

Urogenital Problems of Postmenopausal Women: A Community Based Study in Slums of Dibrugarh Town

Arpita Nath¹, Sultana Jesmin Ahmed², Hiranya Saikia³, Upam Kumar Sharma⁴

ABSTRACT

Introduction: Menopause is a normal, natural event – the term simply refers to the last menstrual period which is defined by not having had a period in twelve consecutive months. During the transition to menopause, women may experience vasomotor, urogenital, somatic and psychological symptoms, as well as sexual dysfunction. Therefore, we have conducted this study to estimate the prevalence of urogenital problems and to determine the socio-demographic factors affecting those problems amongst the postmenopausal women.

Material and Methods: A community based cross-sectional study was conducted amongst 260 postmenopausal women residing in the slums of Dibrugarh town, Assam. Data were collected through house to house visit in each slum by interviewing the postmenopausal women using a pre-designed, pre-tested proforma from June 2014 to May 2015. Data were presented using percentages and mean with standard deviation. All statistical analysis was conducted using Microsoft Excel and GraphPad Prism 7. Chi-square test and Fisher's exact probability test was used to test the association wherever necessary.

Results: Among a total of 260 respondents, the mean age of the study subjects was 52.19 ± 8.17 years. Prevalence of urogenital problems among postmenopausal women were loss of libido (34.6%), increased urine frequency (30.4%), vaginal dryness (26.5%), incontinence of urine (21.5%), recurrent urinary tract infections (7.7%) and uterine prolapse (4.6%). Socio-demographic factors were significantly associated to some of the urogenital problems.

Conclusion: The findings of the study clearly highlight the problems experienced by postmenopausal women and they need to recognize these symptoms early and address them correctly.

Keywords: Menopause, postmenopausal women, prevalence, slum, urogenital problems

INTRODUCTION

Menopause is a normal, natural event – the term simply refers to the last menstrual period which is defined by not having had a period in twelve consecutive months. Menopause usually occurs in midlife, marking the end of a woman's reproductive life. In developing country the normal age range for the occurrence of menopause is 44-45 years.¹ Induced menopause may occur after chemotherapy, pelvic radiation or surgery (hysterectomy and/or bilateral oophorectomy).² Due to the fluctuation in the hormone levels, women during the menopausal transition experience vasomotor, urogenital, somatic and psychological symptoms, as well as sexual dysfunction. The immediate symptoms of menopause are the effects of these hormonal changes on many organ system. However, the influence of this fluctuation varies from one woman to another.

Some of the important and common urogenital symptoms

women might experience during menopausal transition are increased urine frequency, incontinence of urine, recurrent urinary tract infections (UTI), vaginal dryness, loss of libido, uterine prolapse etc. According to literature, at least 60% of ladies suffer from mild symptoms and 20% suffer severe symptoms and 20% from no symptoms.³ This transition period is usually associated with some unavoidable manifestations of ageing process in women. Early recognition of symptoms can help in reduction of discomfort and fears among the women.

Increasing life expectancy has been accompanied by more number of women approaching menopause and a majority of these women may spend one third of their lives in postmenopausal years. Due to this growing population of menopausal women in India, their health demand is becoming a top priority nowadays. In India, there has been an alarming increase in the slum population where the most deprived urban population lives.⁴ Therefore, we have conducted this study to estimate the prevalence of urogenital problems and to determine the socio-demographic factors affecting those problems amongst the postmenopausal women residing in slums of Dibrugarh town, Assam.

MATERIAL AND METHODS

This community based cross-sectional study was carried out for a period of one year from June 2014 and May 2015 on 260 postmenopausal women residing in slums of Dibrugarh town, Assam. The study area selected includes ten registered slums of Dibrugarh town. Considering the prevalence of incontinence of urine in postmenopausal women to be 38.8%,⁵ absolute error of 6% and $\alpha = 0.05$, the sample size required was calculated and rounded off to 260.

Sampling methodology

The total female population of each of the ten registered slums was obtained from the Town and Country Planning Office, Dibrugarh. The number of women aged 40 years and above in each of the slums was estimated considering that approximately 24.2%⁶ of the total female population are in that age group. The

¹Demonstrator, Department of Community Medicine, Silchar Medical College and Hospital, ²Associate Professor, ³Senior Lecturer (Biostatistics), Department of Community Medicine, ⁴Demonstrator, Department of Pathology, Assam Medical College and Hospital, India

Corresponding author: Dr. Arpita Nath, Demonstrator, Department of Community Medicine, Silchar Medical College and Hospital, Silchar, PIN – 788014, Assam, India.

How to cite this article: Arpita Nath, Sultana Jesmin Ahmed, Hiranya Saikia, Upam Kumar Sharma. Urogenital problems of postmenopausal women: a community based study in slums of dibrugarh town. International Journal of Contemporary Medical Research 2016;3(10):2953-2956.

number of study participants to be included from each slum was determined by proportional allocation.

In each slum, all the consecutive households were visited with a random start at any household until the required number of study subjects in each slum was obtained. At every household the presence of a postmenopausal woman was first ascertained and if present she was included in this study provided she fulfilled the inclusion and exclusion criteria. Information was recorded in a pre-designed, pre-tested proforma by interviewing the woman.

Inclusion criteria

1. All women aged 40 years and above having consecutive cessation of menstruation for 12 months or more. 2. Both natural and surgical menopause was included in the study. 3. Women who gave consent to participate in the study.

Exclusion criteria

1. Women with serious illnesses. 2. Women with any malignancy with or without chemotherapy and/or pelvic radiation. 3. Women who did not give consent. 4. Women not present at home on three consecutive visits.

Ethical clearance was obtained from the Institutional Ethics Committee for conducting the study and written informed consent was taken from all the participants.

The socio-demographic variables age, education, marital status and socioeconomic status were noted. All efforts were made to obtain the correct age of the women. Age estimates of the postmenopausal women were done on the basis of reliable documentary evidence like birth certificate, educational certificate or other official documents. In some cases where these were not available, certain historical events or other significant event in their life was used for assessing the correct age.

STATISTICAL ANALYSIS

Data were presented using percentages and mean with standard deviation. All statistical analysis was conducted using Microsoft Excel and GraphPad Prism 7. Chi-square test and Fisher's exact probability test was used to test the association wherever necessary. Statistical significance was considered at 5% level of significance.

RESULTS

Among a total of 260 respondents, the mean age of the study subjects was 52.19 ± 8.17 years. Majority of the women were between 40 to 49 years of age. Most of them belonged to upper lower socio-economic class (Table 1).

The most frequently reported urogenital problem by women was loss of libido followed by increased urine frequency, vaginal dryness, incontinence of urine, recurrent UTI and uterine prolapse (Table 2).

Prevalence of increased urine frequency, vaginal dryness and loss of libido were significantly associated to age and marital status of the postmenopausal women. However, prevalence of incontinence of urine was significantly increasing with decline in socio-economic status. With advancing age the prevalence of recurrent UTI was found to be significantly increasing. Increasing age was also significantly associated with increased prevalence of uterine prolapse. Statistically significant association of uterine prolapse was also found with marital status and educational status of the women (Table 3).

Variables	Number	Percentage
Age (in years)		
40-49	123	47.3
50-59	85	32.7
≥ 60	52	20.0
Education		
Illiterate	98	37.7
Literate	162	62.3
Marital Status		
Unmarried	10	3.9
Married	181	69.6
Widowed	69	26.5
Socio-economic status		
Class I (Upper)	0	0.0
Class II (Upper middle)	9	3.5
Class II (Lower middle)	66	25.4
Class III (Upper lower)	166	63.8
Class V (Lower)	19	7.3

Table-1: Socio-demographic variables of the study population (N = 260)

Urogenital problems*	Number	Percentage
Increased urine frequency	79	30.4
Incontinence of urine	56	21.5
Recurrent UTI	20	7.7
Vaginal dryness	69	26.5
Loss of libido	90	34.6
Uterine prolapse	12	4.6
*multiple response		

Table-2: Urogenital problems (N = 260)

DISCUSSION

The present study showed that increased urine frequency and incontinence of urine was respectively reported by 30.4% and 21.5% of the postmenopausal women, which is almost similar to that reported by Nayak G et al.⁵ Prevalence of recurrent UTI was 7.7% amongst the study participants which is in accordance with the study by Sarkar A et al.⁷ and Bansal P et al.⁸ However, the current study recorded higher prevalence of both incontinence of urine and recurrent UTI than that reported by Bansal P et al.⁸ Vaginal dryness was reported by 26.5% of the postmenopausal women which is similar to the findings of Delavar MA et al.⁹, Nayak G et al.⁵ and Sarkar A et al.⁷ Most frequent urogenital symptom reported in the present study was loss of libido (34.6%) which is in concurrence with others studies.^{5,10,11} The prevalence of uterine prolapse was 4.6%; similar result was also observed by Bansal P et al.⁸ In the current study, prevalence of increased urine frequency, recurrent UTI, loss of libido and uterine prolapse were significantly increasing with age. However no significant relation was found for incontinence of urine with age. Gold EB et al.¹² in their study also documented that urine leakage has no relation with age.

In the present study, the prevalence of loss of libido was significantly increasing with advancing age. This finding was in accordance to the study by Dinnerstein L et al.¹³ which reported that aspects of female sexual functioning decline with age along with decrease in the frequency of sexual activities and libido in postmenopausal women.

Variables	Urogenital problems					
	Increased urine frequency	Incontinence of urine	Recurrent UTI	Vaginal dryness	Loss of libido	Uterine prolapse
Age (in years)						
40-49 (n = 123)	27 (22.0%)	21 (17.1%)	6 (4.9%)	50 (40.7%)	28 (22.8%)	0 (0.0%)
50-59 (n = 85)	30 (35.3%)	19 (22.4%)	5 (5.9%)	15 (17.6%)	38 (44.7%)	0 (0.0%)
≥ 60 (n= 52)	22 (42.3%)	16 (30.8%)	9 (17.3%)	4 (7.7%)	24 (46.2%)	12 (23.1%)
	p < 0.05	p > 0.05	p < 0.05	p < 0.05	p < 0.05	p < 0.05
Education						
Illiterate (n = 98)	34 (34.7%)	26 (26.5%)	8 (8.2%)	27 (27.6%)	39 (39.8%)	8 (8.2%)
Literate (n = 162)	45 (27.8%)	30 (18.5%)	12 (7.4%)	42 (25.9%)	51 (31.5%)	4 (2.5%)
	p > 0.05	p > 0.05	p > 0.05	p > 0.05	p > 0.05	p < 0.05
Marital status						
Unmarried (n=10)	1 (10.0%)	2 (20.0%)	1 (10.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Married (n = 181)	49 (27.1%)	40 (22.1%)	11 (6.1%)	60 (33.1%)	77 (42.5%)	4 (2.2%)
Widowed (n = 69)	29 (42.0%)	14 (20.3%)	8 (11.6%)	9 (13.0%)	13 (18.8%)	8 (11.6%)
	p < 0.05	p > 0.05	p > 0.05	p < 0.05	p < 0.05	p < 0.05
Socio-economic status						
Class I (n = 0)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Class II (n = 9)	2 (22.2%)	0 (0.0%)	1 (11.1%)	0 (0.0%)	4 (44.4%)	0 (0.0%)
Class III (n = 65)	19 (29.2%)	4 (6.2%)	5 (7.7%)	15 (23.1%)	17 (26.2%)	3 (4.6%)
Class IV (n = 167)	51 (30.5%)	46 (27.5%)	12 (7.2%)	48 (28.7%)	64 (38.3%)	8 (4.8%)
Class V (n = 19)	7 (36.8%)	6 (31.6%)	2 (10.5%)	6 (31.6%)	5 (26.3%)	1 (5.3%)
	p > 0.05	p < 0.05	p > 0.05	p > 0.05	p > 0.05	p > 0.05

Table-3: Socio-demographic variables affecting urogenital problems

In the current study, the prevalence of vaginal dryness was more in illiterate women compared to literates. However, no significant association was found. Gold EB et al.¹² in their study also reported that the prevalence of vaginal dryness was more among those with decreasing level of educational attainment. The finding of the present study corroborates with the study of Gold EB et al.¹²

In the present study, the prevalence of vaginal dryness was significantly associated with marital status. The prevalence was highest in married women followed by widowed women while no unmarried women complained of vaginal dryness. Gold EB et al.¹² in their study amongst menopausal women also found higher prevalence of vaginal dryness amongst currently married women compared to that of never married or widowed. The finding of the present study is in accordance with the study by Gold EB et al.¹², although their study did not report any statistical significance.

The prevalence of incontinence of urine was highest in married women followed by widowed and unmarried women, however no statistical significance was found. Similar findings were reported by Gold EB et al.¹² where prevalence of urine leakage was less frequently reported among never married or widowed than currently married women.

In the current study, prevalence of vaginal dryness was increasing with decline in socio-economic status, but no significant association was found. In a study by Gold EB et al.¹², lower socio-economic status was associated with increased prevalence of vaginal dryness. The finding of the present study corroborates with the study of Gold EB et al.¹²

In the present study, prevalence of incontinence of urine was increasing with decline in socio-economic status, and was statistically significant. In a study by Gold EB et al.¹², lower socio-economic status was associated with increased prevalence of incontinence of urine. The finding of this study is in

accordance to the study of Gold EB et al.¹² although they did not report any significant association.

CONCLUSION

The findings of the present study clearly highlight the urogenital problems experienced by postmenopausal women. There is a need to develop informational and educational programmes that create awareness amongst women about these problems, their causes and treatment respectively so that they can recognize these symptoms early and address them correctly. Information on the various health facilities including where these services are available should also be provided. And there should be special clinics for postmenopausal women to carry out IEC activities. The women should be made aware of drinking adequate water per day for preventing urinary tract infections.

REFERENCES

1. Singh A, Arora AK. Profile of menopausal women in rural north India. *Climacteric*. 2005;8:177-84.
2. Malhotra N, Kumar P, Malhotra J, Bora NM and Mittal P. *Jeffcoate's Principles of Gynaecology*. 8th ed. India: Jaypee Brothers Medical Publishers (P) Ltd; 2014.
3. Tumbull S. Yoga as a treatment for menopausal symptoms. *J Yoga Ontogenet and Therap Investig*. 2010;2:14-5.
4. Hazarika I. Women's reproductive health in slum populations in India: Evidence from NFHS-3. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2009;87.
5. Nayak G, Kamath A, Kumar P, Rao A. A Study of quality of life among perimenopausal women in selected coastal areas of Karnataka, India. *J Mid-life Health*. 2012; 3: 71-5.
6. Registrar General and Census Commissioner India. *SRS Statistical Report*. [Online]; 2012 [cited 2014 July 17]. Available from: http://www.censusindia.gov.in/vital_statistics/SRS_Reports_2012.html.
7. Sarkar A, Pithadia P, Goswami K, Bhavsar S, Makwana

- NR, Yadav S et al. A Study on Health Profile of Postmenopausal Women in Jamnagar district, Gujarat. *J Res Med Den Sci.* 2014;2:25-9.
8. Bansal P, Chaudhary A, Soni RK, Kausal P. Menopausal problems among rural middle aged women of Punjab. *Int J Res Health Sci.* 2013;1:103-9.
 9. Delavar MA, Hajiahmadi M. Factors Affecting the Age in Normal Menopause and frequency of Menopausal Symptoms in Northern Iran. *Iran Red Crescent Med J.* 2011;13:192-8.
 10. 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;4:182-7.
 11. Malla VG and Tuteja A. Menopausal spectrum of urban Indian women. *J Mid-life Health.* 2014;5:99-101.
 12. Gold EB, Sternfeld B, Kelsey JL, Brown C, Moulton C, Reame N et al. Relation of Demographic and Lifestyle Factors to Symptoms in a Multi-Racial/Ethnic Population of Women 40-55 years of age. *Am J Epidemiol.* 2000;152:463-73.
 13. Dennerstein L, Dudley E, Burger H. Are changes in sexual functioning during midlife due to aging or menopause? *Fertil Steril.* 2001;76:456-60.

Source of Support: Nil; **Conflict of Interest:** None

Submitted: 03-09-2016; **Published online:** 15-10-2016