likely multifactorial, resulting from physiological changes at menopause as well as cultural expectations and relationship status (7).

Although these symptoms have been attributed to the hormonal changes of menopause, however the
frequency and severity of complaints appear to differ within and across cultures (8).

Materials and methods
The present study is a cross-sectional study of 134 women attending menopause clinic of Tehran Women's General Hospital in Tehran- Iran between January 2011 and January 2012. The women attended the clinic for routine care, which included history taking, physical and pelvic examination, laboratory study, mammography, Pap smear and bone mineral densitometry by indication.

For each woman a questionnaire was completed by general physician. The questionnaire consists of a series of questions concerning women's age, age at menopause and signs and symptoms related to menopause. Inclusion criteria for statistical analysis consist of women who had natural amenorrhea for at least 12 months at time of study. Exclusion criteria included amenorrhea secondary to ovarian surgery, hysterectomy and chemoradiotherapy. Content validity of the questionnaire was approved by specialists in obstetrics and gynecology and epidemiologist involved in the study. The data gained from each questionnaire were analyzed by SPSS version 13.

Results
In this study, 134 questionnaires were completed. The mean age of referred women was 54.86 years. Seven of 134 interviewed women didn’t know her menopausal age. The mean age at natural menopause onset was 47.35(SE=0.11) years in others. The most common symptoms experienced by menopausal women were hot flushes (59.5%), mood swing (42.6%) and vaginal dryness (41.1%). Other symptoms associated with menopause were sleep problems (40.4%), night sweats (38.2%), memory loss (32.3%), urinary symptoms (18.3%), palpitation (6.6%), Anxiety (5.8%), Joint and muscle pain (59.9%), depression (4.4%) and Irritability (3.6%) (Table 1).

Discussion
Identifying the symptoms that are most bothersome to women during the menopause is essential for research, clinical care and public health policy. Due to the fact that few studies have been conducted in Iran on menopausal symptoms our data is low. On the other hand there are significant cultural differences in lifestyle and physical factors that could potentially affect differences in symptom reporting. In the study four group symptoms include vasomotor, psychological, somatic and sexual symptoms were considered. The ‘missed symptoms’ of menopause such as mood swing, sexual problems, sleep problems, forgetfulness, urinary symptoms with high prevalence have negative impact on quality of life that receive less attention. The findings of this study confirm findings of others already reported in the medical literature. The results of this study indicated that hot flashes are the most common symptoms associated with menopause in Iranian women. However in another study that was conducted in Iran night sweat(61.2%), joint and muscle pain(59.9%) and hot flashes(53.1%)were the most common symptoms associated with menopause (9). As regards a systematic review of menopausal symptoms estimated that vasomotor symptoms occur in 30–80% after menopause (10), it means that these differences may be due to the age and last menstrual period time. Women experienced lower hot flash in early perimenopausal period and higher hot flash in postmenopausal period that are in accordance to these studies. Also most women attending a menopause clinic complain of psychological symptoms such as mood swings, and sexual problem such as vaginal dryness. Mood swings are defined as extreme or abrupt fluctuations in mood. More than 50% of women experience mood swings as they approach menopause that are similar to present study (11). Estrogen deficiency leads to thinning of the vaginal epithelium, often resulting in vaginal atrophy (atrophic vaginitis), which may cause symptoms of vaginal dryness, itching, and dyspareunia. The

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot flashes</td>
<td>81</td>
<td>59.5</td>
</tr>
<tr>
<td>Mood swing</td>
<td>58</td>
<td>42.6</td>
</tr>
<tr>
<td>Vaginal dryness</td>
<td>56</td>
<td>41.1</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>55</td>
<td>40.4</td>
</tr>
<tr>
<td>Night sweat</td>
<td>52</td>
<td>38.2</td>
</tr>
<tr>
<td>Forgetfulness</td>
<td>44</td>
<td>32.3</td>
</tr>
<tr>
<td>urinary symptoms</td>
<td>25</td>
<td>18.3</td>
</tr>
<tr>
<td>Pain with intercourse</td>
<td>13</td>
<td>9.5</td>
</tr>
<tr>
<td>Palpitations</td>
<td>9</td>
<td>6.6</td>
</tr>
<tr>
<td>Anxiety</td>
<td>8</td>
<td>5.8</td>
</tr>
<tr>
<td>joint and muscle pain</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>depression</td>
<td>6</td>
<td>4.4</td>
</tr>
<tr>
<td>Irritability</td>
<td>5</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Table 1. Frequency of symptoms in women with natural menopause
prevalence of vaginal dryness in one longitudinal study was 3, 4, 21, and 47% of women in the reproductive, early menopausal transition, late menopausal transition, and 3 yr postmenopausal stages, respectively(12) that are approximately similar to present study. In some of study sexual problems are among the most frequently presented health concerns of women attending menopause clinics (13).

Conclusion
Although some women may spend the menopausal phase with few or no symptoms, the majority experience one or more symptoms serious enough to be disruptive to their lives.

The findings of this study do expand understanding of the menopause symptom in Iran.

These findings was in consist of other studies performed in world and showed that hot flashes, mood swing, vaginal dryness are the most common symptoms in menopause women.

Although the most common symptoms in menopause are vasomotor symptoms (hot flashes and night sweats), but they are not the only menopausal symptoms that can negatively affect quality of life. Therefore health programs should pay attention to all including missed symptoms in menopausal women's care.

Acknowledgement
This project was supported by the menopause clinic of Tehran Women's General Hospital.

There is no conflict of interest among the authors.

References