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THE USE OF ALTERNATIVE METHODS IN REDUCING MENOPAUSAL COMPLAINTS IN TURKEY

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Abstract

Background: Millions of women experience menopause every year, therefore the aim of this study is to determine the rates of application of alternative methods applied by women in order to reduce their complaints caused by menopause and alternative application methods.
Materials and Methods: This study was carried out on 246 women in their menopausal period. The data was obtained by the researcher through face to face interviews during the home visits. During the collection of data, a questionnaire form by the researcher that was developed in accordance with the literature information was applied.
Results: 37.4% of women were determined to use alternative methods to reduce their menopausal symptoms. In the consequence of statistical analysis, a significant relation was found between the menopausal complaints such as hot flashes, night sweats and sleeping problem and the use of alternative methods in order to reduce their menopausal complaints ($p<0.05$).
Conclusion: It was determined that the women at their menopausal ages experienced vasomotor complaints and sleeping problems and they used alternative methods to reduce those problems.

Keywords Menopause-hot flashes -Alternative medicine.

Introduction

Millions of women experience menopause every year. World health organization(WHO) estimates that 1.2 billion women will have been in the menopausal period by 2030 (WHO, 1996). It is important to take the menopausal age into consideration to arrange the present and prospective state of health and well being (Macleran &Woods, 2001), as lots of physical and psychological complaints caused by hormonal changes are experienced in that period. While physical complaints such as vasomotor symptoms (hot flushes, night sweats) sleeping problem, genitoürine and sexual problems occur in short term, cardiovascular system complaints and osteoporosis occur in long period (Ertüngealp, 2003; Taşkın, 2005). Among the menopausal symptoms, especially hot flushes and night sweats affect the quality of life of women greatly (Avis et al.,2001; George, 2002) . Psychological and psychosomatic changes are also reported (Bromberger et al., 2003). Two of the most important psychological complaints are depression and sensitivity disorders resulted from anxiety (Devanand, 2002).

Women in menopausal age consult to medical or alternative methods to reduce menopausal complaints (Newton et al., 2002; Gollschewski et al., 2005; Sluijs et al., 2007). It was determined in studies that women in menopausal period used herbal treatments (Newton et al., 2002; Gollschewski et al., 2005; Hill-Sakurai, 2008), paid attention to healthy diet, used nutrient tablets (Newton et al., 2002; Sluijs et al. 2007; Hill-Sakurai, 2008; Seidle & Steward, 1998; Geller & Studee, 2007), vitamin and mineral tablets, especially vitamin E and Calcium(Gollschewski et al., 2005; Kronenberg & Fugh-Berman, 2002), phytoestrogen tablets, consumed the food rich in phyto-oestrogen in their diets (Gollschewski et al., 2005; Sluijs et al. 2007; Geller & Studee, 2007; Kronenberg & Fugh-Berman, 2002), applied stress-reducing exercises (Newton et al., 2002) , meditated (Hill-Sakurai, 2008; Kronenberg & Fugh-Berman, 2002), underwent massage or massaged themselves (Newton et al., 2002; Hill-Sakurai, 2008; Seidle & Steward, 1998), received acupuncture as alternative methods to reduce menopausal complaints (especially vasomotor and psychological symptoms) (Newton et al., 2002; Sluijs et al. 2007; Hill-Sakurai, 2008; Kronenberg & Fugh-Berman, 2002) and used water-soluble oil (Such as coconut oil) to reduce dryness of the vagina (Taşkın, 2005). Herbal treatments (black cohosh, Wild yam root, licorice root, chaste tree berry, dong quai, evening primrose oil, ginkgo biloba, kava kava, ginseng, valerian, motherwort, St. John's wort) are used more commonly to eliminate vasomotor and psychological symptoms (Kronenberg & Fugh-Berman, 2002; Geller & Studee, 2006). It is alleged that black cohosh is so effective in hot flushes and mood changes, St. John's wort is in depression treatment. Evidences showing the effects and credibilty of the herbs are limited except for black cohosh and St. John's wort (Geller & Studee, 2006). While it was stated that Achillea millefolium was used for menopause in herbal books, no scientific data were found about it (Özer, 2001; Şengöz, 2003). It is suggested that phytoestrogens are also effective in reducing menopausal complaints, especially vasomotor symptoms (Kronenberg & Fugh-Berman, 2002; Brewer & Nashelsky, 2003). Phytoestrogens exist in leguminous seeds (such as pea, bean, lentil) especially soybean and its products, grain crops; red clover, flaxseed (Cassidy, Hanley, Raventos, 2000), currant and sultana amply (Liggins et al., 2000). Researchers conducted in western societies showed that 22% and 61% of women used alternative methods to reduce menopausal symptoms (Newton et al., 2002; Anderson & Posner, 2002). According to a research conducted in USA; it was determined that using alternative methods to reduce menopausal complaints was about 22.1% (Newton et al., 2002).

In recent years, it has been established that the demand for using alternative treatment methods has increased (Newton et al., 2002; Sluijs et al. 2007; Seidle & Steward, 1998). In spite of this increase, the literature and scientific data are not efficient enough to prove that whether alternative methods are effective and reliable (Seidle & Steward, 1998; Geller & Studee, 2007). Although researchers conducted do not provide exact evidences that alternative treatment methods reduce menopausal complaints, women in menopausal ages use the alternative methods (Gollschewski et al., 2005). In Turkey, there was no evidence of alternative methods to reduce menopausal complaints in the studies conducted on menopause. At the end of this research, it is expected to achieve significant results to be used in the future researches by determining the rates of

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applying alternative methods in reducing menopausal complaints and alternative treatment methods. This research was conducted to determine the rates of applying alternative methods and alternative methods used to reduce the complaints.

Materials and Methods

Study desing

This is a descriptive study conducted to determine the rates of women applying alternative methods to reduce the complaints and the alternative methods used.

Setting and samples

Konya, among the Provinces of Turkey, consists of three central districts. By negotiating with Provincial Health Department of Konya, we selected one health care center from each three central districts to constitute a heterogeneous socio-demographic group and data to be able to represent Konya. It was determined that the research be conducted at number 10 health care center in Meram district, number 15 in Karatay, and number 17 in Selçuklu district. According to information obtained from Konya local health authority, 2655 women aged 45-59 living in the region of number 10 health center in Meram district, 693 women aged 45-49 living in the region of number 15 health center in Karatay, 1832 women aged 45-59 living in the region of number 17 health center in Selçuklu district of Konya, total 5180 women constituted the scope of the research. While selecting this age group, it was taken into consideration that the average age of women when they experience menopause was 47 years old (Ertüngealp, 2003).

While determining the sample extent of research the proposed chart of 'Estimating a population proportion with specified absolute precision' was used (Lwanga & Lemeshow, 1991). we benefited from the findings of the research conducted on women aged between 45-65 in the USA related with the use of alternative methods(22.1%) to reduce menopausal complaints (Newton et al., 2002).

Accordingly, 5 % relative accuracy at 95% reliability level was taken into consideration and it was found that the extent of the sample stated in table was 246. In addition, the number of women from whom samples would be taken from in health care centers with proportional selection method was determined as 126 at number 10 health center in Meram, 33 at number 15 health care center in Karatay, 87 at number 17 health care center in Selçuklu district (Sümbüloğlu & Sümbüloğlu, 2002).

In selecting samples; benefiting from the records of FIC (Family Index Card) related with the women aged between 45-59, simple and random sampling method was used.

Sample Selection Criteria

Selection of the samples was based on: i. Being in the age group between 45-59 years old, ii. Being at the age of premenopausal, perimenopausal or postmenopausal period, iii. Not receiving hormone replacement therapy, iv. Not being at surgical menopause age were taken into consideration.

Measurements

In collecting data; a questionnaire form which was developed by researchers benefiting from the literature was used (Newton et al., 2002; Gollschewski et al., 2005; Sluijs et al. 2007; Hill-Sakurai, 2008; Suter, et al., 2007). Questionnaire form consists of total fifteen questions, seven related with socio-demographic features, two with obstetrics features, two with menopausal story, one with menopausal complaints, and three of them related with the use of alternative methods to reduce menopausal complaints.

Procedure

Data was obtained by a researcher during home visits with the method of face to face meetings. Filling up the forms of data collection lasted nearly ten minutes. Data were obtained during home visits to women selected by simple random sampling method through face to face meetings. In three regions where research findings were collected, total fifteen women were excluded from the samples as they did not correspond with the research criteria, and the substitutes were selected instead of the excluded ones. The required permission was obtained from the local health authority (education department) of Konya governorship before beginning the research. Before filling up the questionnaire form, the individuals were informed and their verbal consent was obtained.

Data Analysis

Statistical analysis of the data was made with SSPS 11.0 package programmer. Descriptive statistics and Chi-square tests were used to analyze the data.

Results

Considering the distribution of socio-demographic characteristics of women in the scope of the research, it was determined that the mean age of the women was 51.87±3.88. The average Body Mass Index (BMI) was 28.94±3.69. It was determined that 35.4 % of women regarded their monthly income were fairly good. It was determined that 91.9 % of the women were married, 73.6 % graduated from primary school, and 92.7 % did not work. When the distribution of obstetric characteristics of women included in the stud was considered, it was established that the average number of delivery was 3.22±1.46 and the average number of children living was 2.99±1.19. When the distribution of menopausal status of women was analyzed, it was seen that 30.1% of women were in premenopausal, 19.5% in perimenopausal and 50.4 % in postmenopausal period. When the distribution of menopausal complaints was investigated, it was determined that 69.5 % of women experienced hot flushes, and 55.3 % had night sweats. And It was determined that % 53.7 of women experienced insomnia and % 24 had sexual problems.

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Table 1: The distribution of the use alternative methods in reducing menopausal complaints

Characteristics	Yes n (%)	No n (%)
Use of Alternative Method (n=246)	92 (37.4)	154 (62.6)
Alternative Methods (n=92)[a]		
Herbal Teas		
Ginseng	5 (5.4)	87 (94.6)
Licorice Root	5 (5.4)	87 (94.6)
Chaste tree berry	9 (9.8)	83 (90,2)
Valerian	6 (6.5)	86 (93.5)
St. John's wort	15 (16.3)	77 (83.7)
Achillea millefolium	24 (26.1)	68 (73.9)
Sage	22 (23.9)	70 (76.1)
Camomile Tea	11(12.0)	81 (88.0)
Green Tea	8 (8.7)	84 (91.3)
Linden Tree	8 (8.7)	84 (91.3)
Thyme Tea	5 (5.4)	87 (94.6)
Others[b]	16 (17.4)	76 (82.6)
Nutrition		
Attention to Healthy Nutrition	69 (75.0)	23 (25.0)
Use of Nutrient Tablets	5 (5.4)	87 (94.6)
Use of Calcium Tablets	21 (22.8)	71 (77.2)
Use of Vitamin Tablets	7 (7.6)	85 (92.4)
Phyto-Oestrogen		
Consumption of Dietary (Such as Soya beans, lentils, chickpeas)	73 (79.3)	19 (20.7)
Phyto-Oestrogen Tablets	8 (8.7)	84 (91.3)
Other Applications		
Stress-Reducing Executions	83 (90.2)	9 (9.8)
Relaxing Massages	24 (26.1)	68 (73.9)
Acupuncture	4 (4.3)	88 (95.7)

[a]The women using only alternative method answered. [b]Melissa, cinnamon, ginger, mallow, lavender, carnation, rosemary, fennel, lemon balm , French lavender ,okra blossom, nettle, apple cider vinegar.

Table 2: Distribution of Reasons preferring alternative methods used to reduce menopausal complaints

Reasons of Used Alternative Methods (n=92)[a]	n	%
Thinking of reduce menopausal complaints		
Yes	74	80.4
No	18	19.6
Not Receiving Hormone Therapy Due to Health Problems		
Yes	10	10.9
No	82	89.1
Receiving Advices from Friends		
Yes	49	53.3
No	43	46.7

[a] Only women who using alternative methods answered.

Table 3: Comparison of using alternative methods according to menopausal ages and menopausal complaints

	Use of Alternative Methods		
Menopausal Ages	Yes n (%)	No n (%)	Statistical analysis
Premenopause	23 (%31.1)	51 (%68.9)	X^2=1.999
Perimenopause	18 (%37.5)	30 (%62.5)	p=0.368
Postmenopause	51 (%41.1)	73 (%58.9)	
Menopausal Complaints			
Having Hot Flushes			
Yes	82 (%48.0)	89 (%52.0)	**X^2=26.689**
No	10 (%13.3)	65 (%86.7)	**p=0.000**
Experiencing Night Sweats			
Yes	77 (%56.6)	59 (%43.4)	**X^2=47.986**
No	15(%13.6)	95 (%86.4)	**p=0.000**
Having Sleeping Problems			
Yes	72 (%54.5)	60 (%45.5)	**X^2=35.772**
No	20 (%17.5)	94 (%82.5)	**p=0.000**
Having Sexual Problems			
Yes	27 (%45.8)	32 (%54.2)	X^2=2.319
No	65 (%34.8)	122 (%65.2)	p=0.128

Percentage of line included in the chi-square test.

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Distribution of using alternative methods to reduce menopausal complaints can be seen in Table 1. It was determined that 37.4 % of women used alternative methods to reduce menopausal complaints. It was observed that among the types of herbal tea, 5.4 % women consumed ginseng, 9.8 % licorice root and thyme tea, 6.5 %chaste tree berry, valerian, 16.3St. John's wort, 26.1 % achillea millefolium, 23.9 %sage, 12 % camomile tea, 8.7 % green tea and linden tree, and 17.4 % used other herbal tea. It was determined that 75 % of women paid attention to healthy nutrition, 5.4 % used nutrient tablet, 22.8% calcium tablet, and 7.6 % vitamin tablet. It was determined that 79.3 % of women consumed dietary phyto-oestrogen, and 8.7 % phyto-oestrogen tablets. And 90.2% of women applied stress-reducing executions, 26.1% got massage or massaged themselves and 4.3 % underwent acupuncture.

The distribution of reasons for preferring alternative methods used to reduce menopausal complaints has been shown in Table 2. It was determined that 80.4 % of women used alternative method as they thought that they were reliable and effective, 10.9% could not receive hormone therapy because of health problems, and 53.3 % received advice from people except health staff.

Comparison of using alternative methods according to menopausal ages and menopausal complaints was stated in Table 3. It was determined that 41.1% of women at postmenopausal age used alternative methods, and statistically there was no significant relation between menopause and use of alternative methods in order to reduce menopausal complaints ($p \geq 0.05$). It was determined that 48 % of women having hot flushes, 56.6% of experiencing night sweats, 54.5 % of having sleeping problems used alternative methods and there was significant relation between the state of hot flushes, night sweats, having sleeping problem and use of alternative methods in order to reduce menopausal complaints as a result of statistical analyses ($p<0.05$). There was a significant relation between the use of alternative methods in order to reduce menopausal complaints and having sexual problems ($p \geq 0,05$).

Discussion

The aim of this study was to determine the rate of using alternative methods the women resort to in order to reduce their menopausal complaints and alternative application methods. It was determined that women used alternative methods to reduce their menopausal symptoms (Table1). It was established in different researches conducted that the rate of using alternative and supplementary methods in order to reduce menopausal complaints ranged from 22.1 % to 82% (Newton et al., 2002; Gollschewski et al., 2005; Sluijs et al. 2007; Hill-Sakurai, 2008; Cherrington et al., 2003; Kupferer, Dormire, Becker, 2009; Bair et al., 2002). It was determined that about 45 % of the women aged between 45-47 who participated in the 2002 United Nations National Health Investigation used supplementary and alternative methods in the last one year, but only 3.4 % of them used supplementary and alternative methods because of the menopause (Brett & Keenan 2007). It was determined in a research that 82 % of women used supplementary and alternative methods for menopausal complaints in the past and 50 % of them were still using supplementary and alternative methods (Armitage et al., 2007). In another research it was determined that 48 % of women who quit hormone replacement treatment tried at least one supplementary and alternative method in order to reduce menopausal complaints (Schonberg & Wee 2005). Even though researches were conducted in different countries and on the women from different ethnic groups, it was observed that they applied supplementary and alternative methods even if they were at different levels to reduce menopausal complaints. It is thought that the difference between the findings of research could be resulted from the fact that the researches were conducted in different countries and on different ethnic groups, also cultural differences between the women, experiencing menopausal complaints at different rates, their way of perceiving menopausal complaints.

It was established that of the women consuming herbal tea; ginseng, licorice and thyme tea, chaste tree berry, valerian, St. John's wort, *Achillea millefolium*, sage, camomile tea, green tea and linden tree, and other herbal tea (Table 1). It was determined in the researches with similar findings to our research that 45% of women used herbal mixture related to menopause (Hill-Sakurai, 2008) 13.1% resorted to herbal methods, 18.1 % applied herbal therapy (Bair et al., 2002), 13.3% used ginseng and 41.3% applied herbal therapy (Gollschewski et al., 2005), 6.6 % vasomotor, 7.4% ginseng for psychological and 6.9% for somatic complaints (Gold et al., 2007), 14.8% ginseng and 11.4 % St. John's wort (Brett & Keenan 2007). It was established in other studies that herbs such as evening primrose oil (Sluijs et al. 2007; Kupferer, Dormire, Becker, 2009; Schonberg & Wee 2005), black cohosh (Kupferer, Dormire, Becker, 2009; Brett & Keenan 2007; Schonberg & Wee 2005), Wild yam root (Schonberg & Wee 2005), and dong quai (Brett & Keenan 2007; Schonberg & Wee 2005) were used by women to reduce menopausal complaints in addition to the herbs stated above. In the literature, herbal treatments used to reduce menopausal complaints (black cohosh , Wild yam root, licorice root, chaste tree berry, dong quai, evening primrose oil, ginkgo biloba, kava kava, ginseng, valerian, motherwort, St. John's wort) were used more to eliminate vasomotor and psychological symptoms (Kronenberg & Fugh-Berman, 2002; Geller & Studee, 2006). When compared with literature by scanning data base, it has been stated that ginseng , evening primrose oil, dong quai , or use of vitamin E is not effective in reducing hot flushes, but black cohosh is effective in reducing the frequency and severity of experiencing specific somatic symptoms related to menopause (Wong et al., 2009). According to the results of randomized controlled study carried out on women experiencing hot flushes, it was determined that the scores of the quality of life related to menopause of the women getting St. John's wort extract was higher than the women in control group (Al-Akoum et al., 2009). It is alleged that black cohosh in hot flushes and psychological changes and also St. John's wort in the treatment of depression are very effective. Evidence confirming the effects and credibility of herbs except the black cohosh and St john's wort is limited (Geller and Studee, 2006). Whereas the use of *Achillea millefolium* also in menopause was included in herbal books, scientific data was not found on *Achillea millefolium* (Özer, 2001; Şengöz, 2003). Apart from the knowledge of literature, in the findings of our research women stated that they used sage, camomile, green tea, lime tree, thyme tea and other herbal tea (melisse, cinnamon, ginger, mallow, lavender, carnation, rosemary, fennel, lemon balm, French lavender, okra flower, nettle and apple cider vinegar). It can be seen in our findings that women used different kinds of herbs not included in the literature to reduce menopausal complaints. This can be attributed to the cultural and traditional differences of the women.

It was determined that 75 % of the women paid attention to healthy diet, 5.4 % used nutrient tablets, about 22.8 % used calcium tablets and 7.6 % used vitamin tablets to reduce menopausal complaints. It was established that 79.3 % of the women used phyto-oestrogen in their diets, and 8.7 % consumed phyto-oestrogen tablets (Table1). In some researches with similar findings to ours, it was determined that 64.9% paid attention to their healthy diet (Gollschewski et al., 2005), 7.1% used nutrient tablets (Daley et al., 2006), 27% used multivitamin and calcium tablets (Kupferer, Dormire, Becker, 2009), 60.6% consumed phyto-oestrogen in their diets (Gollschewski et al., 2005). In the studies on using supplementary and alternative ways, it was observed that at menopausal age, consumption of soy bean included in phyto-oestrogen group was between 12.6% and 41.7% (Sluijs et al. 2007; Hill-Sakurai, 2008; Brett & Keenan 2007; Daley et al., 2006), and the use of phyto-oestrogen tablets was between 19% and 33% (Gollschewski et al., 2005; Kupferer, Dormire, Becker, 2009). Consequently, according to the findings it was determined that use of phyto-oestrogen tablets was higher, and the use of phyto-oestrogen in diets was lower in other researches. It is suggested

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that this state results from to result from using phto-oestrogen source in different ways. In a randomized controlled study it has been stated that soy bean decreases hot flushes, however, there is no difference between consumption of soy bean at high or low rate in terms of the levels of effectiveness to reduce menopausal symptoms, and consumption of 40-80 mg soy bean daily could be effective to reduce hot flushes (Nikander et al., 2003).

It was established that 90.2% of women applied stress-reducing exercises, 26.1% got massage or massaged themselves and 4.3% got acupuncture (Table 1). In a research conducted with fewer findings, It was determined that 9.1% (Newton et al., 2002) of women, and in another research 27.4 % of them applied (Daley et al., 2006) stress management and relaxation techniques in order to reduce menopausal complaints. It was determined in the studies that apart from the stress management, women practiced meditation (Hill-Sakurai, 2008, Kupferer, Dormire, Becker, 2009), reiki (Hill-Sakurai, 2008) and yoga to make (Daley et al., 2006) themselves feel better. In the studies with different findings from our research, it was observed that the rate of the women getting massage to reduce menopausal complaints ranged from 2.6 % to 13.7% (Newton et al., 2002; Hill-Sakurai, 2008; Daley et al., 2006) and the rate of getting acupuncture was between 0.6% and 7% (Newton et al., 2002; Hill-Sakurai, 2008; Kupferer, Dormire, Becker, 2009; Daley et al., 2006). It is considered that the difference between the findings of researches could be resulted from their levels of education and awareness. In a randomized controlled study, it was determined that acupuncture decreased the severity of hot flushes, sleeping problems, and psychological changes (Cohen, Rousseau, Carey, 2003).

It was observed that 80.4% of women regarded alternative method as reliable and effective, 10.9% could not receive hormone therapy because of health problems, and 53.3% used alternative methods to reduce menopausal complaints as they followed the advice of the people rather than health staff (Table 2). It was also seen that women gave similar responses to the research findings in a qualitative study of women at menopausal age (Seidle and Steward, 1998).

As a result of statistical analyses, it was determined that the women experiencing hot flushes, night sweats, and having sleeping problems used relatively more alternative methods than the women not experiencing these problems, and the difference between them was statistically significant ($p<0,05$) (Table 4). In the studies conducted on the subject with similar findings to our research, it was seen that women resorted to alternative methods because of the vasomotor complaints and sleeping problems (Newton et al., 2002; Sluijs et al. 2007; Kupferer, Dormire, Becker, 2009; Bair et al., 2002; Armitage et al., 2007; Gold et al., 2007; Daley et al., 2006; Cohen, Rousseau, Carey, 2003; Hur, Yang, Lee, 2008; Murakami et al., 2005) .

Conclusion

It was determined that women experienced vasomotor complaints (hot flushes and night sweats) and had sleeping problems and they used alternative methods to reduce these complaints. In this regard, it can be suggested that it is essential to increase the number of studies questioning whether the women at menopausal age use alternative methods to reduce menopausal complaints or not, health staff especially nurses should question the use of alternative methods while collecting data.

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