

# Knowledge and attitude toward menopause phenomenon among women aged 40–45 years

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## ABSTRACT

**Background:** Appropriate understanding of women that certain physical, mental, social and psychological changes occur during menopause helps them with greater readiness to cope with these changes. In all training programs to identify and analyze perceptions of the subjects is a key component. The purpose of this study was to investigate the knowledge and attitude of women toward the menopause phenomenon. **Materials and Methods:** This cross-sectional study was conducted on 400 healthy and non-menopausal women aged 40–45 years. The stratified sampling method was used and participation in this study was based on obtaining informed consent. The data collection instrument was a questionnaire consisting of three parts: demographic information, questions to assess knowledge and attitude investigation questions. **Findings:** The results showed that the average knowledge score of subjects was  $63.57 \pm 10.79$ , and their average attitude score was  $61.21 \pm 12.73$ . In this study, 8% of the subjects had poor knowledge, 68% had moderate knowledge and 38.5% had good knowledge. Meanwhile, 81.5% of the women had a positive attitude toward menopause. The correlation test showed that knowledge and attitude are meaningfully related to economic status and education level. But, the relationship between knowledge and attitudes of women under study was not significant. **Conclusion:** Identifying the quality of women's subjective perception of menopause has an essential role in the development of accurate and appropriate programs to promote women's health during menopausal years.

**Key words:** Attitude, knowledge, menopause

## INTRODUCTION

Nowadays, health systems have described their plans based on the family's health. Women are considered as the base of family's health, which, in addition to health management of family members, are original patterns of training and propagating a

healthy lifestyle to the next generation. Women have a greater population and their average age and life expectancy is more than men, but their imperfection and disability is higher and they face special issues resulting from their natural and physiological conditions; one of these issues is the menopausal transition period or final years of pregnancy.<sup>[1]</sup> Menopause is one of the natural and important processes of women's life,<sup>[2]</sup> where its main feature is fertility and menstruation ending.<sup>[1]</sup> The average age of menopause onset is 51 years (from 47 to 53 years), but, in Iran, menopausal age is lower and is about 47.8 years. Regarding life expectancy in Iran, women spend about one-third of their life in this period.<sup>[1]</sup> In 1990, 467 million women were at the age of 50 or more, where 40% lived in industrialized countries and 60% in developing countries. By 2030, this number will reach one billion and two hundred million people, respectively. Despite this overall increase, the ratio of menopausal women in industrialized countries will decrease to 24%, while this number will reach 76% in developing countries.<sup>[3]</sup> In our country, by

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investigating health and disease in 1385 by the Iran Statistical Center, there are 5854763 40–65-year-old women.<sup>[4]</sup> Women during the menopause period experience certain physical and psychological changes and face various problems such as urogenital, psychological–social,<sup>[2]</sup> cardiovascular and neurological problems, etc.<sup>[1]</sup> These problems not only cause great distress and disability for the person but also impose a lot of pressure on the limited resources of the countries' health care system.<sup>[5]</sup> Familiarity with these changes and understanding their reasons are essential in the life of all women, and helps them enter this stage of their life with adequate knowledge and a positive attitude.<sup>[1]</sup> Studies performed in Iran in the field of investigating the level of women's knowledge and attitude toward menopause indicate inadequate knowledge and negative attitude toward this phenomenon among Iranian women.<sup>[6–8]</sup> Palank writes: “knowledge is a basic condition for the use of health services and attitude is an effective organizing principle in performing an action and can start a health behavior due to the effect it has on the person.” He believes that creating knowledge and a positive attitude is a useful and logical issue for making continuous changes in behavior.<sup>[9]</sup> One way to achieve this is through health education. In fact, training (education) is one of the most important ways of women's empowerment and, as we know, the first step in any training is recognition and analysis of the knowledge, attitudes and behavior of the subjects, based on which to be able to perform the next steps for designing and implementing training programs.<sup>[7]</sup> Unfortunately, so far in our country, policies and programs of women's health promotion are specifically limited to specific issues such as pregnancy and family planning, and enough attention is not paid to other women's health needs, including the problems of menopausal transition period.<sup>[1]</sup> Moreover, few studies have been performed in Iran in the field of investigating women's knowledge and attitude toward menopause. Therefore, this study aimed at investigating the knowledge and attitude of 40–45-year-old women under the coverage of Isfahan health care centers about menopause phenomenon based on its results to be able to design suitable training programs for improving life quality and promoting women's health during menopause.

## MATERIALS AND METHODS

To assess the knowledge and attitudes of non-menopausal women 40–45-years old healthy and health coverage – health city, a cross-sectional study was designed. The required sample size was estimated using  $n = z^2 \times s^2 / d^2$  ( $d = 0.1s$ ,  $P = 0.05$  relation and paying attention to similar studies of 384 people. Four hundred people entered the study for more precision. A stratified, cluster sampling procedure was used. Then, using a probability proportional to size (PPS) method, four centers (with 20 health care centers) were selected of health center number one and six centers (with 22 health care centers) were selected of health center number two randomly.

After coordination with the above centers, the list of all 45–40-year-old women under the coverage of these centers was extracted through the Office of Family Planning and

the concerned individuals were selected. After calling them and making them aware of the plan's goals, the action to complete the questionnaire by interview was taken at the right time. In this research, the data collection instrument was a constructed questionnaire, which was set in three parts. The first section included 10 questions on personal information about age, education level, occupation, marital status, number of children, residence status, personal evaluation of economic status, insurance status, information regarding menopause and the source of this information. Knowledge measuring questions included 26 questions designed in three areas of knowledge of menopausal symptoms, complications of estrogen deficiency in the long term and some ways of controlling menopausal symptoms. The answers to these questions were designed as right and wrong. Every correct answer had one point and every wrong answer had zero point, according to which people's knowledge was classified into three categories: weak (with a score of 0–33), moderate (with a score of 33–66) and good (with a score of 66–100) knowledge. The third section included 11 items for measuring the attitude designed as four-choice Likert scale (completely agree, agree, disagree and completely disagree). The score of negative attitude was zero. Accordingly, the subjects were placed in two groups with negative attitude (with a score below 50) and positive attitude (with a score of 50 and above). The Delphi method was used to determine the content of data collection instrument and eight experts in the fields of reproductive health, social medicine and health education investigated the concerned questionnaire. To determine its validity, a pilot study was performed among 30 women of the target group and, finally, the validity of the questionnaire was confirmed using the Cronbach Alfa test ( $\alpha = 0.71$ ). After data collection, data were entered in the computer through SPSS software and were analyzed using *t*-tests, Variance analysis and Spearman and Pearson analysis.

## Findings

This study is performed on 400 40–45-year-old women having referred to the Isfahan health care centers. Most people in this study (24.8%) were 45-year-old women. Sixty-nine percent of them had school education, 31% were diploma and higher and 83.5% were housekeepers. The highest percentages of women under study (92%) were married. The majority of subjects (64.8%) evaluated their economic situation as moderate. 73.2% of the subjects had previously acquired information about menopause, and the greatest sources of information in this field were friends and acquaintances (37%). It should be noted that some individuals had acquired information from two or more sources. The mean and standard deviation of knowledge and attitude scores and given in Table 1. Regarding the status of the subjects' knowledge, the results showed that the majority of people (60.8%) had moderate knowledge, 38.5% had good knowledge and only 0.8% had weak knowledge. It should be noted here that people's knowledge about some obvious symptoms of menopause, such as hot flashes or abnormal menstrual bleeding, was high. For example, more than 85% of the women knew that menopausal bleeding disorder is one of the main symptoms of menopause, or more than 90% of

them introduced hot flashes as one of the obvious symptoms of menopause. On the other hand, knowledge about other menopausal symptoms such as vaginal dryness and painful intercourse, urinary frequency and dysuria was low [Table 2]. The results of the subjects' attitude toward menopause showed that the attitude of 81.5% was positive and only 18.5% had a negative attitude toward this phenomenon. For example, more than 70% of the women agreed with the fact that woman's life in the menopause period is more delightful than before, or more than 67% of them knew menopause as a comfortable period of menstruation problems and pregnancy prevention [Table 3]. The Pearson correlation test showed that there is no meaningful statistical relation between knowledge and attitude scores ( $r = 0.27$  and  $P = 0.592$ ). Also, results showed that there is no meaningful statistical relation between knowledge and attitude scores of subjects and age and number of their children. In this study, there was a meaningful relation between knowledge and attitude scores of people and variables of economic status and education level ( $P < 0.001$ ). In other words, the knowledge of women with

higher education and women having reported their economic status as desirable was higher and their attitude toward this phenomenon was more positive. As shown in Table 1, average knowledge score in employed women is meaningfully higher than in housewives ( $P < 0.001$ ).

## CONCLUSION

This study aimed to investigate the knowledge and attitude (toward menopause phenomenon) of 45–40-year-old women under the coverage of the Isfahan health care centers. The results indicated the average knowledge of women about the symptoms, complications and some ways of controlling menopausal symptoms, which are consistent with the results of most similar studies conducted in Iran.<sup>[6,7,10]</sup> But, studies conducted in Tehran and Lam show that women's knowledge in this field is weak.<sup>[5,11]</sup> It should be noted that women's knowledge in this study is slightly higher than other similar studies conducted in Iran. The results of studies conducted in other developing countries are consistent with the results of this study to some extent, and these studies often indicate inadequate knowledge of women about menopausal issues.<sup>[12-15]</sup> On the other hand, the results of studies are different in developed countries. In Sharp's study in America (2003), the knowledge level of most of the people (80%) about menopause was reported as good. In Coaster's research in

**Table 1: Average score of knowledge and attitude of people under research about menopause**

| Score     | Maximum | Minimum | Mean  | Standard deviation |
|-----------|---------|---------|-------|--------------------|
| Knowledge | 92/26   | 15/96   | 57/63 | 79/10              |
| Attitude  | 30/30   | 97/96   | 21/61 | 73/12              |

**Table 2: Distributaion of absolute and relative abundance of scores of knowledge questions in people subject to the research**

| Question  | Number | Percent |
|---|--------|---------|
| At the time of menopause, menstruation stops suddenly                                 | 298    | 5/74    |
| Women become menopausal at the age of 48–55 years                                     | 309    | 3/77    |
| Hereditary backgrong affects the tome of menopause occurrence                         | 313    | 3/87    |
| Menopause occurs in women due to increasing sexual hormones                           | 243    | 8/60    |
| Thin people become menopausal sooner  | 82     | 5/20    |
| Most of the women experience menstruation disorder before menopause occurrence        | 360    | 90      |
| Most of the women experience hot flashes in the menopause period                      | 343    | 5/85    |
| Menopause in women decreases genital infections                                       | 251    | 8/62    |
| Menopause in women increases weight and obesity                                       | 285    | 3/71    |
| Menopause symptoms are preventable and curable  | 252    | 63      |
| Menopause decreses cardiovascular diseases in women                                   | 284    | 71      |
| Menopause increases osteomalacia in women   | 327    | 8/81    |
| Menopause causes dryness and skin shrivel in women                                    | 251    | 8/62    |
| Menopause causes different types of cancer in women                                   | 283    | 8/70    |
| Sexualities change in menopausal women  | 202    | 5/50    |
| Smoking affects the time of menopause occurrence                                      | 163    | 8/40    |
| Smoking does not affect the severity of symptoms and complications of menopause       | 304    | 76      |
| Menopause increases extra hair on women's face  | 200    | 50      |
| Menopause causes vaginal dryness and painful sexual intercourse                       | 210    | 5/52    |
| Menopause causes urinary frequency and dysuria  | 182    | 5/45    |
| Smoking and using alcohol are factors of increasing osteomalacia in women             | 261    | 3/65    |
| Regular physical activity is effective in preventing osteomalacia in menopausal women | 348    | 87      |
| Menopause affects the power of concentration and memory of women                      | 227    | 8/56    |
| The frequency and severity of hot flashes in menopausal women increases by time       | 129    | 3/32    |
| The level of stress and depression feelings increases in menopausal women             | 310    | 5/77    |
| During 1 year after complete stop of menstruation, pregnancy prevention is necessary  | 194    | 5/48    |

**Table 3: Distributaion of absolute and relative abundance of scores of attitude questions in people subject to the research**

| Question   | Completely agree |         | Agree  |         | Disagree |         | Completely disagree |         |
|--|------------------|---------|--------|---------|----------|---------|---------------------|---------|
|  | Number           | Percent | Number | Percent | Number   | Percent | Number              | Percent |
| Menopause is the period of woman's loneliness  | 178              | 5/44    | 140    | 35      | 48       | 12      | 34                  | 5/8     |
| Menopause is the period of eradicating the problems of menstruation and preventing pregnancy | 97               | 3/24    | 171    | 8/42    | 115      | 8/28    | 17                  | 3/4     |
| Woman's menopause decreases husband's sexuality  | 69               | 3/17    | 205    | 3/51    | 96       | 24      | 30                  | 5/7     |
| Every woman can care for herself through training and necessary tendance                     | 113              | 3/28    | 169    | 2/42    | 90       | 5/22    | 28                  | 7       |
| In the menopause period, interest and attention of woman to her husband decreases            | 13               | 3/3     | 202    | 5/50    | 175      | 8/43    | 10                  | 5/2     |
| Menopause is the beggining of the period of women's disablement                              | 123              | 8/30    | 163    | 8/40    | 78       | 5/19    | 36                  | 9       |
| Woman's life in the menopause period is more delightful than before menopause                | 105              | 3/26    | 148    | 37      | 114      | 5/28    | 33                  | 3/8     |
| Menopause decreases the grace of woman's appearance  | 168              | 42      | 114    | 5/28    | 24       | 6       | 94                  | 5/23    |
| Menopause is a usual and natural phenomenon in women's life                                  | 149              | 3/37    | 148    | 37      | 65       | 3/16    | 38                  | 5/9     |
| Menopause is the beginning of another life and second maturity of women                      | 23               | 8/5     | 195    | 8/48    | 170      | 6/42    | 12                  | 3       |

Denmark (1991), the knowledge of half of the subjects about menopause was good. Of course, Donati showed in a study in Italy (2009) that more than half of the samples had no information about menopause.<sup>[16-18]</sup>

The presented study shows that 81.5% of the subjects had a positive attitude toward menopause. The results of this study are not inconsistent with the results of studies conducted in Iran.<sup>[6,8]</sup> The results of investigating women's attitude toward menopause in different countries mostly indicate the positive attitude of subjects. Oviss and McKinley (1991) in a study in America showed that the attitude of most of the women toward menopause and menstruation pause was a sense of relief, and women thought they were a positive and experienced person.<sup>[19]</sup> Also, in a study conducted on Hindi women, it was shown that they know menopause as a reward and feeling of freedom.<sup>[20]</sup> Similar studies conducted by Leon in Ecuador (2007) and Donuts in Italy (2009) showed that over 90% of the samples knew menopause as a positive event and had a positive attitude toward it.<sup>[14,18]</sup> In the presented study, no meaningful relation was found between knowledge and attitude of the subjects, and it is inconsistent with the study results of Bakhtiari (1380) and Eftekhari Tavakoli (1377).<sup>[8,21]</sup> Our study showed that there is a meaningful relation between women's knowledge and attitude and their background characteristics (education, job and satisfaction of economic status), so that higher educated and employed and satisfied women had higher knowledge and more positive attitudes. The study results of Hassan zade, Garmz nezhad, Mansourian, Eftekahri Tavakoli and Shafee are consistent with our study results regarding this subject.<sup>[17,10,21-23]</sup> Of course, the study results of Hassan pour Azghady (1385) are not consistent with the results of this study.<sup>[6]</sup> The study of Padyla in Indonesia (2000), Gar in Turkey (2004), Donuts in Italy and Oviss and McKinley in America (1991) indicated

a relationship between knowledge and education level of subjects.<sup>[15,18,19,24]</sup> This finding can be explained as education level affecting the way of self-care. Therefore, literate people use more health care services and also have more access to databases; hence, have higher knowledge. In this study, the majority of women had previously acquired information about menopause. Major sources of their information were friends and acquaintances, mother and sister, the media and, finally, doctor and midwife. As can be seen, unfortunately, the first priority of information acquiring in women is non-scientific and non-specialist resources, and the role of health care personnel is slight in this area. Other results have been followed in Iran, with the results of our study being consistent in this area.<sup>[6,10,11]</sup> The results of other studies conducted in Iran are consistent with the results of our study regarding this subject.<sup>[6,10,11]</sup> For example, in the study of Hassan Pour Azghady, 60% of subjects had acquired their information from non-scientific resources, and only 34% had acquired their information from a doctor. This information was limited to two hot flashes and bleeding complications. The results of studies in other developing countries are consistent with the results of this study.<sup>[14,25]</sup> Statistics of developed countries on acquiring information are different. The most common sources of information acquiring in these countries are doctors and news media.<sup>[17,18]</sup> Nowadays, in other countries, particularly developed countries, the key role of mass media, health training associations and health care personnel on informing about various issues such as menopause is emphasized, while in developing countries, yet, the role of education and informing public for empowering individuals is slight. In our country, after the end of the pregnancy period, women do not have a special place in the health care system and practically receive no tendance in this period, while trying to improve women's knowledge for self-care helps the improvement of their life quality during menopause. The results of this study

showed that subjected women have a positive attitude toward menopause but do not have adequate knowledge in this field. Designing and implementing a proper training program with the lowest cost can have an effective and valuable role in improving women's knowledge.

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