

The Prevalence of Sleep Disorders among Ageing Adults residing in Jaipur City

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ABSTRACT

Sleep disorder is a very grave issue among ageing adults. Research studies shows that many ageing adults are suffering from various sleep problems. There are many sleep disorders exist but insomnia, obstructive sleep apnea, restless leg syndrome and narcolepsy are found mostly in the population. If the person twisting and turning all the night and can't sleep at night or awake before the time, it is the symptoms of insomnia. When a person is sleeping and repeatedly experiencing uneasy respiration or interruption in respiration, it could be the sign of obstructive sleep apnea. When a person is experiencing pain, creeping and crawling sensation in the legs during sleep, it can be restless leg syndrome. If a person can't sleep properly at night and experiencing sleep attacks during day time, it could be narcolepsy. The objective of the study was to study the percentage profile of various kinds of sleep disorders among 150 male and 150 female ageing adults of Jaipur city, Rajasthan, India. A Pittsburgh Sleep Quality Index was used to examine sleep disorders in the ageing adults. A measure to examine sleep disorders was developed by the investigator and its reliability was 0.854. This is a useful measure to access types of sleep disorders among males and females ageing adults. In this study, it was found that the percentage of insomnia in ageing adults was found to be high than other sleep disorders whereas the percentage of the ageing adults with narcolepsy was found very least. Restless leg syndrome and obstructive sleep apnea was moderately found in the ageing population in this study.

Keywords: - ageing, sleep disorders, insomnia, obstructive sleep apnea, narcolepsy, restless leg syndrome.

INTRODUCTION

Sleep is a very essential biological and physiological necessity. Insufficient sleep can lead to adverse effect on physical, behavioral and mental health (**Luyster, strollo and Zee, 2012**). Sleep disorders are poorly identified and very common in general population. Almost 20% people were correctly diagnosed and treated. It is estimated that a large number of people are suffering from serious sleep disorders and need medical attention (**Sleep Medicine Research, 2011**).

Sleep is an important part of life of human beings, especially for ageing adults. Insomnia is one of the most common sleep disorder found in ageing adults. Approximately 20% people of world's population are suffering from insomnia. However, 40% ageing adults from world's population is experiencing insomnia. The prevalence of insomnia is very high in women and ageing adults over 60 years (**Ohayon and Lemoine, 2004**).

Insomnia is commonly found in women than in men. In women, preexisting insomnia may have increased vulnerability of sleep disturbance at the time of menopause (**Arakane, Castillo and Rosero, 2011**).

Many research studies showed that prevalence of sleep disorders and mental and physiological complications were found higher among women than in men. The sleep duration of men was found longer than women (**Asai, Kaneita and Uchiyama, 2006**).

The National Health Survey (2012) found an average sleep duration that ranged from 7.03 to 7.11 hours in women between 45-74 years. In men, these same averages range from 7.19 to 7.61 hours. In a meta-analysis of sex differences in prevalence of insomnia, it is found that women are 1.41 times more likely to suffer from insomnia.

OBJECTIVE

To study the presences of the types of sleep disorders among men and women residing in Jaipur city.

PARTICIPANTS

This study was conducted on 300 ageing adults (150 men and 150 women) residing in Jaipur city. Simple random sampling technique was used to select participants. The age of the samples is in between 55 years to 75 years.

MEASURES

For the collection of the data three measures were used:-

1. Basic Profile Inventory – This brief inventory was prepared by the investigator to get information about basic profile of the ageing adults with sleep disorders.
2. PSQI (Pittsburgh Sleep Quality Index) – this measure was used to examine sleep problems in ageing adults.
3. Types of Sleep Disorder Screening Questionnaire (Self-made) – This measure were developed by the investigator. It is a close-ended questionnaire consists of 34 questions about four types of very commonly found sleep disorders- Insomnia, Sleep Apnea, Restless Leg Syndrome and Narcolepsy. The reliability of the measure was calculated. The cronbach alpha value was 0.854 and gutman split half coefficient was 0.725 found.

STATISTICAL ANALYSIS

The data was collected and tabulated on a data- sheet on excel. The initial calculations of the data were done then it was statistically analyzed. Percentage and chi-square test was done for statistical analysis.

RESULTS

Table 1: Percentage distribution of the types of sleep disorders among men and women in Jaipur city

Types of Sleep Disorders	Men f (%)	Women f (%)	Chi-square	p-value
Insomnia	26 (34.7%)	47 (62.7%)	12.249	0.007**
Narcolepsy	8 (10.7%)	3 (4.0%)		
RLS	16 (21.3%)	9 (12%)		
Sleep Apnea	25 (33.3%)	16 (21.3%)		

The above table depicts the percentage distribution of different types of sleep disorders among men and women residing in Jaipur city. The data shows that the maximum number of men (34.7%) and women (64.7%) both reported insomnia. Statistically, a very significant difference was seen with ($p = 0.007$). 33.3% men and 21.3% women were having sleep apnea. Restless leg syndrome was observed in 21.3% men and 12% of women. The percentage of narcolepsy was very low in ageing adults with 10.7% in men and 4% in women was reported.

It found noticeable that very less respondents in the both groups were suffering from narcolepsy. A very large number of the women participants were having insomnia. Restless syndrome and Sleep apnea was moderately found in men and women samples.

In a study of **Palhares et al. (2014)** they found an association of poor sleeping quality in women and a strong correlation between the quality of life and the quality of sleeping.

One in four women has some insomnia symptoms, such as trouble falling asleep, trouble staying asleep, or both. About one in seven adults has chronic (long-term) insomnia. Chronic insomnia can affect the ability to do daily tasks. Insomnia is more common in women, especially ageing women, than in men (**Sateia and Buysse et al, 2017**)

CONCLUSION

Insomnia was found a very common sleep disorder in between men and women both groups of ageing adults. This problem affects almost every ageing adult. This population is less aware about sleep disorders and its possible treatment. We need to spread relevant awareness and treatments for the above problem. Yoga and exercise plays an effective role for the treatment of sleep disorders. It is recommended that ageing adults should have included yoga and exercise in their everyday schedule.

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