REVIEW ARTICLE

KNOWLEDGE AND ATTITUDE REGARDING HEALTH AWARENESS AMONG MENOPAUSAL WOMEN OF SELECTED RURAL AREAS OF ANAND DISTRICT, GUJARAT-LITERATURE REVIEW

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ABSTRACT

The current study aims to assess the Knowledge & Attitude regarding Health awareness among Menopausal women at selected rural areas of Anand district, Gujarat. India has a large Population, which has already crossed the 1billionmark with 71 million people over 60 years of age and the numbers of menopausal women about 43 million. Projected figures in 2026 have estimated the population in India will be 1.4 billion, people over 103 million menopausal women. It is not the secret that the common perception is that western culture treats older women as if they were less valuable members of society. While Menopausal women in India experience the emotional and physiological problems, it is almost officially unheard in public circles. India has traditionally ignored women's health issues including menopause and latest societal trends are attempting to break the outdated attitudes towards women. As life expectancy and population of menopausal women increases, efforts are needed to educate them and make them aware about menopause. Thus the studies needed to done on knowledge and attitude regarding health awareness among menopause.

INTRODUCTION

Health is the term describing the state of being free from any kind of illness or diseases. Health is a form that assures the harmony between all the systems, organs and parts of the body. The main objective of health awareness is to provide health related knowledge to the people for preventing and curing diseases. Menopause is a Normal condition that all women experience as they age. The term "Menopause" can describe any of changes a woman goes through either just before or after she stops menstruating, marking the end of her reproductive period. Most women approaching menopause will have hot flashes, a sudden feeling of warmth that spread over the upper body, often with blushing and some sweating. Other common symptoms around the time of menopause includes: Insomnia, Mood swings, Fatigue, Depression, Irritability, Raching heart, headache, Joint and Muscle aches and pains, changes in libido, vaginal dryness, bladder control, etc. There is lack of awareness regarding menopause and health awareness regarding how to cope up with it to have a good

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quality of life is very limited. So, it is essential to recognize symptoms early and seek timely medical treatment for the same and improve quality of life. The literature review obtained through different database in searching using Cinhal (cumulative index to nursing & allied health literature), medline, google, pubmed, journal & articles.

MATERIAL METHOD AND FINDINGS

The study is headed in selected rural areas (Dahemi, Bamroli, Navli, Fangni) of Anand district, Gujarat on menopausal women. A descriptive study done by Ghimire. N (2015) conducted study on "Menopausal Health Status of Women of Kapilvastu District of Nepal". This study aimed to describe the prevalence of menopause, the associated health problems and their severity amongst women aged 40-60 years in Kapilvastu. All symptoms in the Menopause Rating Scale were experienced to some extent by at least 30% of women, even amongst the premenopausal group. The most common problems experienced by menopausal women were: sexual problems, physical and mental exhaustion and joint and muscular discomfort. The symptoms most frequently deemed "severe" or "very severe" were: sexual problems, joint and muscular discomfort and sleep problems. Middle-aged women

in Kapilvastu experienced menopausal symptoms to a substantial degree. The prevalence and severity of these symptoms increased with the menopausal transition, and with increasing age. Menopause itself did not appear to be the primary risk factor for typical "menopausal" symptoms. A cross-sectional study done by venuqopalan. p (2009) conducted study on "menopausal symptoms, and perceptions about menopause among women at a rural community in Kerala." The study was conducted among 106 postmenopausal women staying more than 6 months at Anjarakandy with the help of pretested questionnaire administered by a trained social worker from January to October 2009. The result that mean age of attaining menopause was 48.26 years. Thus study stated that all the ladies were suffering from one or more number of menopausal symptoms. Ladies should be made aware of these symptoms, their causes and treatment respectively.

A cross-sectional study done by Singh A (2013) conducted study on "Menopausal symptoms of postmenopausal women in a rural community of Delhi". The study was conducted in a rural area of New Delhi among 252 postmenopausal women from October 2011 to March 2013. Postmenopausal women experienced at least one or more menopausal symptom(s). The most common complaints of postmenopausal women were sleep disturbances, muscle or joint pain, hot flushes and night sweats. A total of 32.1% (n=81) postmenopausal women suffered from depression and 21.0% (n=53) postmenopausal women suffered from anxiety. It is necessary to critically introspect health needs of postmenopausal women and specific components can be incorporated in the national health programs. A descriptive correlational study done by mathunjwa (2006) conducted study on "The relationship between personal characteristics and health status among southern rural African." The sample was comprised of all of the participants in the original study 206, who were African-American women between 40 and 60 years of age. The Menopausal Health Survey, the People In Your Life Questionnaire, the Life Stress Questionnaire, and the Beck Depression Inventory-II were utilized in data collection. The study findings revealed that knowledge on menopause ,social support ,decision making, and full-time employment were significantly associated with having favorable self-perceived physical health status. The study also revealed that advancing age was positively and significantly associated with self-care practices.

A cross-sectional study was done by fallahzadeh (2010). Study conducted on "Quality of life after the menopause in Iran: a population study". This cross-sectional study was conducted through cluster sampling among 480 postmenopausal women in Yazd, Islamic Republic of Iran, in 2008. The results showed that the menopausal women have worse QoL scores in vasomotor dimension and higher QoL scores in physical dimension. Univariate analysis showed that there were significant differences in the MENQOL scores by age, number of children, education, postmenopausal stage, employment status, and BMI. Logistic regression determined that vasomotor score decreased with age. Employment and number of children decreased the risk of having psychosocial scores above the median. Postmenopausal stage ≥5 increased the risk for higher scores within the sexual domain, respectively. Menopause causes a decrease in quality of life, which is dependent to work and other socio-demographic variables. Therefore, it is necessary to develop effective intervention programs to improve quality of life after menopause.

An analytic cross- sectional study was done in (2015). Study conducted on "Knowledge of Women in Reproductive Age about Menopausal Problems and Preventive Health Behaviors in Tanta City". The study sample was chosen as a systematic random sample, where as one woman was interviewed every 3rd woman from those attending the MCH centers, their ages ranged from 15 years to 49 years old, where their number was 300 through the study period. A structure interview questionnaire sheet was used to collect the necessary data. Result shown that More than two thirds of the studied women (72%) had poor level of knowledge about symptoms and signs of menopause, and two thirds of them (66%) had also poor level of knowledge about onset and causes of menopause. Whereas of the studied women had poor level of knowledge about preventive health behavior, management and concept of menopause. - There was negative correlation between studied women knowledge about menopause and their total level of knowledge about health problems of menopausal women (p<0.05).

A descriptive study done by Emelege (2014). Study conducted on "The Use of Alternative Methods in Reducing Menopausal Complaints in Turkey". This study was carried out on 246 women in their menopausal period. The result shown that 37.4% of women were determined to use alternative methods to reduce their menopausal symptoms. In the consequence of statistical analysis, a significant relation was found between the menopausal complaints such as hot flashes, night sweats and sleeping problem and the use of alternative methods in order to reduce their menopausal complaints (p<0.05). It was determined that the women at their menopausal ages experienced vasomotor complaints and sleeping problems and they used alternative methods to reduce those problems. A cross-sectional study was done by sankar amrita, goswamikakoli, pithadiapradeep (2014). Study conducted on "A Study on Health Profile of Post-menopausal Women in Jamnagar district, Gujarat". Sample is 300 women (100 each from urban, urban slum and rural areas of Jamnagar district) aged between 40 and 65 years, through simple random sampling method. Result shown that Mean age at menarche and menopause were 14.73±1.40 and 46.3±5.29 (mean±SD) respectively, which were higher in rural areas, followed by urban slums and urban areas of Jamnagar district. Whereas mean age at marriage and first pregnancy were found to be 17.71±3.31 and 20.18±3.27 (mean±SD) respectively, which were higher in urban areas followed by urban slums and rural areas. The most common symptoms associated with menopause were joint pain (64%), backache (58%), irritability (56.66%), forgetfulness and sadness (48%) and vasomotor symptoms like hot flushes and night sweats (47.33%).

As life expectancy and population of post-menopausal women increases, efforts are needed to educate them and make them aware about various menopausal symptoms. This will enable them to recognize these symptoms early, to seek timely medical treatment for the same and improve quality of life. A descriptive study was conducted to assess the prevalence and the relative importance of risk factors for low bone mass at pune among urban women in the age group of above 40years. A sample of 80 premenopausal women & 90 postmenopausal women the age group is 40-75 years. The study results revealed that bone mineral density was significantly lower in post menopausal than the pre menopausal women (p<0.001). The study was concluded that low intake of calcium &low intake of vitamin D along with poor sun light exposure are

major factors contributing to bone loss in urban women above 40years of age. A cross-sectional study was conducted to determine the effect of the menopause on various coronary heart disease risk factors and on the global risk of Coronary Heart Disease in a population based sample of women at France. A sample of 1730 randomly selected women the age group is 35-64 years, based on the date of late menses. The results shows that post menopausal women had significantly higher age-adjusted levels of total cholesterol and Low-density Lipoprotein cholesterol. The 10 years risk of Coronary Heart Disease was higher in post menopausal as compared with peri-menopausal The study was concluded that Coronary Heart Disease risk increases during the sixth decade.

A cross sectional study was conducted to identify the average age at menopause, and to assess knowledge and attitude towards menopause, among women in Karachi. A sample of 925 women aged over 35 years was taken and interviews were analyzed. The result shows that there were 287 menopausal women, whose mean age of women, whose mean age at menopause was 47.1(4.7) year. Out of these 135(47%) wanted their menses to continue and 235(82%) had consulted a physician after menopause. 58% women know the definition Of menopause and 53% said that women should consult a physician premenopausal. Source of knowledge about the menopause included relatives (35%), television (18%), neighbors (17%), friends (17%) and health care providers (14%). The study concluded that evidenced-based information about the menopause should be provided for women.

A descriptive study was conducted to assess the association between life course socio economic adversity and age at menopause. Among 4,056 women aged 60 to79 years randomly selected in Latin America and Caribbean. The result shows that median age at menopause was 50 years. The following life course socio economic indicators were associated with earlier age at menopause. And they are low education, manual occupation/housewives, current smoking, null parity, and multiparty. The study concluded that median age at menopause occurs several years earlier in women. The results supported the association between life course socioeconomic and age at menopause. A cross-sectional study was conducted to investigate the influence of body weight and weight change on age at natural menopause at Turkey. The study included of 1,106 women in that 46% were post menopausal, rest of the women's are pre menopausal age groups. The study result reveled that those who had a history of episodic weight loss of more than 5kg was independently associated with later age at natural menopause. After history of episodic weight loss of more than 5kg, smoking, premenopausal type2 diabetes emerged as time-dependent predictors of age at natural menopause. The study concluded that premenopausal Body Mass Index gain rate and premenopausal history of episodic Weight losses of more than5kg are independently associated with later age at natural menopause.

A cross-sectional study done by Linday k. roth (2001). Study conducted on "Risks of smoking to reproductive health: Assessment of women's knowledge". Survey was given to 388 female hospital employees. Knowledge of smoking-related illnesses that are specific to women was assessed. Regression analysis was used to discern potential predictors of this knowledge. The result shown that Most women are aware that smoking causes respiratory disease (99%), lung cancer (99%), heart disease (96%), and pregnancy complications (91%). Few women are aware of the health risks of smoking that are specific to women, such as infertility (22%), osteoporosis (30%), early menopause (17%), spontaneous abortion (39%), ectopic pregnancy (27%), and cervical cancer (24%). Knowledge of these health risks was not predicted by age, education, or smoking status. Health care professionals were no more likely than other women to have knowledge of these risks.

A cross-sectional study done by Himansu, and waidyasekera (2009). Study conducted on "Menopausal symptoms and quality of life during the menopausal transition in Sri Lankan women". A community-based, cross-sectional study was conducted on 683 women ages 45 to 60 years living in the district of Colombo, Sri Lanka. A cluster sampling method was used for recruitment of the sample. The result shown that the sample, 59.4% were postmenopausal and 18.4% were peri-menopausal; 90% of the sample had one or more menopausal symptoms. The most prevalent menopausal symptoms were joint and muscular discomfort (74.7%), physical and mental exhaustion (53.9%), and hot flushes (39.1%). Hot flushes sleep problems, and joint/muscular discomfort showed an increase in prevalence from the premenopausal category to the postmenopausal category ($P < 0.05$ for all). Chronic illness in the women was significantly associated with the presence of menopausal symptoms ($P < 0.01$). Women with menopausal symptoms had significantly lower ($P < 0.05$) quality-of-life scores in most of the domains of the Short Form 36 compared with women without symptoms.

An experimental study was conducted among 60 menopausal women, 30 each in experimental and control group who met inclusion criteria. The menopausal women were identified in both the groups and level of depression was assessed using Cornell Dysthmia rating scale. Simple random sampling technique by lottery method was used for selecting the sample. Autogenic relaxation was practiced by the menopausal women for four weeks. The findings revealed that in experimental group, after intervention of autogenic relaxation on depression among menopausal women, 23 (76.7%) had mild depression. There was a statistically significant effectiveness in experimental group at the level of $p < 0.05$. There was a statistically significant association between the effectiveness of autogenic relaxation on depression among menopausal women in the post-experimental group with the type of family at the level of $p < 0.05$.

A cross-sectional survey done by Alquaiz J M (2008). Study conducted on "Determinants of severity of menopausal symptoms among Saudi women in Riyadh city". Women aged > 40 years attending or accompanying their relatives in outpatient clinics in King Khalid University Hospital were invited to participate in the study. The English version of the Menopause Rating Scale (MRS) was used to assess the severity of menopausal symptoms after translation and validation on a sample of 30 women. The results shown those totals of 490 women were included. Severe urogenital symptoms were more common among housewives compared to working women, 95% confidence interval and women living in apartments or small houses compared to women living in villages. Nulliparous women had more severe somatic symptoms compared to those who had been pregnant. Women who exercised regularly were less likely to experiencesevereseveresomaticandurogenitalsymptoms**.**Obese wome

n experienced more severe psychosomatic symptoms compared to those of normal body mass index. Women who are housewives, living in apartments, not exercising regularly and obese are more likely to suffer from severe symptoms of menopause.

A Cross-sectional study done by Bell R.J. (2015) Study conducted on "Use of complementary and alter native medicines for menopausal symptoms in Australian women aged 40-65 years. The study conclude that Australian women at midlife are using CAMs that are known to be ineffective for managing VMS. Health care providers need to be more involved in guiding women in the treatment of VMS and other menopausal symptoms. More judicious use of supplements such as fish oil and glucosamine, particularly by older women, is needed until their efficacy and safety profiles are better understood. A cross-sectional study done by Calvo-p'erez A (2013). Study conducted on "Quality of life of menopausal women in the island of Majorca: a population based study". Study was conducted with a sample of 428 women. The study shown that Among women in Majorca, the mean QOL is better than the national mean of the Spain reference population. It declines with age and levels off at menopause. In menopausal women, QOL improves slightly in tandem with educational level. 29% of menopausal women were on some form of therapy, most commonly a mix of estrogens and gestagens (36%).

Only a weak association was detected between being menopausal and QOL. A study conclude that The Cervantes questionnaire allows periodic study sample cut-offs to determine whether changes in socio-demographic and disease-related variables are also accompanied by changes inself-perceived QOL. It is much better in menopausal women in Majorca than in those in the Spanish mainland. A cross-sectional study done by Tayel SA (2013). Study conducted on "Assessment of symptoms of menopause and their severity among Saudi women in Riyadh". Sample are Four hundred and ninety healthy women aged 40-55 years. The result shown that mean (SD) age of the women in menopause was 47.9 (6.03) years. The most frequent symptoms were muscle and joint problems occurring in 411 women (83.9%), physical and mental exhaustion in 393 (80.2%), heart discomfort in 358 (73.1%), sleeping disorders in 349 (71.2%), hot flashes in 348 (71.0%), and irritability in 348 (71.0%); in addition, 179 (36.5%) of these women experienced severe psychological distress. Perimenopausal women had higher total and subscales scorings for somatic symptoms than did premenopausal and postmenopausal women (P=.008). The study conclude that number of Saudi women reporting hot flashes and night sweats was comparable to the number of Western women. In addition, somatic symptoms were more prevalent among perimenopausal than among premenopausal women. A cross-sectional study done by monterrosa-castro A (2013). Study conducted on "Assessment of sleep quality and correlates in a large cohort of Colombian women around menopause". Study involved1, 078 Colombian women aged 40 to 59 years who completed the Pittsburgh Sleep Quality Index (PSQI), the Menopause Rating Scale (MRS), and a general questionnaire exploring sociodemographic data. The result shown that median [interquartile range] age of the whole sample was 49.0 [9.0] years. Significant correlations between PSQI global scores and MRS total and subscale scores were found. Multiple linear regression analysis found that higher PSQI scores (poorer quality of sleep) correlated with higher MRS psychological and somatic subscale scores (more severe symptoms), smoking habit, and hypertension. Menopause status and black ethnicity were excluded from the final regression model. Study conclude that Despite study limitations, poor sleep quality is highly prevalent in this large middle-aged Colombian female sample and is related to menopausal symptom severity, tobacco use, and presence of hypertension.

Conclusion

The Study concluded that 4% of Menopausal women have inadequate Knowledge regarding health awareness, 60% menopausal women have moderate and 36% menopausal women have adequate knowledge regarding health awareness. And 12% negative, 65% neutral & 23% Positive Attitude towards health Awareness. It suggests that menopausal women residing at rural areas of Anand district has adequate knowledge and good Attitude.

Acknowledgement

Conflict of Interest: None.

Sources of Finding: No separate Finding was received for this study.

Ethical clearance: Taken from Chief district health officer, Anand & Additional director of Health, Ghandhinagar, Gujarat.

REFERENCE

Agrinier, N., Cournot, M., Dallongeville, J., Arveiler, D., Ducimetiere, P., Rudidavets, J.B., Ferrieres, J. 2010. "Menopause and modifiable coronary heart disease risk factores: Population based study". Maturitas, Mar; 65(63):237-43,Epub-2009,Dec23.PMID:20031345 https://www.ncbi.nlm.nih.gov/pubmed/?term=PMID%3A20031345

AlQuaiz, A.M., Tayel, S.A., Habiba, F.A. 2013. "Assessment of symptoms of menopause and their severity among Saudi women in Riyadh" *Ann Saudi Med,* Jan-Feb;33(1):63-7.PMID:23458944 https://www.ncbi.nlm.nih.gov/pubmed/23458944

Alquaiz, J.M., Siddiqui, A.R., Tayel, S.A., Habib, F.A. 2014. "Determinants of severity of menopausal symptoms among Saudi women in Riyadh city" Climacteric., Feb; 17(1):71-8, Epub 2013 Aug 25. PMID:2397188 https://www.ncbi.nlm.nih.gov/pubmed/23971880

Aydin, Z.D. 2010. "Determinants of age natural menopause in the Isparta Menopause and Health Study: premenopausal body mass index gain rate and episodic weight loss" Menopause, May-Jun; 17(3):494-505.PMID:20065885. https://www.ncbi.nlm.nih.gov/pubmed?term=PMID%3A20065885

Baig, L.A., Karim, S.A. 2006. "Age at menopause, and knowledge and attitudes to menopause of women in Karachi, Pakistan" Menopause, Soc. Jun; 12(2):71-

4.PMID:16776858. https://www.ncbi.nlm.nih.gov/pubmed/ ?term=PMID%3A16776858.

Borker, S.A., Venugopalan, P.P., Bhat, S.N. 2013. "Study of menopausal symptoms, and perceptions about menopause among women at a rural community in Kerala" J Midlife Health, Jul;4(3): 182-7. PMID: 24672192. PMCID: PMC3952411   https://www.ncbi.nlm.nih.gov/pubmed/ 24672192

Calvo-Pérez, A., Campillo-Artero, C. 2013. "Quality of life of menopausal women in the island of Majorca: a population based study" *gynecol Endocrinol,* Jun; 29(6):556-8, Epub 2013, Mar 12, PMID: 23480719 https://www.ncbi. nlm.nih.gov/pubmed/23480719

Emel Ege, Halime Esra Kal, and Kamile Altuntuğ, 2014. "The Use of Alternative Methods in Reducing Menopausal Complaints in Turkey" Afr J Tradit Complement Altern Med, 2014 Jan PMCID: PMC4202636 https://www. ncbi.nlm.nih.gov/pmc/articles/PMC4202636/

Entisar Abo Elghite Elhossinys Elkazeh, and Amaal Mohamed, Ahmed – ElZeftawy "Knowledge of Women in Reproductive Age about Menopausal Problems and Preventive health Behaviorsin Tanta City", Al –Gharbyia Governorate Egypt, *Ournal of Nursing and Health Science*, Volume4, Issue3, May.Jun.2015   http://www. iosrjournals.org/iosr-jnhs/papers/vol4-issue3/Version-2/F04325163.pdf

Fallahzadeh, Hossien"Quality of life after the menopause in Iran: a population study" Quality of Life Research, Aug 2010, 813-9. http://search.proquest.com/health/docview/ 872198312/abstract/63ABE637367C4126PQ/1?accountid= 170291

Gartoulla, P., Davis, S.R., Worsley, R., Bell, R.J. 2015. "Use of complementary and alternative medicines for menopausal symptoms in Australian women aged 40-65 years" *Med J Aust,* Aug 3; 203(3):146, PMID:26224187 https://www.ncbi.nlm.nih.gov/pubmed/26224187

Ghimire, N., Dhakal, P., Norrish, D., Dangal, G., Sharma, D., Dhimal, M., Aryal, K.K., Jha, B.K., Karki, K.B. 2015. "Menopausal Health Status of Women of Kapilvastu District of Nepal" *J Nepal Health Res Counc,* 2015 Sep-Dec https://www.ncbi.nlm.nih.gov/pubmed/27005709

Kadam, N., chiplonkar, S., khadilkar, A., Divate, U., Khadilkar, V. "Low bone mass in urban Indian women above 40 years of age: prevalence and risk factors" Gynecol Endocrinol, 2010. Dec; 26(12):909-17, Epub 2010 sep 17. PMID: 20849208 https://www.ncbi.nlm.nih.gov/ pubmed/20849208

Lindsay, K., Roth, M.P.H., Hugh, S., Taylor, M.D. 2001. "Risks of smoking to reproductive health: Assessment of women's knowledge" *American Journal of Obstetrics and Gynecology ,* Volume 184, Issue 5, April., Pages934-939.

http://www.sciencedirect.com/science/article/pii/S0002937 801361215

Mathunjwa, Tengetile Rebecca, 2006. "The relationship between personal characteristics and health status among southern rural African -American perimenopausal women", Case Western Reserve University (Health Sciences), Pro Quest Dissertations Publishing, 3239635 http://search. proquest.com/health/docview/304962619/abstract/A2EFC B0965A40A5PQ/1?accountid=170291

Mina Rotem, Talma Kushnir, Ruth Levine, Mally Ehrenfeld, 2005. "A Psycho- Educational Program for Improving Women's Attitudes and Coping With Menopause Symptoms" *Journal of Obstetric, Gynecologic, & Neonatal Nursing,*Volume34, Issue2, March2005, Pp233–240 http://onlinelibrary.wiley.com/doi/10.1177/0884217504274 417/abstract

Monterrosa-Castro A, Marrugo-Flórez M, Romero-Pérez I, Fernández-Alonso AM, Chedraui P, Pérez-LópezFR, 2013. "Assessment of sleep quality and correlates in a large cohort of Colombian women around menopause" Menopause, Apr; 20(4): 464-9. PMID: 23096246 https://www.ncbi.nlm.nih.gov/pubmed/23096246

Singh, A., Pradhan, S.K. 2014. "Menopausal symptoms of postmenopausal women in a rural community of Delhi, India: A cross-sectional study" *J Midlife Health,* Apr;5 (2) : 62 – 7 PMID :24970983. PMCID:PMC4071646 https:// www.ncbi.nlm.nih.gov/pubmed/24970983

Som, N., Roy, P., Ray, S. 2014. "Menopause-specific quality of life of a group of urban women, West Bengal, India" Climacteric, Dec;17(6):713-9, Epub 2014 Jul 4.PMID: 24742367   https://www.ncbi.nlm.nih.gov/pubmed/ 24742367

Sujithra, S. 2014. Effect of autogenic relaxation on depression among menopausal women in rural areas of Thiruvallur District (Tamil Nadu)." Nurs J India, 2014\ Mar-Apr; 105(2): 65-8. PMID: 25417441 https://www.ncbi. nlm.nih.gov/pubmed/25417441

Velez, M.P., Alvarado, B., Lord, C., Zunzunegui, M.V. 2010. ."Life course socioeconomic adversity and age at natural menopause in women from Latin America and the Caribbean"   Menopause,   Menopause.   May-Jun;17(3):5529.PMID:20464784.   https://www.ncbi.nlm. ih.gov/pubmed?term=PMID%3A20065885

Waidyasekera, Himansu MBBS, Wijewardena, Kumudu MD, Lindmark, Gunilla MD, PhD, Naessen, Tord MD, PhD "Menopausal symptoms and quality of life during the menopausal transition in Sri Lankan women" Menopause, January 2009, Volume 16, Issue 1, pages 164-170. http://journals.lww.com/menopausejournal/Abstract/2009/1 6010/Menopausal_symptoms_and_quality_of_life_during_ the.26.aspx

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