



CODEN [USA]: IAJPBB

ISSN : 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187

<http://doi.org/10.5281/zenodo.5046106>
Online at: <http://www.iajps.com>

Research Article

ASSESSMENT OF SYMPTOMS AND QUALITY OF LIFE AMONG POST-MENOPAUSAL WOMEN IN RURAL AND URBAN ANANTHAPURAMU

Dr. V Sreedhar¹, Dr. P. Ramakrishna Reddy², Dr. L Reddenna^{3*}, G. Nagendra Prasad⁴, B. Nishkala⁴, P.N. Mounika⁴, Shaguftha⁴

¹ Professor & Principal, Balaji College of Pharmacy, Rudrampeta, Ananthapuramu

² IQAC Head, Balaji College of Pharmacy, Rudrampeta, Ananthapuramu

³ Associate Professor & Head, Department of Pharmacy Practice, Balaji College of Pharmacy, Rudrampeta, Ananthapuramu

⁴ Pharm.D Interns, Balaji College of Pharmacy, Rudrampeta, Ananthapuramu

Article Received: May 2021

Accepted: May 2021

Published: June 2021

Abstract:

Introduction: Menopause is a biological event characterized by complexity of factors. On an average one third of the women's life consists of the post menopause years, and health care programmes for women do not address concerns beyond reproductive ages. This study aims to assess the symptoms and quality of life among post-menopausal women in urban vs rural Ananthapuramu.

Method: This is a community based cross-sectional study in Ananthapuramu rural and urban using a multi stage stratified random sampling strategy. Structured interview schedule was used for data collection and analysis was done using different statistics.

Results & discussion: A total of 400 participants were included in the study. The present study findings show that the maximum quality of life score among post-menopausal woman was 22000. The quality-of-life score among postmenopausal women in urban area was 10995 the total score for rural area is 11,000 which is slightly higher than the urban area which indicates that the quality of life of postmenopausal women of rural area were found to be distressing than that of urban area.

Conclusion: The severity of symptoms was found more in urban women. The QOL in rural population where the symptoms experienced were less severe was average and better than the QOL in urban women having severe menopause symptoms and there is a need to address the menopause problem of post menopause women and establish health care centres for them.

Key words: Menopause, Menopause symptoms; Post-menopausal woman; Quality of life; reproductive ages; Rural; Urban

Corresponding author:**Dr. L. Reddenna,**

Associate Professor & Head,

Department of Pharmacy Practice,

Balaji College of Pharmacy, Rudrampeta, Ananthapuramu,

Andhra Pradesh, India-515001,

Mail id: reddennapharmd@gmail.com,

Mob: 9866124220

QR code



Please cite this article in press L. Reddenna *et al.*, *Assessment Of Symptoms And Quality Of Life Among Post-Menopausal Women In Rural And Urban Ananthapuramu...*, *Indo Am. J. P. Sci.*, 2021; 08(06).

INTRODUCTION:

The menopausal experience involves a multifaceted interaction between psychological sociocultural, and environmental factors, as well as the biological changes relating to altered ovarian hormone status or deficiency. ¹According to the North American menopause society, Natural menopause is the permanent cessation of menstruation resulting from the loss of ovarian follicular activity which is recognized to have occurred after 12 consecutive month of amenorrhoea, for which there is no obvious pathological or psychological cause. ² During menopausal transition, women may experience vasomotor, Urogenital and psychological symptoms as well as sexual dysfunction. ³These problems are often attributed to hormonal changes during midlife and are projected as health risk. The menopausal experience involves a multifaceted interaction between psychological sociocultural, and environmental factors, as well as the biological changes relating to altered ovarian hormone status or deficiency. ⁴According to the North American menopause society, Natural menopause is the permanent cessation of menstruation resulting from the loss of ovarian follicular activity which is recognized to have occurred after 12 consecutive month of amenorrhoea, for which there is no obvious pathological or psychological cause. ⁵ During menopausal transition, women may experience vasomotor, Urogenital and psychological symptoms as well as sexual dysfunction. These problems are often attributed to hormonal changes during midlife and are projected as health risk. Over the past decade, health related quality of life (QOL) has emerged as an important outcome in the medical field. ⁶ The concept of general QOL, however, has a longer history in the social sciences literature growing out of social indicators research. Over the past decade, health related quality of life (QOL) has emerged as an important outcome in the medical field. ⁷The concept of general QOL, however, has a longer history in the social sciences literature growing out of social indicators research ⁸. The aim of the present study is to assess the symptoms and quality of life among post-menopausal women in urban Vs rural Ananthapuramu.

METHODOLOGY:

STUDY DESIGN: This is a community based cross-sectional study of 400 postmenopausal women, aged 40 to 60 years, residing in and around the Ananthapuramu.

SAMPLING METHOD: Participants were randomly selected and they were interviewed.

SAMPLE SIZE:

200 Urban+ 200 Rural

DURATION OF STUDY:

06 Months (December 2020 to May 2021)

COLLECTON OF DATA: Fully informed consent was obtained from all participants prior to the survey research. The participants were interviewed to collect information on Socio demographic profile, relevant menstrual history, personal history and the presence and severity of menopausal symptoms were evaluated using the Menopause Rating Scale {MRS}.

STUDY SITE:

Urban and Rural areas in Ananthapuramu.

INSTITUTIONAL ETHICAL COMMITTEE {IEC} APPROVAL:

Ethical approval for the study was obtained from the ethical committee.

PATIENT INFORMED CONSENT FORM: Oral information about the reasons of the study were given in local language to women invited to participate in this study. The participants were informed that their inclusion in the study will be voluntary. They were informed that they were free to withdraw from study and if any question they do not want to answer they can withdraw it.

STATISTICAL ANALYSIS: Statistics were calculated by entering the collected data in Microsoft excel and analysed by using standard method of calculation- descriptive statistics and students t test for level of significance.

INCLUSION CRITERIA:

1. Women 40 to 60 years of age.
2. Women whose menopause was natural.
3. Women who are residing in the urban and rural Area.
4. Women who agree to this study after sufficient explanation.

EXCLUSION CRITERIA:

1. Women who had attained unnatural menopause, on medication such as anxiolytics, antidepressants, antipsychotic drugs.
2. On any hormone replacement therapy, women who were known case of systemic diseases, thyroid disorders and any genital pathology and women with missing period in last 12months due to other physiological conditions other than menopause.

DATA COLLECTION PROCEDURE:

Data collection done using a structured questionnaire and the adapted scale to assess menopause related symptoms. The interview was conducted in local

language telugu, English and carried out by the principal investigators for all the participants, at each eligible participant 's residence with minimal distractions and discomfort and assuring convenience and comfort.

RESULTS:

Table- 1 : Distribution of socio-demographic characteristics in rural and urban post-menopausal women

Variables	Rural (n=200)	Percentage (%)	Urban (n=200)	Percentage (%)
Age				
< 55years	113	56.5	117	58.5
>55 years	87	43.5	83	41.5
Marital status				
Married	148	74	151	75.5
Unmarried	3	0	1	0.5
Widow	42	22.5	41	20.5
Divorced	7	3.5	7	3.5
Education				
No formal education	110	55	105	52.5
Middle school	67	33.5	65	32.5
Graduate	23	11.5	30	15
Occupation of women				
House wife	77	38.5	121	60.5
working	123	61.5	79	39.5
Occupation of husband				
Working in government	16	8	39	19.5
Working in private	58	29	124	62
Farmer	74	37	18	9
Religion				
Hindu	148	74	136	68
Christian	28	14	31	15.5
Muslim	24	12	33	16.5

Parity				
Nulliparous	3	1.5	6	3
Parous	197	98.5	194	97
Type of family				
Nuclear	149	74.5	154	77
Joint	51	25.5	46	23
Source of income				
Spouse	140	70	141	70.5
Children	60	30	59	29.5
Income/month				
> 10,000 INR	96	48	137	68.5
< 10,000 INR	104	52	63	31.5
Social habits				
Nothing	200	100	200	100
Tobacco	0	0	0	0
Smoking	0	0	0	0
Age at menopause (Years)				
> 45	129	64.5	122	61
< 45	71	35.5	78	39

Table-2: Comparison of vasomotor symptoms among PMW in rural and urban area

Vasomotor symptoms	Rural	Urban	F statistics	P value
Hot flashes, sweating	2.8±0.9	2.9±1.0	1.234	0.138
Heart discomfort	2.5±0.7	2.6±0.2	12.25	<0.001 (Significant)

It was observed that there was a significant difference in mean score of heart discomfort in rural women compared to urban women. Whereas, the mean score vasomotor symptoms suggest that PMW were having moderate vasomotor symptoms. The hot flashes and sweating symptoms expressed in equally in rural and urban women.

Table 3: Comparison of physical symptoms among PMW in rural and urban area

Physical symptoms	Rural Mean \pm SD	Urban Mean \pm SD	F – statistics	P value
Sleep problems	2.9 \pm 0.82	3.2 \pm 0.75	1.642	0.0005 (Significant)
Physical and mental exhaustion	2.2 \pm 0.81	2.4 \pm 0.71	1.333	0.0427 (Significant)
Joint problems	3.31 \pm 0.96	3.40 \pm 0.84	1.306	0.0603
Bladder problems	2.6 \pm 0.94	2.5 \pm 0.92	1.044	0.7619

The mean score of physical symptoms (sleep problems, physical and mental exhaustion) was significantly high in urban women compared with rural women with a $P < 0.05$. The mean score of joint problem was equal in both rural and urban women. The findings of this study suggest that the mean score of joint and sleep problems are in severe as per the menopause rating scale. The remaining physical symptoms are in moderate according to rating scale.

Table-4: Comparison of psychosocial symptoms among PMW in rural and urban area

Psychosocial symptoms	Rural Mean \pm SD	Urban Mean \pm SD	F – statistics	P value
Depressive mood	2.1 \pm 0.91	3.0 \pm 1.20	1.738	<0.001
Irritability	1.9 \pm 0.13	1.6 \pm 0.38	8.544	<0.001
Anxiety	2.6 \pm 0.26	3.1 \pm 0.92	12.52	<0.001

Psychosocial symptoms like depressive mood, and anxiety mean score was significantly high in urban women compared with rural women. These symptoms are in moderate in rural and severe in urban women as per menopause rating scale. The irritability mean score was high in rural women compared with urban. As per rating scale the irritability score was in mild stage in both urban and rural women.

Table-5: Comparison of Sexual symptoms PMW in rural and urban area

Sexual symptoms	Rural Mean \pm SD	Urban Mean \pm SD	F – statistics	P value
Sexual problems	1.9 \pm 0.12	1.7 \pm 0.14	1.361	0.0301
Dryness of vagina	0.8 \pm 0.11	0.9 \pm 0.16	2.115	<0.001

(P value $P < 0.05$ - Significant)

Psychosocial symptoms like sexual problems and dryness of vagina mean score was significantly high in urban women compared with rural women. These symptoms are in mild (sexual problems) and normal (dryness of vagina) in both rural and women as per menopause rating scale.

DISCUSSION:

The findings of the present study reveal that postmenopausal women in rural area shows symptoms like hot flushes and night sweat (53%), heart discomfort (52%), sleeping problems (39.5%), depressive mood (32.5%), irritability (32.5%), anxiety (38%), physical and mental exhaustion (26.5%), sexual problems (85%), bladder problems (58.5%), dryness of vagina (61%), joint and muscular discomfort (29%). Postmenopausal women from the

urban area shows symptoms like Hot flushes and night sweats (56%), heart discomfort (46%), sleep problems (33%), depression mood (30%), irritability (31.5%), anxiety (27%), physical and mental exhaustion (32%), sexual problems (86.5%), bladder problems (51%), dryness of vagina (53%) and joint and muscular discomfort (43%). The findings of present study are consistent with the finding of the study of Satpathy M, who identified population comprised of menopausal women with hot flushes

(77%), sleep problem (42%), joint pain (60), cold hand/feet (27%), vagina dryness (34%), weight gain (69%), headache (43%), irritability (42%), forgetfulness (59%), anxiety (42%).⁹

This result is similar with study conducted Bansal et al, in which findings are headache (94.1%), dizzy spells (81.5%), decreased libido (81.5%), sleep disturbance (68.9%) and loss of interest in most things, hot flushes (59.3%), lack of concentration (54.1%), mood changes (49.6%) and night sweats (35.6%).¹⁰ Study conducted by Madhu Kumar and Gaikwad is similar with our study in which the results shows the symptoms like aching in muscle and joints, feeling tired, poor memory, lower backache.¹¹ Similar study conducted by Borker et al, shows similar symptoms like depression, irritability(90.7%), headache (72.9%), lethargy 65.4%), dysuria (58.9%), forgetfulness (57%), musculoskeletal problems(53.3%), sexual problems (decreased libido, dyspareunia) (31.8%), genital problems (itching, vaginal dryness) (9.3%).¹²

Symptoms like joint pain (64%), backache (58%), irritability (56.66%), forgetfulness and sadness (48%) and vasomotor symptoms like hot flushes and night sweats (47.33%) are consistent with the study conducted by Sarker et al with present study.¹³ The findings of present study is consistent with the findings of the study of Sharma et al, who identified symptoms like fatigue and lack of energy (72.93%), Headache (55.9%), Hot flushes, Cold sweats, cold hand and feet 53.86 %, Weight gain (43.13%)¹⁴

Study conducted by Bagga A, in Pune shows common symptoms as compared to present study that is loss of interest (93%), Pressure/tightness in head (83%) Weight gain (67%), Hot flushes (54%).⁵⁹ Muscle and joint pains (37.4%), Insomnia (20.6%), Headache (13.8%) are shown in study conducted by Shah et al in Mumbai and diminished acuity of vision and hot flushes are shown in study conducted by Singh and Arora in Punjab is consistent with our present study¹⁵

The present study findings show that the maximum quality of life score among post-menopausal woman was 22000. The quality-of-life score among postmenopausal women in urban area was 10995 the total score for rural area is 11,000 which is slightly higher than the urban area which indicates that the quality of life of postmenopausal women of rural area were found to be distressing than that of urban area.

A cross sectional study conducted by Sharma S and Mahajan N findings of the study were the high

proportions and the scores of MRS were observed in both rural and urban women.¹⁶ The severity of symptoms was found more distressing for rural women. The quality of life in urban society was average and better in rural women. The present study findings show that among all variables has association between quality of life between urban and rural area. There is association in history of menopause in urban area and in rural area and there is association in physical activity during the year preceding menopause and also in time since attending menopause in urban area. A study conducted by Devi S et al found that demographic variable, education of middle age women was found to have significant association with menopausal symptoms in rural women.¹⁷

CONCLUSION:

In the current study, high proportions and the scores of menopause ratings were observed in the both rural and urban women. The severity of symptoms was found more in urban women's. The QOL in rural population where the symptoms experienced were less severe was average and better than the QOL in urban women having severe menopause symptoms and there is a need to address the menopause problem of post menopause women and establish health care centres for them. Hence, awareness regarding menopause and problems among women related to it need to be improved, health workers, ASHA, anganwadi workers can help women to be understand about the menopausal symptoms, if they are given adequate training.

ACKNOWLEDGEMENT: We wish to express our sincere gratitude to Medical Superintendent and staff for guidance, suggestions and for an unflinching support throughout the work. We had an enriching experience, working under guidance.

REFERENCES:

1. Soules MR, Sherman S, Parrott E, et al. Executive summary: Stages of Reproductive Aging Workshop (STRAW). *FertilSteril.* 2001;76(5):874-878.
2. McKinlay SM, Brambilla DJ, Posner JG. The normal menopause transition *Maturitas.* 1992;14(2):103-115.
3. Gold EB, Bromberger J, Crawford S, et al. Factors associated with age at natural menopause in a multiethnic sample of midlife women. *Am J Epidemiol.* 2001;153(9):865-874.
4. Morabia A, Costanza MC. International variability in ages at menarche, first livebirth, and menopause. World Health Organization Collaborative Study of Neoplasia and Steroid

- Contraceptives. *Am J Epidemiol.* 1998;148(12):1195-1205.
5. Bromberger JT, Matthews KA, Kuller LH, Wing RR, Meilahn EN, Plantinga P. Prospective study of the determinants of age at menopause. *Am J Epidemiol.* 1997;145(2):124-133.
 6. Garrido-Latorre F, Lazcano-Ponce EC, Lopez-Carrillo L, Hernandez-Avila M. Age of natural menopause among women in Mexico City. *Int J Gynaecol Obstet.* 1996;53(2):159-166.
 7. Dratva J, Gomez Real F, Schindler C, et al. Is age at menopause increasing across Europe? Results on age at menopause and determinants from two population-based studies. *Menopause.* 2008.
 8. Rodstrom K, Bengtsson C, Milsom I, Lissner L, Sundh V, Bjorkelund C. Evidence for a secular trend in menopausal age: a population study of women in Gothenburg. *Menopause.* 2003;10(6):538-543.
 9. Satpath M. A study on age at menopause, menopausal symptoms and problems among urban women from western Odisha, India. *Int J Sci Res Publ.* 2016;6(3).
 10. Bansal P, Chaudhary A, Soni RK, Sharma S, Gupta VK, Kaushal P. Depression and anxiety among middle-aged women: A community-based study. *J Family Med Prim Care.* 2015;4(4):576-81.
 11. Madhukumar S, Gaikwad V, Sudepa D. A community based study on perceptions about menopausal symptoms and quality of life of postmenopausal women in Bangalore rural. *Int J Health Sci Res.* 2012;2(3):49-56.
 12. Borker SA, Venugopalan PP, Bhat SN. Study of menopausal symptoms, and perceptions about menopause among women at a rural community in Kerala. *J Mid-life Health.* 2013;4(3):182-7.
 13. Amrita S, Pradeep P, Kakoli G, Sudip B, Naresh M, Sudha Y, et al. A study on health profile of postmenopausal women in Jamnagar district, Gujarat. *J Res Med Dental Sci.* 2017;2(2):25-9.
 14. Bairy L, Adiga S, Parvathi BH, Rajeshwari BH. Prevalence of menopausal symptoms and quality of life after menopause in women from South India. *AusNew Zealand J Obstet Gynaecol.* 2009;49(1):106-9.
 15. Sharma S, Mahajan N. Menopausal symptoms and its effect on quality of life in urban versus rural women: A cross-sectional study. *J Mid-Life Health.* 2015;6(1):16.
Shah. Impact of post menopausal symptoms on quality of life on menopausal women and its outcomes. *J Women Health.* 2013.
 16. Devi S, Upendra S, Chavan R, Barde S. Assessment of menopausal symptoms using modified menopause rating scale (mrs) among middle age women in selected urban and rural area of Pune district. *J Adv Sci Res.* 2015;6(3):47-50.