# Frequency of Physical, Mental and Social Health problems in post-menopausal females, A Cross-Sectional Study

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[1,2] *Conception of study*
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[1,4,5] *Analysis/Interpretation/Discussion*
[1,6,7,8,10] *Manuscript Writing*
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## Abstract

**Introduction:** Each year globally, 85% of women experience menopause-related symptoms, the most common being hot flashes, night sweats, mood swings, apprehension, anxiety and weight gain. Addressing these symptoms is needed to improve the health status of post-menopausal women, which is possible through education and counselling to improve the attitudes of women and their families towards menopause.

**Objectives:** To determine frequency of health problems in post-menopausal females

**Methodology:** Three hundred twenty-five post-menopausal women from outpatient departments of Allied Hospitals of RMU were recruited in descriptive cross-sectional study by consecutive sampling and interviewed.Data were entered on SPSS version 22 and analysed.

**Results:** The highest percentage of respondents were 51-55years of age (55%) followed by 46-50years (28%). The most frequent physical problems were tiredness (72%) and joint pains (66.8%). Commonest mental health issues reported was indecisiveness (75%) and forgetfulness (66.8%). The most common social health problems were staying silent (43%), and discomfort while travelling (39%).

**Conclusion:** Various grades of social, physical and mental symptoms exist in our postmenopausal women. There is a dire need of recognizing them so that these women can be helped by psychological support and lifestyle enhancement.

**Keywords:** Menopause, mental and social health, education, and counselling.

## Introduction

Menopause is the permanent cessation of menses.[1] It is diagnosed retrospectively when the woman hasn't had her menses for at least 12 months.[2] The average age is around 52 years, but it can occur anywhere between 40 to 58 years.[3] Menopause is challenging for most women around the globe as it is associated with a wide variety of symptoms that affect the quality of life for these individuals.[4] These symptoms are due to fluctuations in the hormone levels that occur in the peri-menopausal and menopausal states, which leaves them susceptible to various mental, physical, and social disorders.[5] Annually, 85% of women experience menopause-related symptoms.[6] The transition to menopause is a unique experience for every woman, with the symptoms varying widely based on psychological, socio-cultural, and ethnic differences.[7] However, the most common symptoms are hot flushes, night sweats, insomnia, vaginal dryness, mood swings, and weight gain. Anxiety, both major (23%) and minor (68%), was also found to be relatively common.[8] Physical and emotional exhaustion was found in 71% of the menopausal women, with irritability affecting 68% of them.[6] Joint and muscular discomfort, CVS-related problems, decline in cognitive functioning, and even sexual dysfunction have also been reported.[9,10] Vertebral fractures, as a sign of osteoporosis, can also occur in post-menopausal women.[11]

Due to all these factors, impaired health has greatly altered workability and social performance.[12] Since a woman spends almost one-third of her lifespan in the menopausal state, these attributes need to be thoroughly considered in order to improve the quality of life for females when they suffer the consequences of these hormonal changes.[13,14] Quality of life worsens with age; tending to this condition early can save from the devastating sequelae.[15] Enhancement in the quality of life seems to be linked with a good partner and adequate psychological support.[16] Lifestyle modifications and weight loss have been found to be beneficial.[17] It has been proven that the use of hormone therapy reduces the symptoms of menopause, hence establishing a possible remedy in severe cases.[18]

Due to lack of resources, and the fact that discussing menopause is considered taboo in Pakistan, only few comprehensive studies done on the topic are available, and data collection from the subject was also hindered. This study was taken to determine the quality of mental and social health and the factors leading to poor mental and social health in post-menopausal women and help raise awareness among low socio-economic groups about post-menopausal women's social and mental well-being.

## Materials and Methods

A cross-sectional study in the OPDs of Allied hospitals of Rawalpindi Medical University (RMU), lasting for 08 months. A sample of 325 post-menopausal women was selected by consecutive sampling (the sample size was calculated via a sample size calculator). Only post-menopausal women above 40 and below 80 were selected,[19] so women with premature menopause, those taking hormones, radiotherapy/chemotherapy/surgery-induced menopause were excluded, as well as those with any comorbidity (e.g., CHD, psychological illness). Informed consent was taken from the participants. The questionnaire was prepared by a group of senior gynaecologists based on reference studies.[20,21] Data was collected by

interview using a structured questionnaire to record demographic details and the effects on physical, social and mental health of the participant.

Data was only collected after approval from the MS of the respective hospital. 10-point scoring system was used, in which 10 questions from physical, mental and social health each were asked from the participants who were assessed out of 10 points for each category (mild, moderate, severe). Scoring of all the three variables physical, mental, and social health was done using Pearson correlation and Sig. (2-tailed). Pearson correlation showed the strength of linear relation. Data were retrieved in Excel and analysed using SPSS version 22, with categorical variables being analysed via the Chi-square test and numerical variables by student T-test.

## Results

A total of 325 respondents were selected for analysis. 48.18 years (SD 4.7) was the mean age of menopause. Table 1 shows the demographic profile of the participants.

**Table I: demographic profile of participants**

| Demographic characteristic | Category | n (%) |
|---|---|---|
| | <50 | 51 (15.7%) |
| | 50-55 | 152 (46.89%) |
| | 56-60 | 75 (23.1%) |
| | 61-65 | 15 (4.6%) |
| **Age in years** | 66-70 | 20 (6.2%) |
| | >70 | 12 (3.7%) |
| | Unemployed | 218 (67%) |

| | | |
|---|---|---|
| **Employment** | Self Employed | 4 (1.2%) |
| | Job | 103 (31.7%) |
| **Number of children** | 0-3 | 154 (47.4%) |
| | 4-7 | 158 (48.6%) |
| | 8-10 | 13 (4%) |
| **Residence** | Rural | 71 (21.8%) |
| | Urban | 254 (78.2%) |
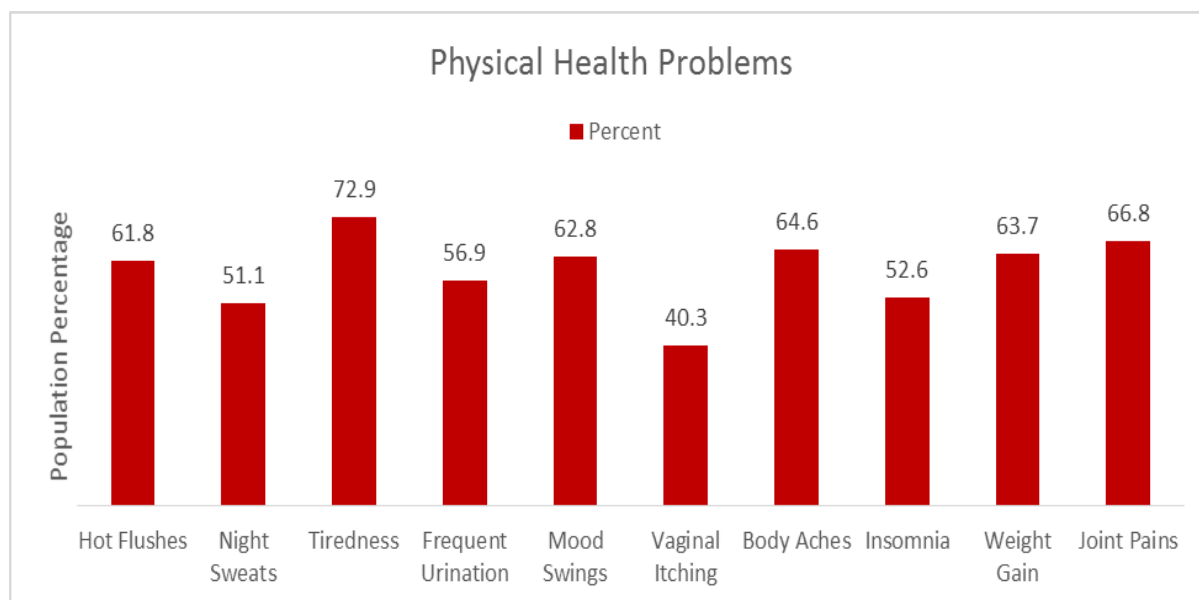


**Figure1:Frequency of physical health problems in postmenopausal females**

## Mental Health Problems

■ Percent



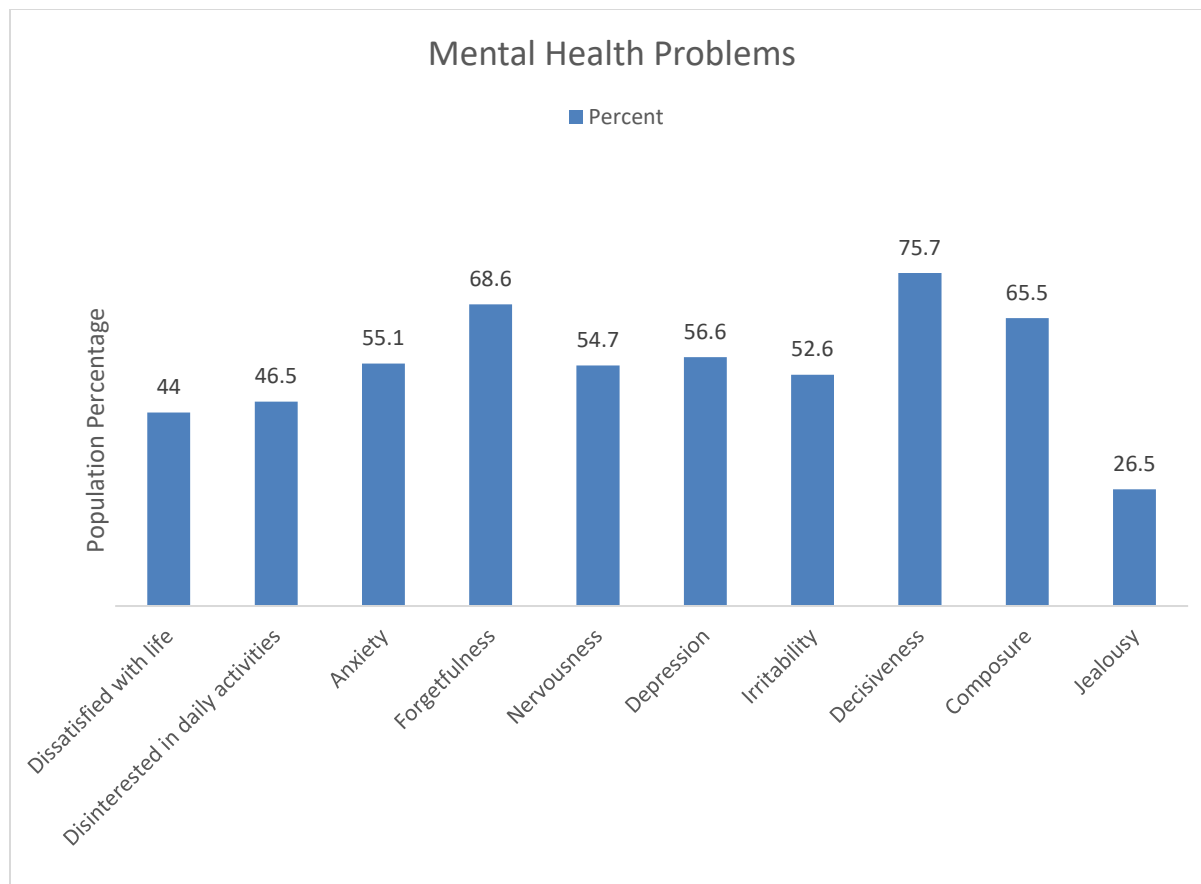**Figure 2: Frequency of mental health problems in postmenopausal females**

The most frequent mental health problem is impaired decisiveness 75% , forgetfulness 68.6%, loss of composure 65%.
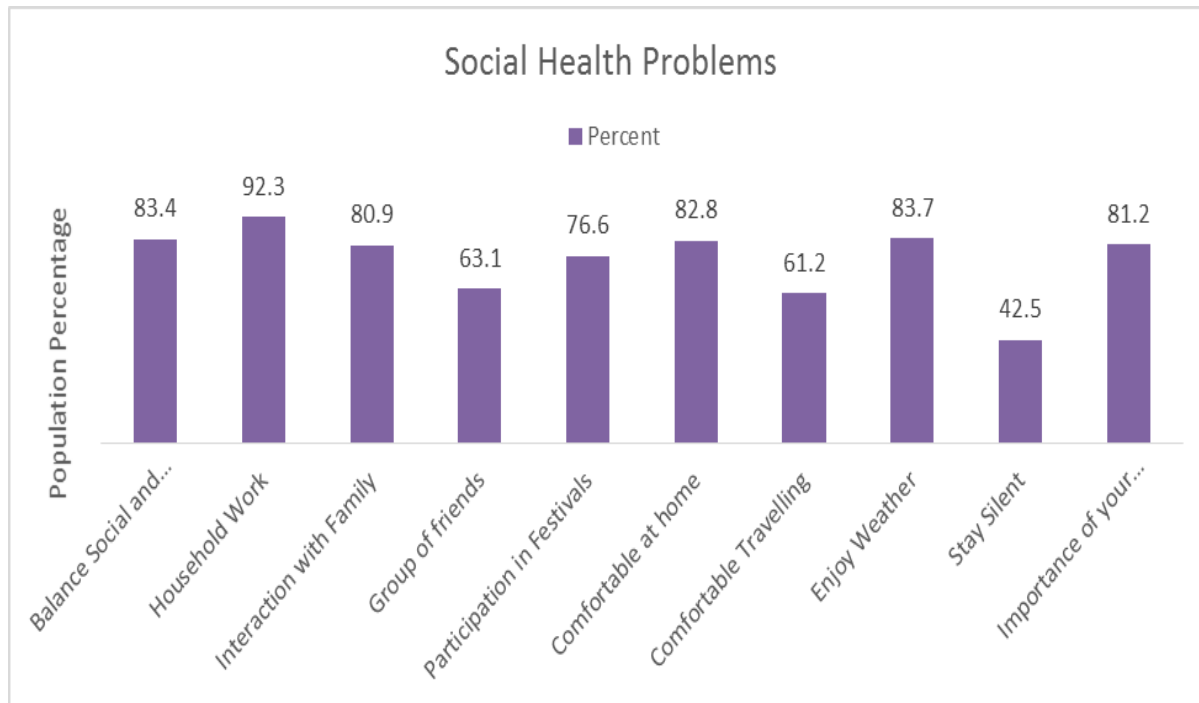
**Figure 3: Social health problems in postmenopausal females**

Among social health issues the most frequent is difficulty in performing household work 92%, imbalance between personal and social life 83% , reduced comfort at home 82%.

Categorization of physical, mental, and social health was done with a score of 10 given to each, with 0-3 representing a mild effect, 4-6 denoting moderate effect, and 7-10 meaning severe effect. Only 15% reported three or fewer physical health symptoms. 38% reported three or fewer mental health symptoms. Social health problems were the least experienced, with 75% of patients experiencing three or fewer social health problems. These findings are summarized in table II.

**Table II: Categorization of health problems:**

|  | **Severity** | **n (%)** |
|---|---|---|
| Physical health problems | Mild | 51 (15.7) |
|  | Moderate | 136 (41.8) |
|  | Severe | 138 (42.5) |
| Mental health problems | Mild | 125 (125) |
|  | Moderate | 123 (37.8) |
|  | Severe | 77 (23.7) |
| Social health problems | Mild | 242 (74.5) |

| | | |
|---|---|---|
| Moderate | 71 (21.8) | |
| Severe | 12 (3.7) | |

Pearson correlation was applied, and a significant negative correlation was found between mental health and physical health. Pearson correlation came out to be 0.521 (Table 1). $r^2$ came out to be 0.27, which means 27% of the negative mental health problems were due to the affected physical health. (table III)

**Table-III: Pearson correlation between Physical, Mental, and social problems**

| | | Physical Health | Social Health | Mental Health |
|---|---|---|---|---|
| **PH Total** | Pearson Correlation | 1 | .128* | -.521** |
| | Sig. (2-tailed) | | .021 | .000 |
| | N | 325 | .325 | 325 |
| **SH Total** | Pearson Correlation | .128* | 1 | .068 |
| | Sig. (2-tailed) | .021 | | .225 |
| | N | .325 | 325 | 325 |
| **MH Total R** | Pearson Correlation | -.521** | .068 | 1 |
| | Sig. (2-tailed) | .000 | .225 | |
| | N | 325 | 325 | 325 |

The chi-square test was applied, and a significant association was found between the age of participants and the physical, mental, and social health symptoms (p<0.005).

Physical symptoms (>7 symptoms) were high at the onset of menopause (<50yrs) and increased at later ages (>66yrs). Mental health symptoms (>7 symptoms) were more prominent in later ages (>70 yrs.). There was no obvious trend in social health symptoms.

Table IV shows the frequency of exceptionally high numbers (≥7) of physical, mental, and social symptoms in different age groups.

**Table-IV: Relation of Age to Incidence of Physical, Mental, and Social Symptoms**

| Age groups | ≥7 Symptoms of Physical Health (%) | ≥7 Symptoms of Mental Health (%) | ≥7 Symptoms of Social Health (%) |
|---|---|---|---|
| **<50** | 56.8 | 7.8 | 64.7 |
| **50-55** | 34.8 | 28.9 | 82.2 |
| **56-60** | 32 | 20 | 68 |
| **61-65** | 40 | 20 | 80 |
| **66-70** | 70 | 15 | 65 |
| **>70** | 100 | 66.7 | 66.7 |

## Discussion

Our study reported 48.18years as the mean age of menopause whereas other studies from Pakistan, Iran and USA reported 48.9[22], 47.3[23] and 51.4[24] respectively. These similarities might be explained by common race, social factors, extrinsic factors[25] such as smoking and contraceptive hormones or intrinsic factors such as reproductive history.[26]

The most common physical health problem in our study were in the following order: tiredness (72%), joint pains (66%), and body aches (64%). A study conducted by Gorecka on Polish women, also reports fatigue (75.5%) and hot flushes (62.3%) in postmenopausal women [27] However, joint pains were reported more in Iran[25] ,India[28] and Malaysia[29] which means that postmenopausal women living in Asian regions are more likely to develop joint pains, this might be due to racial, genetic, geographical and lifestyle factors.

Our study results were also seconded by a study conducted in Sweden which reported that a better quality of physical, mental, and social health was obvious for the older age groups compared with the younger ones. [31] The higher physical health symptoms at the extreme ages of

>70 years are most probably age related. An article from India reports that post-menopausal women experience vaginal dryness, stiff or sore joints and urinary leakage.

Studies have showed that increasing social and family support[32] are most beneficial for post-menopausal women in treating their problems.[31]

Mental health issues reported in our study showed that indecisiveness (75%) was on top with forgetfulness (68%) second. A study conducted in Ethiopia reported depressive mood (46.0%), irritability (45.1%), and anxiety (39.8%) to be the most reported individual symptoms in postmenopausal women.[33] Mental health symptoms in our study were more reported in urban women which was consistent with a study from Asunción-Paraguay in which 216 urban-living women were surveyed, and anxiety and nervousness (70.8%) was found to be the most prevalent symptom.[34] Urban areas are busier with less casual non work related social interactions especially for older people living at home which might lead to greater mental health problems.

The most common social health symptoms presented were staying silent (43%) and lack of comfort while traveling (39%). Social health problems were found to be the least common among our population which might be due to the joint family systems in Pakistani society. Social health symptoms were more reported in women who were unemployed which means that a lack of financial security leads to social problems in post-menopausal women. A study from Iran showed a higher level of self-care in employed and educated postmenopausal females. [35]

## Conclusion

Menopausal symptoms can be a significant physical and emotional burden on women in middle and old ages. The need for education and counselling of females, their spouses and families is felt. Besides, improving emotional and social support, planning for lifestyle enhancement, and improving socio-economic status are needed, which results in promoting women's health.

## References

1. Nelson HD. Menopause. Lancet. 2008;371(9614):760-770.
2. Koothirezhi R, Ranganathan S. Post-menopausal Syndrome. [Updated 2022 Apr 28]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-.
3. Barkoot Sr S, Saeed A, AlMetrek M, AlShahrani S, AlHomedi H, AlShahrani A, AlQahtani O, AlShehri S. The Quality of Life of and Social Determinants Affecting Menopausal Women in Aseer's Healthy Cities in Saudi Arabia: A Cross-Sectional Study. Cureus. 2022 Nov 27;14
4. Aloufi B, Hassanien NS. The Association of Menopausal Symptoms and Social Support Among Saudi Women at Primary Health Care Centers in Taif, Saudi Arabia. Cureus. 2022 Jun 20;14
5. Karmakar N, Majumdar S, Dasgupta A, Das S. Quality of life among menopausal women: A community-based study in a rural area of West Bengal. Journal of mid-life health. 2017 Jan;8(1):21.
6. Sussman M, Trocio J, Best C, Mirkin S, Bushmakin AG, Yood R, Friedman M, Menzin J, Louie M. Prevalence of menopausal symptoms among mid-life women: findings from electronic medical records. BMC Women's Health. 2015 Dec;15
7. Talaulikar V. Menopause transition: Physiology and symptoms. Best practice & research Clinical obstetrics & gynaecology. 2022 May 1;81:3-7.
8. Bauld R, Brown RF. Stress, psychological distress, psychosocial factors, menopause symptoms and physical health in women. Maturitas. 2009 Feb 20;62(2):160-5.
9. Kalhan M, Singhania K, Choudhary P, Verma S, Kaushal P, Singh T. Prevalence of menopausal symptoms and its effect on quality of life among rural middle aged women (40–60 Years) of Haryana, India. International Journal of Applied and Basic Medical Research. 2020 Jul;10(3):183.
10. Johnson A, Roberts L, Elkins G. Complementary and Alternative Medicine for Menopause. J Evid Based Integr Med. 2019;24:2515690X19829380. doi:10.1177/2515690X19829380
11. Rostom S, Allali F, Bennani L, Abouqal R, Hajjaj-Hassouni N. The prevalence of vertebral fractures and health-related quality

of life in post-menopausal women. Rheumatol Int. 2012;32(4):971-980.

12. Rindner L, Nordeman L, Strömme G, et al. Prognostic factors for future mental, physical and urogenital health and work ability in women, 45-55 years: a six-year prospective

13. Rindner, L., Nordeman, L., Strömme, G. *et al.* Prognostic factors for future mental, physical and urogenital health and work ability in women, 45–55 years: a six-year prospective longitudinal cohort study. *BMC Women's Health* 20, 171 (2020). https://doi.org/10.1186/s12905-020-01015-4

14. Takahashi TA, Johnson KM. Menopause. Med Clin North Am. 2015;99(3):521-534.

doi:10.1016/j.mcna.2015.01.006

15. Krishnamoorthy Y, Sarveswaran G, Jayaseelan V, Sakthivel M, Arivarasan Y, Bharathnag

N. Assessment of Quality of Life Based on Psychological, Somatovegetative, and Urogenital Health Problems among Post-menopausal Women in Urban Puducherry, South India: A Cross-Sectional Observational Study. J Midlife Health. 2018;9(4):173-179. doi:10.4103/jmh.JMH_61_18

16. Budakoğlu II, Ozcan C, Eroğlu D, Yanik F. Quality of life and post-menopausal symptoms among women in a rural district of the capital city of Turkey. Gynecol Endocrinol. 2007;23(7):404-409.

17. Rindner L, Nordeman L, Strömme G, et al. Prognostic factors for future mental, physical and urogenital health and work ability in women, 45-55 years: a six-year prospective longitudinal cohort study. BMC Womens Health. 2020;20(1):171. Published 2020 Aug 12.

18. Rostom S, Allali F, Bennani L, Abouqal R, Hajjaj-Hassouni N. The prevalence of vertebral fractures and health-related quality of life in post-menopausal women. Rheumatol Int. 2012;32(4):971-980

19. Yahya S, Rehan N. Age, pattern and symptoms of menopause among rural women of Lahore. J Ayub Med Coll Abbottabad. 2002 Jul-Sep;14(3):9-12. PMID: 12476855.

20. Nisar, N. (n.d.). Severity of Menopausal symptoms and the quality of life at different status of Menopause: a community based survey from rural Sindh, Pakistan. Insight Medical Publishing. https://internalmedicine.imedpub.com/severity-of-menopausal-symptoms-and-the-quality-of-life-at-different-statusof-menopause-a-community-based-survey-from-rural-sindh-pakistan.php?aid=6037

21. Namazi M, Sadeghi R, Behboodi Moghadam Z. Social Determinants of Health in Menopause: An Integrative Review. Int J Womens Health. 2019 Dec 9;11:637-647. doi: 10.2147/IJWH.S228594. PMID: 31849539; PMCID: PMC6910086.

22. Mazhar SB, Rasheed S. Menopause Rating Scale (MRS), A simple tool for assessment of climacteric symptoms in Pakistani women. Ann Pak Inst Med Sci. 2009;5(3):158-61

23. Asadi M, Jouyandeh Z, Nayebzadeh F. Prevalence of menopause symptoms among Iranian women. Journal of Family and Reproductive Health. 2012:1-3.

24. Gold EB, Bromberger J, Crawford S, Samuels S, Greendale GA, Harlow SD, et al. Factors associated with age at natural menopause in a multiethnic sample of midlife women. American journal of epidemiology. 2001;153(9):865-74.

25. Abasi EL, Keramat AF, Ghorbani M. The Relationship between Social Support, General Health Status, and Severity of Menopause Symptoms among Postmenopausal Women in Northern Iran. J. Med. Heal. Sci. 2020;14:771-6.

26. Thomas F, Renaud F, Benefice E, De Meeus T, Guegan J-F. International variability of ages at menarche and menopause: patterns and main determinants. Human biology. 2001;73(2):271-90.

27. Górecka K, Krzyżanowska M. Prevalence of menopausal hormone therapy and alternative methods, health benefits experienced by peri- and postmenopausal Polish women. Prz Menopauzalny [Internet]. 2022 [cited 2023 Aug 13];21(1):27–36. Available from: http://dx.doi.org/10.5114/pm.2022.113731

28. Santhi Vadugu VL. The Menopause Rating Scale (MRS) in Indian Women. Journal of Evidence based Medicine and Healthcare. 2015;2(54):8789-91.

29. Rahman SASA, Zainudin SR, Mun VLK. Assessment of menopausal symptoms using modified Menopause Rating Scale (MRS) among middle age women in Kuching, Sarawak, Malaysia. Asia Pacific family medicine. 2010;9(1):5.

30. Bhutani S, Bhutani J, Bhutani P. Social issues in post menopausal women. J Midlife Health. 2013 Jan;4(1):68-9. doi: 10.4103/0976-7800.109649. PMID: 23833544; PMCID: PMC3702076

31. Ekström H, Hovelius B. Quality of life and hormone therapy in women before and after menopause. Scand J Prim Health Care. 2000 Jun;18(2):115-21.

32. Shariat Moghani S, Simbar M, Dolatian M, Nasiri M. The relationship between perceived social support and women experiences in menopause. Scientific and Research Journal of Nursing and Midwifery Faculty. 2015;25(90):55-64.

33. Yisma E, Eshetu N, Ly S, Dessalegn B. Prevalence and severity of menopause symptoms among perimenopausal and postmenopausal women aged 30-49 years in Gulele sub-city of Addis Ababa, Ethiopia. BMC Womens Health [Internet]. 2017 [cited 2023 Aug 13];17(1). Available from: https://pubmed.ncbi.nlm.nih.gov/29216870/

34. Sánchez-Zarza SC, Armeni AK, Chedraui P, Pérez-López FR, Gavilanes AWD. Prevalence of menopausal symptoms and severity-related factors among mid-aged Paraguayan women as measured with the 10-item Cervantes Scale. Gynecol Endocrinol [Internet]. 2023 [cited 2023 Aug 13];39(1). Available from: https://pubmed.ncbi.nlm.nih.gov/37478894/

35. Simbar M, Nazarpour S, KhodaKarami N, Nasiri Z, Rashidi Fakari F, Kiani Z, Keyvanfar S, Alavi Majd H. A situation analysis on postmenopausal women's self-care needs and priorities in Tehran: a population-based study. BMC Public Health. 2023 Dec;23(1):1-3