

How to Cite:

Hanson, V. F., Pitre, S., & Kumardhas, V. (2022). Menopause is a natural stage: Prevalence and experience of menopause symptoms among university faculty members in Rakmhsu and India. *International Journal of Health Sciences*, 6(S3), 3187–3197.
<https://doi.org/10.53730/ijhs.v6nS3.6326>

Menopause is a natural stage: prevalence and experience of menopause symptoms among university faculty members in Rakmhsu and India

Dr. Victoria Funmilayo Hanson, PhD

RAK Medical and Health Sciences University, RAK College of Nursing. Ras Al Khaimah, United Arab Emirates
Email: victoria@rakmhsu.ac.ae

Dr. Sneha Pitre PhD

RAK Medical and Health Sciences University, RAK College of Nursing. Ras Al Khaimah, United Arab Emirates
Email: sneha@rakmhsu.ac.ae

Dr. Vijaya Kumardhas PhD

RAK Medical and Health Sciences University, RAK College of Nursing. Ras Al Khaimah, United Arab Emirates
Email: Vijaya@rakmhsu.ac.ae

Abstract---Menopause is a natural phenomenon occurring as women approach middle age, the transitional period in a woman's life when her ovaries start producing less of the sex hormones estrogen and progesterone marking the end of her reproductive years. Due to a growing aging population and longer life expectancies, globally women will spend a significant portion of their lives in post-menopause. Women's experiences, views, and responses to menopause that influences women's daily life and well-being, may vary between different societies and cultures. Aim: To assess the prevalence and experience of menopause symptoms of university faculty members in RAKMHSU and INDIA. Cross sectional survey was carried out among thirty nine-university faculty by using purposive sampling technique. Menopause specific quality of life questionnaire was used for collecting the data and was analysed by using SPSS version 25. A total of 39 women participated in the study, the majority of women (76.9%) reached menopause after 45 years of age. Muscular and joint pain was experienced by majority (74.4%) of participants, followed by weight gain (71.8%) and insomnia (66.7%), the least reported

symptom were 'being dissatisfied with personal life' and "Feeling depressed, down and blue" both at 10.3%. There was a highly significant correlation between the four domains at a significance level of 0.01. This result provide an opportunity for expansion into further studies to enumerate the true prevalence and severity of menopausal symptoms among faculty members in university. The MENQOOL instrument could be applied to different faculty populations. Future work should be conducted to better understand the unmet health needs of women entering or experiencing menopause. Women who experience joint pain as well as weight gain and fatigue while going through menopause with an increased risk for developing lifestyle diseases. The menopause related symptoms will have a negative effect on the quality of life of the menopausal. Such regional studies can help in creating awareness and in educating women on the early identification of the common menopausal symptoms.

Keywords---menopause transition, severity, aging, faculty, MENQOOL.

Introduction

Menopause, defined as the end of menstruation due to the loss of ovarian follicular activity, which is known to decrease in the late 30 s with complete loss in most women in the early 50. The number of postmenopausal women globally is expected to reach 1.2 billion by 2030 .The term 'menopausal transition' can be used synonymously with the term 'peri-menopause'. The period of change in ovarian function from being fertile to becoming infertile, called menopausal transition, is a natural and inevitable change that affects all women. Although, menopause is considered to be a universal occurrence it is affected by socio-cultural norms, and women's experiences of the menopausal transition is consequently handled by women in different ways. According to menopause is an experience hidden within the cultural background of patriarchy for which women give up their own needs including health care needs in favor of the needs of their family, consequently making menopausal transition invisible.

However, after mid-forties, almost all women, irrespective of their cultural background and health conditions, begin to experience physical, psychological and emotional disturbances. These disorders coincide with a progressive decline of female hormones, estrogen and progesterone, culminating to a total shutdown from the ovaries, diagnosed as menopause. During this period, women present difficulties in accurately describing physical, psychosocial or sexual disturbances and report mainly hot flashes, nervousness, depression, insomnia, and general fatigue .These enormous groups of symptoms progressively worsen the well-being of women, and affect, consequently, their quality of life (QOL) on a daily basis. Since the definition presented by the in 1947, QOL refers to the "state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity" of individuals, irrespective of their age, race and socio-economic status. The World report on ageing and health responds to these challenges by recommending equally pro-found changes in the way health policies for ageing

populations are formulated and services are provided. As the foundation for its recommendations, the report looks at what the latest evidence has to say about the ageing process, noting that many common perceptions and assumptions about older people are based on outdated stereotypes.

The Menopause-Specific Quality of Life Questionnaire (MENQOL), developed initially by, focuses on the QOL of women in midlife, during the past month^{Error! Bookmark not defined.}. This tool has been validated and translated into many languages in various epidemiological and clinical settings. It has four domains covering vasomotor, psychosocial, physical and sexual aspects which was explored in this self-administered survey; they measure both the degree and the severity of several menopausal symptoms, that affect women. It is important to strengthen the general well-being during the menopausal transition by relieving troublesome menopausal symptoms, detecting and preventing chronic diseases. Little research is done on post-menopausal women in the Universities, which motivates the aim of this study, which is to investigate university women's experiences of menopause and quality of life. The knowledge provided in this research could be used to enhance care for women seeking help in menopause related problems and provide a basis to organize health care for menopausal women based on their needs.

The majority of women's health seeking behaviours depend on their tolerance of aging or their busy lifestyle with marriages, jobs and careers. It is important to strengthen the general well-being during the menopausal transition by relieving troublesome menopausal symptoms, detecting and preventing chronic diseases. No research is done on post-menopausal women in the university, which motivates the aim of this study. The knowledge provided in this research could be used to enhance care for women seeking help in menopause related problems and provide a basis to organize health care and support group for menopausal women based on their needs

Materials and Methods

Aim of the study

To assess the prevalence and experience of menopausal symptoms among faculty members from selected universities in UAE and India.

Research design

Descriptive Cross sectional survey design was used in the study.

Sampling method

Data was collected from 39 faculty members by using purposive sampling technique. Faculty who have attended the menopause, are above 45 years of age, have experienced menopause minimum for one year and gave consent participated in the study.

Instruments

Menopause - specific quality of life questionnaire was used for collection of data. It consists of 29 items in a Likert-scale format. Each item assesses the impact of one of four domains of menopausal symptoms, as experienced over the last month: vasomotor (items 1–3), psychosocial (items 4–10), physical (items 11–26), and sexual (items 27–29). For each specific symptom, participants rated it either yes or no, giving it a score of one if experienced, and zero if not. Reliability coefficient for this instrument is 0.728.

Data collection procedure

All faculty that fulfilled the inclusion criteria were contacted through their university mail ID after obtaining permission from ethical committee of RAK Medical and Health Sciences University .(RAKMHSU- REC-169-2020/21-F-N.The data was collected via electronic mode (google form) from those who gave consent for the participation in view of the Covid 19 pandemic.

Data analysis

Statistical package for social science (SPSS) version 25 was used for the analysis of the data.

Results

Table 1
Demographic characteristics of the participants (n = 39)

Variable	Frequency	Percent
Faculty		
General Education	2	5.1
Medical	2	5.1
Nursing	25	64.1
Others	2	5.1
Pharmacy	8	20.5
Nationality		
African	7	17.9
Asian	28	71.8
Others	4	10.3
Religion		
Christianity	13	33.3
Islam	12	30.8
Others	14	35.9
Marital Status		
Married	35	89.7
Separated/ Widow	4	10.3
Age of Menopause attainment		
40-45years	9	23.1

Above 45 years	30	76.9
Total	39	100.0

Table 1 reveals that majority of participants are Asian (71.8%); married (89.7%) and 76.9% attained menopause after the age of 45 years and majority were from Nursing college.

Table 2
Symptoms experienced by participants related to menopause (n=39)

VASOMOTOR DOMAIN	Frequency (%) Yes	Frequency (%) No
1, Hot Flushes/Flashes	23(59.0)	16(41.0)
2. Night sweat	19 (48.7)	12(51.3)
3. Sweating	21 (53.8)	18(46.2)
PSYCHOSOCIAL DOMAIN		
4. Being dissatisfied with personal life	4(10.3)	35(89.7%)
5. Feeling anxious or nervous	21(53.8)	18(46.2%)
6. Experiencing poor memory	6(15.4%)	33(84.6)
7. Accomplishing less than I used to	10(25.6)	27(69.2%)
8. Feeling depressed, down or blue	4(10.3)	33(84.6) ,
9. Being impatient with other people	10(25.6)	29(74.4)
10. Feeling of wanting to be alone	6(15.4)	33(84.6)
PHYSICAL DOMAIN		
11. Flatulence (wind)or gas pain	10(25.6)	29(74.4)
12. Aching in muscles and Joints	29(74.4)	10(25.6)
13. Feeling tired or worn out	23(59.0)	16(41.0)
14. Difficulty in sleeping	26(66.7)	13(33.3)
15. Aches in back of head or neck	21(53.8)	18(46.2)
16. Decrease in strength	15(38.5)	24(61.5)
17. Decrease in stamina	14(35.9)	25 (35.9)
18. Feeling a lack of energy	17(43.6)	22(56.4)
19. Dry Skin	23(59.0)	14(35.9) ,
20. Weight gain	28(71.8)	11(28.2)
21. Increased Facial hair	12(30.8)	27(69.2)
22. Changes in the appearance texture or tone of your skin	17(43.6)	22(56.4)
23. Feeling bloated	16(41.0)	23(59)
24. Low backache	21(53.8)	18(46.2)
25. Frequent Urination	16(41.0)	23(59.0)
26. Involuntary urination when laughing or coughing	10(25.6)	29(74.4)
SEXUAL DOMAIN		
27. Change in your sexual desire	21(53.8)	18(46.2)

28.Vaginal dryness during intercourse	19(48.7)	20(51.3)
29.Avoiding intimacy	13(33.3)	26(66.7)

Table.2 represents the domain wise symptoms experienced by participants related to menopause. With respect to vasomotor domain experience of hot flushes (59%) followed by sweating in the night (53.8%) was predominantly observed. Though anxiety and feeling nervousness were experienced by 53.8% of participants, the majority (84.6%) did not have feelings of depression. The decrease in sexual desire was reported by 53.8% of participants, but not the avoidance of intimacy. Of all symptoms, muscle and joint pain were experienced primarily by the majority of participants (74,4%).

Table 3
Correlation of MENQOL Domain

Correlations

		VASOMOTOR	PSYCOSOCIAL	PYSICAL	SEXUAL
VASOMOTOR	Pearson Correlation	1	1.000**	-1.000**	-.032
	Sig. (2-tailed)		0.000	0.000	.926
	N	17	4	4	11
PSYCOSOCIAL	Pearson Correlation	1.000**	1	-1.000**	1.000
	Sig. (2-tailed)	0.000		0.000	0.000
	N	4	4	4	4
PYSICAL	Pearson Correlation	-1.000**	-1.000**	1	-1.000
	Sig. (2-tailed)	0.000	0.000		0.000
	N	4	4	4	4
SEXUAL	Pearson Correlation	-.032	1.000**	-1.000**	1
	Sig. (2-tailed)	.926	0.000	0.000	
	N	11	4	4	13

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation coefficients between the four domains, which indicates that there was a highly significant correlation between the four domains at a significance level of 0.01.

Table 4
Association of MENQOL domains and socio demographic variables

Variable / Domain	X ² Value	df	Asymp. Sig. (2-sided)
College			
Vasomotor	25.636 ^a	12	.012
Psychosocial	23.664 ^a	12	.013
Physical	136.530 ^a	40	.000
Sexual	51.060 ^a	12	.002

Nationality			
Vasomotor	11.143a	6	.084
Psychosocial	17.040 ^a	6	.009
Physical	38.372a	20	.008
Sexual	9.936a	8	.270
Religion			
Vasomotor	38.352a	6	.000
Psychosocial	11.207a	6	.082
Physical	39.772a	20	.005
Sexual	18.269a	8	.019
Marital status			
Vasomotor	12.926a	3	.005
Psychosocial	3.435a	3	.329
Physical	23.172a	10	.010
Sexual	17.443a	4	.002

Table 4, shows significant association was observed between college and experience of symptoms related to physical and sexual domain of menopause. Significant association was also observed between Religion and symptoms belonging to vasomotor and physical domain among the participants

Discussion

Menopause is an important experience that changes a woman's life in different aspects; therefore, the QOL of menopausal women is important to assess. Our study, revealed that the most commonly reported symptoms was physical in nature: The most frequent symptom was 'aching in the muscles and joints' at 74.4%, and the least reported symptom were 'being dissatisfied with my personal life' and "Feeling depressed, down and blue" both at 10.3%. Most of the other physical symptoms were also commonly experienced. This finding is not similar to what was reported by, though result of findings is similar to a community based study among Emirate women.

Coping with menopausal symptoms may differ for women in different parts of the world, as culture may affect perceptions towards menopause, this was shown in

an exploratory qualitative study “Adopting Self-sacrifice”: How Iranian women cope with the sexual problems during the menopausal transition?. It revealed that women having a positive view towards menopause considered aging as a natural process and vice versa. A literature review on perspectives on Women’s Menopausal Health in India suggest that though women’s health beliefs, behaviour and coping patterns in India context differs from western counterparts, huge similarities are found in socio cultural and medical discourses. Menopause in India is seen as a normal life event and not associated with bio-psycho social morbidity paradigm. These findings differ from those in most European and Western studies in which the most commonly reported symptoms were hot flashes rather than other physical symptoms.

Another study reported difference may be explained by the different cultures; for example, in Japan, the menopause phase is called ‘konenki’, which means ‘renewal years and energy’ while the Arabic idiom for the menopause phase is ‘desperate age’ because it is considered the end of women’s life as they are no longer reproductive. Some social determinants of health are related to the health of women in menopause such as college of work, marital status, nationality and religion that the present research assessed. The need for education, improving emotional and social support, planning for lifestyle enhancement, and improving socio-economic status is necessary in promoting women’s health during menopause. This study’s is similar to our study that reveals association between the four domains of MENQOOL and the socio demographic variable (college, nationality, religion and marital status). It was found that college is significantly associated with all the four domains of menopausal symptoms while religion and marital status are associated with three of the four domains of menopausal symptoms; while nationality is the least being significantly associated with the physical and psychosocial domains.

Symptoms experiences of the participants

In our study, physical domain symptoms were the most reported with aching of muscles and joints at 74.4% , weight gain 71.8% and feeling tired and dry skin with 59% ; it was followed by vasomotor domain symptoms where hot flushes was reported as 59% and sweating 53%. Sexual domain symptoms followed in which changes in sexual desire was reported as 53.6% while the least felt domain was psychosocial symptoms reported by 53.8 % of the participants. This is similar to what was reported in the study conducted in the United Arab Emirates by **Error! Bookmark not defined.** , in their study, employed women experienced more symptoms. This may be related to culture, as discussing sexual problems is considered taboo in many cultures, including the Arabic one.

The findings of this study on faculty experiences in selected universities is in congruent with women’s experiences of menopause in Sri Lanka that menopause was perceived as a stage of the normal aging process. Women in the current study experienced unpleasant menopausal physical symptoms as seen in the category entering a new stage in life, similar to other women around the world. Further, they also meant that menopause had brought about positive changes in their life pattern as seen in the category not the end of life and that they were able to carry out their responsibilities as before the menopause.

It is a known fact that serotonin in the body act as a mood stabilizer **Error! Bookmark not defined.** Imbalance in estrogen , progesterone and testosterone during menopause lowers the level of serotonin and endorphins whereas increases the level of cortisol and adrenalin . These hormonal changes affect the stress response and may lead to feeling of anxiety and irritability. It may explain why substantial number of participants (53.8%) in the study, express feelings of anxiety. Similar findings were observed in the study by where anxiety symptom was observed among 58.43% participants during perimenopausal period. Menopausal period is very crucial in life of women, decline in important hormones like estrogen and progesterone affects the quality of life due to significant change in physiological and psychosocial functioning of the body. These symptoms are categorized in to four domains like vasomotor, psychosocial ,physical and sexual. In the present study significant correlation was observed among all these domains. It indicates that all symptoms associated with menopause are interrelated and are unique. These symptoms imposes a risk for developing various health issues .Women who frequently experience hot flushes are likely to develop cardiovascular diseases. As per the findings of our study 59% of participants are at risk of developing cardiovascular diseases.

Research done by others also suggests that there is a significant association between anxiety and symptoms like hot flushes, muscular and joint pain. Present study findings also reveals that more than 50 % of participants experience feeling of anxiety, hot flushes and muscular and joint pain and there is strong correlation between the domains containing these symptoms. The perception of menopause as a natural component of the life cycle may however contribute in ignoring menopausal health risks or delaying necessary treatment until too late a stage. This perception may also explain why reported that women in Sri Lanka had a significantly decreased health-related quality of life due to menopausal symptoms, this is at variance with the present study in which faculty members are aware of the health related risks due to their profession. This confirms that Sri Lankan women's health-seeking behavior related to menopausal changes is dependent on a busy life, mainly due to family involvement. This study therefore seems vital to encourage faculty women to take part in screening, as they are likely to ignore serious symptoms because they prioritize professional obligations instead of seeking health care for themselves.

Conclusion

The prevalence and severity of menopause symptoms among postmenopausal faculty members above 45 years of age in selected countries was assessed using the MENQOOL questionnaire. The most commonly reported individual symptoms were aching in muscles and joints, weight gain, feeling tired and worn out, hot flushes and sweating. Women reported psychological menopause symptoms as the most severe experience. Further investigations are required to be conducted among faculty with larger population in different areas of the Emirates.

Practice Implications

This result provides an opportunity for expansion into further studies to enumerate the true prevalence and severity of menopausal symptoms among

faculty members in universities. The MENQOOL instrument could be applied to different faculty populations. Future work should be conducted to better understand the unmet health needs of women entering or experiencing menopause.

Acknowledgement

We would like to thank the faculty members of all the colleges in selected universities in United Arab Emirates and India for their cooperation and active participation in the study.

Conflict of interest: None declared

References

- Afshari F, Bahri B, Sajjadi N, Mansoorian MR, Tohidinik HR. Menopause uncertainty: the impact of two educational interventions among women during menopausal transition and beyond. *Menopause Rev.* 2020;19(1):18–24. <https://doi.org/10.5114/pm.2020.95305>.
- Bahri N, Roudsari RL. “Moving from uncertainty toward acceptance”: a grounded theory study on exploring Iranian women’s experiences of encountering menopause. *J Psychosom Obstet Gynecol.* 2020;14(2):154– 64. <https://doi.org/10.1080/0167482X.2019.1678018>
- Bruce D, Rymer J. Symptoms of the menopause. *Best Pract Res Clin Obstet Gynaecol.* 2009 Feb;23(1):25–32. pmid:19056320
- Emma, J.; Janelle, J.; Sandra, T. Menopause and the influence of culture: Another gap for Indigenous Australian women? *BMC Women’s Health* 2012, 12, 43. [CrossRef]
- Eric, B. Women’s Health, Your Menopause Experience May Depend on Your Cultural Background. Available online: <https://www.everydayhealth.com/menopause/menopause-and-culture.aspx> (accessed on 25 October 2019).
- Genazzani, A.R.; Schneider, H.P.; Panay, N.; Nijland, E.A. The European menopause survey 2005: Women’s perceptions on the menopause and postmenopausal hormone therapy. *Gynecol. Endocrinol.* 2006, 22, 369–375. [CrossRef]
- Goodman NF, Cobin RH, Ginzburg SB, Katz IA, Woode DE. American association of clinical endocrinologists’ medical guidelines for clinical practice for the diagnosis and treatment of menopause. *Endo Practice.* 2011;17:1–25.
- Hilditch JR, Lewis J, Peter A, van Maris B, Ross A, Franssen E, et al. A menopause-specific quality of life questionnaire: development and psychometric properties. *Maturitas.* 1996 Jul;24(3):161–75. pmid:8844630 <https://doi.org/10.2147/IJWH.S228594>
- Jaeger, M.D.B., Miná, C.S., Alves, S., Schuh, G.J., Wender, M.C. and Manfro, G.G., 2020. Negative affect symptoms, anxiety sensitivity, and vasomotor symptoms during perimenopause. *Brazilian Journal of Psychiatry*, 43, pp.277-284.
- Jenkins TA, Nguyen JC, Polglaze KE, Bertrand PP. Influence of tryptophan and serotonin on mood and cognition with a possible role of the gut-brain axis. *Nutrients.* 2016 Jan;8(1):56.

- Khadija, W.; Amna, K.; Sara, E.; Ambreen, B.; Fawad, A.R. Quality of life after menopause in Pakistani women. *Gynecol. Obstet.* (Sunnyvale) 2016
- Lv J, Liu F. The role of serotonin beyond the central nervous system during embryogenesis. *Front Cell Neurosci.* 2017;11. doi:10.3389/fncel.2017.00074
- Meleis AI. *Transition theory: Middle range and situation specific theories in nursing research and practice.* 2010; 1st ed. New York: Springer.
- Namazi M, Sadeghi R, Behboodi Moghadam Z. Social Determinants of Health in Menopause: An Integrative Review. *Int J Womens Health.* 2019;11:637-647
- Núñez-Pizarro JL, González-Luna A, Mezones-Holguín E, Blümel JE, Barón G, Bencosme A, Benítez Z, Bravo LM, Calle A, Flores D, Espinoza MT. Association between anxiety and severe quality-of-life impairment in postmenopausal women: analysis of a multicenter Latin American cross-sectional study. *Menopause.* 2017 Jun 1;24(6):645-52.) Organization; 2015.
- Reed, S.D.; Guthrie, K.A.; Newton, K.M.; Anderson, G.L.; Booth-LaForce, C.; Caan, B.; Carpenter, J.S.; Cohen, L.S.; Dunn, A.L.; Ensrud, K.E.; et al. Menopausal quality of life: RCT of yoga, exercise, and omega-3 supplements. *Am. J. Obstet. Gynecol.* 2014, 210, 244.e1–244.e11. [CrossRef]
- Shakila P, Sridharan P, Thiyagarajan, S. An Assessment of Women's Awareness and Symptoms in Menopause (A Study with Reference to Academic Women's at Sri Lanka), *J Bus Econ Policy* 2014; 1(2).
- Shakila P, Sridharan P, Thiyagarajan, S. An Assessment of Women's Awareness and Symptoms in Menopause (A Study with Reference to Academic Women's at Sri Lanka), *J Bus Econ Policy* 2014; 1(2).
- Smail, L., Jassim, G., & Shakil, A. (2019). Menopause-Specific Quality of Life among Emirati Women. *International journal of environmental research and public health*, 17(1), 40. <https://doi.org/10.3390/ijerph17010040>
- Stanzel KA, Hammarberg K, Nguyen T, Fisher J. They should come forward with the information': menopause related health literacy and health care experiences among Vietnamese-born women in Melbourne, Australia. *Ethnicity Health.* 2020. <https://doi.org/10.1080/13557858.2020.1740176>.
- The WHOQOL Group. *The World Health Organization Quality of Life assessment (WHOQOL): position paper from the World Health Organization.* *Soc. Sci. Med.*, 41, 1403, 1995
- Thurston RC, Aslanidou Vlachos HE, Derby CA, Jackson EA, Brooks MM, Matthews KA, Harlow S, Joffe H, El Khoudary SR. Menopausal vasomotor symptoms and risk of incident cardiovascular disease events in SWAN. *Journal of the American Heart Association.* 2021 Feb 2;10(3):e017416.)
- Waidyasekera H, Wijewardena K, Lindmark G, Naessen T. Menopausal symptoms and quality of life during the menopausal transition in Sri Lankan women. *Menopause.* 2009;16(1):164–70.
- West Tiwari, Vibha, and A. K. Sharma. "Perspectives on Women's Menopausal Health in India: A Review." *Asian Journal of Social Science*, vol. 45, no. 1/2, Brill, 2017, pp. 93–125, <http://www.jstor.org/stable/44508279>.
- WHO: *World Report on Ageing and Health.* Geneva: World Health