

The Effect of Menopause On Women's Health: A Systematic Review

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Research Article

Keywords: menopausal complications, menopause, Iran, sign, symptoms.

Posted Date: January 17th, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1118042/v1>

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Abstract

Background: Importance: Menopause accompanied by many signs and symptoms in the women's life.

Objective: This study aims to review impact of menopause on the health of menopausal women in Iran.

method: This review performed in accordance with the PRISMA guidelines. We searched, including PubMed, Web of Science (ISI), Scopus, Ovid, and the Iranian Clinical Trial Registry and Magiran, SID from January 1990 to January 2020. The quality of the articles was assessed the consort tool in clinical trials and STORB tool for observational research and PRISMA tool for systematic review.

Findings: In total 2759 articles were obtained by searching in databases. Finally 23 study selected to evaluate. According to the studies, Women's experiences of physical effects, negative emotions, negative attitudes, how adjustment, worries and psychological effects cause severity of menopausal symptoms and, as the age of postmenopausal women increases, the severity of physical and psychological symptoms decreases. education is one of the important factors that achieve healthy life style, increase knowledge and improve performance in order to improve the quality of life and menopausal health in women.

Conclusion: attitudes toward menopause are influenced by the beliefs and culture of society. Thus, menopause more than a physiological phenomenon is a cultural phenomenon

Introduction

Menopause is a natural period in women's life. Women will spend one-third of their lives after menopause (1). The world's population of menopausal women in 1990 was 467 million. These are expected to reach 1000.2 million women by 2030 (Brambilla, 2014). World Health Organization (WHO) estimates that on 2050 there will be one billion women 60 years old (2). They will be about five million by 2021 in Iran (Statistical Centre of Iran, 2011).

Due to the increasing trend of postmenopausal women, menopausal health will be one of the most important issues of societies. The age at menopause is between 50 and 51 years in developed countries, The mean age at menopause is 46.8 ± 7.8 in Iran (3). We need to know that the term "menopause" is referring to a cessation of menses (4,2). loss of ovarian follicular activity cause menopause (2). Menopause occurs after the final menstrual period (FMP), there is known a year or more after the event (4,1). The term "symptoms" refers to perceptions related to changes in body function, presented as complaints by women. This process is seen with different symptoms in women. These symptoms trigger different attitudes.

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Peyman et al. (2016) express that, women usually have two main attitudes towards menopause: satisfaction and unsatisfied (4). Important themes of Women's attitudes toward menopause in this research are avoidable processes in life, the need for support, the role of spirituality in life, the education need for effective adaptation (4). menopause might be caused the emotional and social disasters. This disaster may last for many years. It may induce many complications. It is inducing uncomfortable and Pressure on the health system budget

The researches of menopausal women show that their experiences are different in scopes and intensities. How these situations happen, will affect women's interpersonal communication, society, family, and overall quality of life. This is why menopause is called a biological and social, cultural and, emotional process (5). physiological symptoms can be caused by hormonal fluctuation (5). One of the symptoms of menopause is hot flashes, sometimes reported to be accompanied by anxiety, confusion, nausea and, depression. Flushing harms mood, attention, sleep quality and, sexual function, and causes fatigue and stress (6), which can have a significant negative impact on quality of life (7).

Vaginal symptoms include vaginal dryness, burning, pain during intercourse, feeling of pressure and excessive discharge of feminine secretions and urinary symptoms include burning, feeling of urgency, blood in the urine, (8,9). symptoms of atrophic vaginitis leading to Sexual dysfunction and long-term use of hormone therapy, which is associated with an increased risk of breast cancer and stroke (9). Anxiety and depression are other unpleasant experiences of menopause (10). All these are the annoying factors of menopause that impress the health status of menopausal women.

According to Jones et al. In 2016, the possibility of various cancers and heart attacks was another concern for postmenopausal women. In the cross-sectional study, Pimento et al. on 710 women in Portugal, 2014, the results showed that spirituality was significantly associated with low levels of premenopausal and postmenopausal symptoms, independent of demographic characteristics, menopausal status and, perceived health (9). Spirituality is inversely correlated with depression, anxiety, cognitive impairment, pain, vasomotor symptoms, and sexual problems. In addition, some sociodemographic variables and perceived health affect the severity of menopausal symptoms (11). menopause will lead to concerns such as feelings of helplessness and uncontrollable situations, as well as changes in identity (10). attitudes and reinforcing factors have more predictive power than environmental behavioral factors, enabling factors and, self-efficacy (4). The support of husbands and children is the most important reinforcing factor in enhancing self-efficacy (4,7,11).

The dominant moral culture in the family and access to personal and interpersonal resources can help women gain stronger self-esteem and have higher self-efficacy. people with higher education and higher income (12) and employing women (13) have fewer menopausal symptoms and complications.

Due to the wide range of complications during menopause and many changes that occur in the physical, mental, social, and spiritual condition of women during this period, along with the fact that each of the studies has investigated a specific aspect of menopause and other factors have been ignored. the current review has been done to orderly and systematically review the studies, qualitatively gathering, incorporating the results of different studies and creating a comprehensive interpretation of the results, presenting a comprehensive the conclusion from the results of the studies about health of menopausal women. Thus, this study aims to review impact of menopause on the health of menopausal women in Iran.

Methods

Study Design

We searched and assessed International electronic bibliographic databases from January 1990 to January 2020, including PubMed, Web of Science (ISI), Scopus and Ovid, and English and Persian language that was done in Iran. This review was performed under the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). In this research menopausal women were defined as women who haven't had menstruation during the past 12 months (2). The research question is:

What Is menopause affecting the health status of Iranian women?

Search strategy

In this research, we manage to investigate menopausal effects on women. The keywords are menopause, compatibility, cultural, social support and complication, sign, symptom, and Iran. Combination of Words Used to Search Articles were shown in table 1.

We screen the title and abstract to determine the relevant papers. If there are doubts in the abstract, the full text is evaluated. manually was searched the relevant articles for inclusion. The protocol of this study was recorded in PROSPERO (record number: 281264)

Table 1 -Combination of Words Used to Search Articles

("Culture"[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("Social Support"[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("Economics"[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("compatibility "[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("sign"[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("symptoms"[Mesh]) AND (("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("complication"[Mesh]) AND(("Menopause"[Mesh]) OR "Post menopause"[Mesh])
("Culture"[Mesh]) OR "Social Support"[Mesh]) OR "Economics"[Mesh]) OR (("compatibility"[Mesh]) OR "sign"[Mesh])) OR "symptom"[Mesh]) OR "complication"[Mesh])

Study selection

we Imported all the articles identified by the search into the Endnote library. First, we provided titles and abstracts, and further evaluated those selected as relevant or potentially relevant. Then we evaluated the full text of the article according to our inclusion and exclusion criteria. In this study, the eligible reports were selected, and the other non-compliant reports were deleted for the evidence shown in Figure 1.

Inclusion and exclusion criteria

The Inclusion criteria are as follows:

- 1) articles published in the Persian and English, language;
- 2) cross-sectional, and case-control, experimental, and semi-experimental, Phenomenology studies data on menopausal women in Iran from January 1990 to January 2020.

The exclusion criteria are as follows:

- 1) Editorials, speeches, comments, conference abstracts.
- 2) insufficient characterization,
- 3) the lack of full text and necessary information,
- 4) To avoid multiple publication biases in our study, duplicate publications were removed from the analysis.

Quality assessment

We downloaded all the potentially relevant studies from each database. titles and abstracts of all studies were assessed by two authors. Then excluded duplicate articles and those that did not fit with the study objective. Next, results and methodology sections of full texts were assessed. so the suitability of the remaining studies was evaluated by following exclusion and inclusion criteria and non-applicable or unrelated studies were deleted. Furthermore, the disagreement of the assessment results was resolved through conversation with a third author. The quality of the articles was assessed by validated tools. The consort tool in clinical trials and STORB tool(Strengthening the Reporting of Observation Studies in

Epidemiology for observational research) for observational research and PRISMA tool for systematic review were used.

Data extraction

Data from the quantitative and qualitative studies were evaluated based on the study objective to extract data. collected data based on: the first author, Title, Type of research, Year of publication, Target group, Sample size, Questionnaire, Type of intervention, Final impact of the results were written in table 2.

All articles were evaluated by two authors. The disagreement of the assessment results was resolved through a conversation with a third author.

Data analysis

Fig. 1, Flowchart is the description of the article selection process, based on the PRISMA checklist. Records identified database searching was 2759. title and abstract were evaluated after was deleted duplicated articles (N=1698). in the next step, 537 articles hadn't been explained data correctly. afterward, the full text had evaluated. 28 articles had uncompleted data. 23 articles had 'not suitable method. one of the articles had Poor quality. Finally 23 articles were assessed by two authors. The disagreement in the evaluation results was resolved through a conversation with the third author.

Results

In total 2759 articles were obtained by searching in databases. Finally 23 study selected to evaluate. Methodology of research in 23 Selected articles were descriptive (n=5, 21.7%) and cross-sectional (n=7, 30.4%), Clinical trial (n=3, 13.04%), semi-experimental (n=2, 8.6%) and qualitative (n=5, 21.7%) included content analysis (n=2, 8.6%), phenomenology (n=2, 8.6%), systematic review (n=1, 4.3%). Topics searched in these articles include: attitude (4, 27, 16) (n=3, 13.04%), experiences of menopause (17, 18, 19) (n=3, 13.04%), social support (11, 16) (n=2, 8.6%), psychological effects (2, 19, 20) (n=3, 13.04%), sexual disorder (21, 22) (n=2, 8.6%), quality of life (n=6, 26.08%), health promotion (11, 27, 28, 29) (n=4, 17.3%).

3832 persons participated in these researches. In one study menopausal age was $46/8 \pm 7/8(3)$. In another research with 27,250 participants (12) menopausal age was $51/8 \pm 4/79$.

The target population of the eight articles was women aged 40-65, and the others were menopausal women. sampling was Purposive sampling- theoretical - in all cases. All researchers used standard questionnaires except seven. The majority of studies were Surveyed the various rates related to menopause, such as the rate of menopausal complications, the rate of depression, the rate of anxiety, etc. Only 5 of the 23 pieces of research, interventions were performed.

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Experiences of menopause

According to the studies, most menopausal women have physical experiences, the most common symptom of which is hot flashes (14). hot flashes aggravate by stress and anxiety. As the age of postmenopausal women increases, the severity of physical and psychological symptoms decreases (15,16). Increasing the level of education increases self-confidence and better perception of health, thus improving the health of postmenopausal women (14).

Attitude

According to the studies, attitudes toward menopause are influenced by the beliefs and culture of society (4,17). When menopause is a sign of aging and loss of youth and loss of sexual attractiveness thus leads to a negative attitude towards menopause (4,1,18). Attitude may include two original attitudes satisfied and non-satisfied (4). In cultures where having children is the most important role for a woman, menopause creates a negative attitude in women (4,19). In some societies and cultures, menopause makes women liberate to have more opportunities to communicate with God and perform religious ceremonies, thus leading to a positive attitude in postmenopausal women (4). positive or negative attitudes toward menopause will affect the severity of menopausal signs and symptoms.

social support

According to researches, social support is the level of love, assistance, and attention, Family members, friends, and other people related to the individual. Tension changed family dependence in postmenopausal women. The most important factor for reducing problems and increasing self-efficacy and health promotion is support by husband and children (4). social and personal variables are impacted on menopausal Complications and health (17,18). Social support increases the ability of individuals to compatibility with stress and reduces physical and psychological symptoms (11). Social and cultural factors are closely related to menopausal symptoms (17).

Psychological effects

According to the studies, psychological disorders, depression, and anxiety during menopause can be influential on the quality of life of women (19). psychological support by the husband, the most important person, can reduce anxiety and depression and improve relationships in menopause. (4,11). Marital satisfaction can reduce the psychological effects of menopause(1,19).

anxiety and depression did not correlate Severity of Signs and symptoms in Iran (10), despite, the research of the other countries that have been reported this correlation. Probably these differences caused by differentiation in women's culture and attitude. Various changes in the life of menopausal

women, such as varies in roles and responsibilities lead to an increase in demands and expectations from own and others.

sexual disorder

According to the studies, sexual capacity diminishes in menopause (19). Many women experience complications in their sexual life during the transition from menopause (20,19,21,22). Menopause causes a great reduction or termination of sexual activity, but most women consider themselves obligated to satisfy the sexual needs of their husbands (20,19). interventions based on eliminating barriers and enhancing motivational sexuality factors can promote women's sexual health (20).

Quality of life

According to the studies, menopausal Changes have a significant impact on quality of life (7,23,15,12). Also, Menopausal symptoms affect the quality of life and daily activities (7). A significant negative relation usually is observed between menopausal symptoms and quality of life scores (7). women's Age one of the important factors that affect their quality of life (7,12). quality of life usually decreases with aging (7). Educational interventions during menopause can reduce the complications of menopause and consequently improve the quality of life (4,23,12).

Health promotion

According to researches, A healthy lifestyle promotes menopausal health (11,17,14). Exercise, physical activity, non-smoking and proper nutrition induce menopausal health promotion (17, 23,14), but Aging makes it difficult to do physical activity and other things. Education is one of the important factors in increasing knowledge and improving the performance of postmenopausal women to health promotion (7). Education reminds the effect of proper weight on postmenopausal health to promote health (11).

Discussion

Menopause exposes women to wide-ranging changes. Achieving optimal health requires considering all the factors that affect menopause and promoting different aspects of menopause. there are post-menopausal psychological problems, as shown in Table 2, changes in Mental image of own appearance, psychological disorders, anxiety and depression, insomnia, sexual dysfunction (23), negative reactions to menopause, feeling of aging, and insufficient preparation for menopause (17,25). the high percentage of menopausal women experience sexual functioning disorders in menopausal periods (23). Of course, some of these symptoms usually appear with age, and in all cases, these symptoms may not be related to menopause (8).

one of the most factors affections on symptoms of menopause is age (17,24). Many things may affect menopausal age. menopausal age is reduced by high blood pressure, education, occupation and increased by marriage and number of children (3). another predictive variable in women's menopausal experiences was the duration of menopause (20). so that one year after menopause would have been

decreased one score of the questionnaire this means menopausal complication would have been decreased (20). The other factors, such as the role of gender, changes in socialization, perceptions, and supportive resources, are affected the menopausal symptoms (13).

Disorders such as emotional and economic the complication will affect the women's health status and health system. Before menopause, many women have a negative attitude toward menopause therefore it showed that the more negative attitude, the more severe their perception of symptoms. The attitude has affected the signs and symptoms and complications of menopause. The thought that menopause is the end of sexual life leads to a negative attitude towards menopause (21).

But "rescue feeling" or "liberation" from Unwanted pregnancies, annoying dysmenorrhea and extensive bleeding, the negative reaction of sexual partner, Health requirements of menstrual cycles lead to a positive attitude towards menopause (4,25). If women mentally prepare for this phenomenon in the premenopausal period, decrease negative attitudes and aging feelings (25). increasing menopausal knowledge will reduce complications, increase self-efficacy, and improve quality of life and health too (4. 16).

Thus, the education of menopausal women is caused by Choosing the right lifestyle and doing activities such as following a proper diet, getting enough sleep and rest, exercising and controlling proper weight, and not smoking and alcohol (11).

As shown in Table 2 ,Education has a significant impact on the health promotion of postmenopausal women (7, 15,26,25,14). For this reason, future studies should be focused on educating women to prepare for menopause in premenopausal ages.

postmenopausal women become more dependent on the family. Social support at this time can play an important role in reducing menopausal problems. Therefore, it is better to conduct future studies to increase the knowledge of the families of postmenopausal women to increase social support. It is also worthwhile to conduct studies based on increasing public knowledge of the social support importance on postmenopausal women's quality of life in the future.

Social activity compensates for the loss of fertility in menopausal women and decreases complications. As a result, working women experience fewer complications and problems. Thus, it is better, unemployed women to do charitable social activities. Communities can increase their social support by creating opportunities for menopausal women to do charity work.

one of the most challenges for menopausal women is Decisions making about menopausal annoyed complications and treating them, in this process, Rural or urban women are not different (19). In the lack of Sufficient knowledge of various treatments of menopausal symptoms and selection of gynecologists for advice, the most common treatments used hormone therapy, and at least treatments used complementary and alternative medicine methods (1,8,27). although other methods may be safer because of the carcinogenic effects of hormone therapy. The use of hormone therapy was associated

with the lowest level of education (13, 7). The use of complementary medicine was associated with older age, higher education, and poor health in research (27). because of side effects of various treatments to reduce the complications of menopause, further studies should be performed in adaptation to menopause to identify healthy ways to deal with these problems. Training these strategies can improve menopausal health.

Conclusion

Cultural factors, lifestyle (nutrition, exercise, smoking, etc.), social factors such as family support, education level, employment, economic status, marital status, and the number of pregnancies and deliveries determine menopausal health. Women's experiences of physical effects, negative emotions, negative attitudes, how adjustment, worries, and psychological effects cause the severity of menopausal symptoms. Thus, menopause more than a physiological phenomenon is a cultural phenomenon.

Limitations

One of the limitations was the low number of studies determining the adaptation factors to these complications and the low number of intervention studies to improve postmenopausal women's health. The association of menopausal symptoms with each other has been reported in a low number of studies. Another limitation was the presence of covid-19 disease, which slowed the research process and caused researchers' illness.

Declarations

Acknowledgment

We are particularly grateful to the researchers who have provided us with a wealth of knowledge and experience of menopause. As well, we thank professors of the Faculty of Health, and Research Committee of Mashhad University of Medical Sciences.

Authors' contributions

khandehroo wrote the main manuscript text and peyman and khandehroo prepared figures and tables. All authors reviewed the manuscript.

Funding

This study sponsored Mashhad University of Medical Sciences. There were no funding agencies role in design of study, data collection and analysis, or presentation of the results .

Availability of data and materials

All data generated and analyzed during this study are included in this published article.

Ethics approval and consent to participate

This article is a part of the Ph.D. thesis in the field of Health Education and Health Promotion in Mashhad University of Medical Sciences. All procedures performed in studies were in accordance with the ethical standards of the institutional research committee with the 1964 Helsinki declaration. This proposal has been approved by the Ethics Committee of Mashhad University of Medical Sciences ; approval ID:IR.MUMS.FHMPM.REC.1400.076) .

Address: <https://ethics.research.ac.ir/IR.MUMS.FHMPM.REC.1400.076> (2020 year).

Consent for publication

Not applicable.

Competing interests

There is no potential conflict of interest between the authors.

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Table

Table 2 is available in the Supplementary Files section

Figures

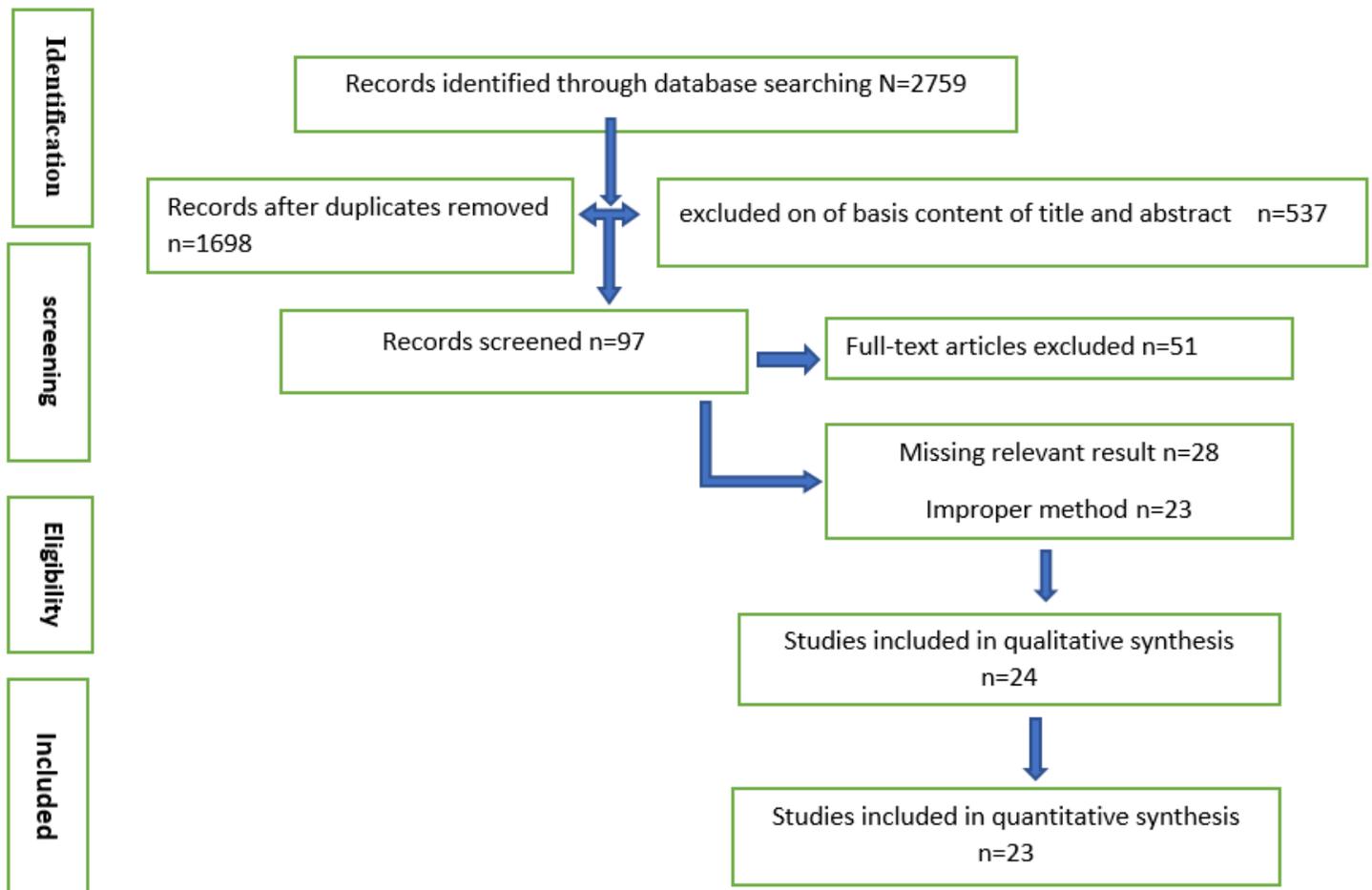


Figure 1

Flowchart of articles in systematic review

Supplementary Files

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- [Table2.docx](#)