

DOI: <http://dx.doi.org/10.18203/2320-1770.ijrcog20172292>

Original Research Article

## Sleep disorders in menopausal women

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**Received:** 29 April 2017

**Revised:** 15 May 2017

**Accepted:** 17 May 2017

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### ABSTRACT

**Background:** Sleep disturbance is one of frequent sign and symptom encountered in post-menopausal women. It affects the quality of the life and may lead to depression in some women. Objective of present study was to find out the prevalence of sleep disorder in post-menopausal women

**Methods:** Prospective study done on the post-menopausal women coming to Gynaecology OPD of Dr Bheem Rao Ambedkar Hospital, Raipur. This study was a prospective cross sectional observational study, conducted in the outpatient department of Obstetrics and Gynecology from 1<sup>st</sup> August 2016 to 31<sup>st</sup> January 2017. It included 500 women of postmenopausal age. A detail Performa was provided to assess sleep patterns and disorders associated with it. All the data was analysed using chi square test

**Results:** The prevalence of sleep disturbances was 29.58%. Home makers were affected more in comparison to working women, 71.43% women had problems in initiating sleep. About 2/3rd women in the study group developed insomnia within 5 years of menopause, whereas 1/3rd took more than 7years to develop insomnia. Co morbidities were present in 48% women. Our women have mean age of menopause around 45 years.

**Conclusions:** Sleep disorders are common, with prevalence of 29.5% in menopausal women in present study. It significantly causes psychosocial problems in women. There is need for it to be asked for and to be treated promptly.

**Keywords:** Co-morbidities, Insomnia, Postmenopausal women, Sleep disturbances

### INTRODUCTION

Sleep disorders is one of the common symptoms and signs of menopausal transition. It may either affect the initiation of sleep or its maintenance. Patients afflicted with sleep disorders may have a wide variety of complaints, the majority of which are, generally, nonspecific.

It is therefore critically important that providers caring for these patients should be well-versed in the appropriate work-up.<sup>1</sup> Because sleep disorders affect a high proportion of the population and are known to be correlated with decreased wellbeing and productivity,

more detailed national surveys are necessary to provide relevant information to develop approaches to prevention and treatment.<sup>2</sup> Its cause has been a matter of enigma. Researchers have tried to link it to lower oestrogen level, vasomotor symptoms, existing diseases in the aged women and lifestyle. Whether the cause is hormonal or age related or genetic, is still largely unknown.

### METHODS

This study was a prospective cross sectional observational study, conducted in the outpatient department of Obstetrics and Gynaecology from 1<sup>st</sup> August 2016 to 31<sup>st</sup> January 2017. It included 500 women

of postmenopausal age. Menopausal status was determined by menstrual history, surgical history, and use of hormone replacement therapy. Sleep quality was subjectively measured. A detail Performa was provided to assess sleep patterns and disorders associated with it. All the data was analyzed using chi square test.

## RESULTS

The prevalence of sleep disturbances was 29.58%. Our women have mean age of menopause around 45 years. 14.29% women suffering from sleep disorder had early menopause.

**Table 1: Characteristics of menopause.**

Characteristics of menopause	
Mean age of menopause in women under study	45.45 years
Women with natural menopause	76.19%
Women with surgical menopause	23.81 %
Women with early menopause at <40 years	14.29%

Homemakers (71.43%) were affected more in comparison to working women (28.57%). Majority of the women (76.19%) with sleep disorder had attained menopause naturally whereas 23.81% women had surgical menopause.

**Table 2: The epidemiological factors associate with sleep disorders.**

Epidemiological factors	Percentage
Urban	38.09
Rural	61.91
Illiterate	57.14
Middle school	19.04
High School	04.76
Postgraduate	19.06
Home makers	71.43
Working	28.57

71.43% women had problems in initiating sleep. About 2/3rd women in the study group developed insomnia within 5 years of menopause, whereas 1/3rd took more than 7years to develop insomnia.

**Table 3: Frequency of insomnia.**

Frequency	Percentage
< 5 /month	23.82
6-10 /month	33.2
>10 / month	42.86

Co morbidities were present in 48% women. Most common co morbidity associated was hypertension (38%).About 81% women were suffering from joint pains, 38.09% women complaint of developing forgetfulness

and 9.52% women had depression. Assessment of quality of life revealed that only 30% women rate it satisfactory. Despite this less than 1% women were taking medical advice and were on medication.

**Table 4: Associated co morbidities.**

Conditions	Incidence
Hypertension	38%
Diabetes mellitus	9.52%
Mood disorders	38%
Hot flashes	23.8%
Joint pain	80.95
Depression	9.52
Forgetfulness	38.09

## DISCUSSION

We have done a subjective study on 500 menopausal women in an effort to find out its associating factors. The management of the problem definitely reduces the suffering of women and gives them fair quality of life. Life style modifications perhaps offer a better option than sleep medications.

The characteristics associated with menopause in the women are shown in Table 1. Our women seem to have menopause around 45 years. Not a single woman had a late menopause (>55 years).

Our study in accordance with the study by Octavian who also showed that insomnia is more frequent in homemakers and retired individuals.<sup>1</sup>

In a Brazilian study insomnia was seen in 40% women as compared to men having only 25% incidence<sup>2</sup>. Advancing age and menopause contribute significantly towards sleep disorders. In our study 71.43% women suffered from initiating sleep, while the rest of them had problem in maintenance of sleep. About 2/3<sup>rd</sup> women in the study group developed insomnia within 5 years of menopause, whereas 1/3<sup>rd</sup> took more than 7 years to develop insomnia.

The prevalence of sleep disorders was found to be 29.5%. Eichling et al have found the prevalence of 25-50 % in postmenopausal women in comparison to 15 % in general population.<sup>3</sup> The subjective complaint of poor sleep may not be necessarily related to electrophysiological disturbances.<sup>4</sup>

Vasomotor symptoms are frequently seen in menopausal women. Kravitz et al have shown the same in a community based survey.<sup>5</sup> In another population based study from Taiwan, hot flashes have been found to be associated with anxiety and depression.<sup>6</sup> Some studies have shown that vasomotor symptoms are the main culprits for insomnia in women<sup>7</sup>.Thurston et al have shown that sleep may be affected even in absence of vasomotor symptoms.<sup>8</sup>

Table 4 shows the associated co morbidities, which may be age or life style related. Studies have pointed associated medical conditions and insomnia.<sup>9,10</sup>

Self-rated score for quality of life due to disturbed sleep was found more in women who had depression. Similar association was noted in a study by Myra et al.<sup>11</sup>

## CONCLUSION

Sleep disorders are common, with prevalence of 29.5% at menopausal women in our study. It significantly causes psychosocial problems in women. There is need for it to be asked for and to be treated promptly.

## ACKNOWLEDGMENTS

The authors are thankful to all the women included in the study, faculty and technical staff of department of Obstetrics and Gynecology, Dr. BRAM Hospital, Pt. J. N. M. Medical College, Raipur (C.G.) India, for their cooperation and support during the entire study period.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

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**Cite this article as:** Singh A, Daharwal A, Kujur A. Sleep disorders in menopausal women. Int J Reprod Contracept Obstet Gynecol 2017;6:2289-91.