

Pilot Study

Prevalence of Insomnia among Elderly Residing in Urban Area-A Pilot Study

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Abstract: Insomnia in elderly is very essential part of research. The considerations of physiological changes during the vulnerable phase of life, elderly are prone for many risk factors. The research aims on identifying the prevalence of insomnia among elderly residing in urban area. Majority 22(44%) of participants were had sub threshold insomnia, 21(42%) of participants were had no clinically significant insomnia and remaining 7(14%) of participants were had clinical insomnia. Insomnia is commonest sought everyday problem among elderly which goes unnoticed.

Keywords: Insomnia, elderly.

Introduction

Aging is the gradual accumulation of changes over time linked with or accountable for an ever-increasing vulnerability to illness and death that accompanies the aging body.¹ Quite old people, because of their decreased mobility and impaired handicaps, need to do things for other people.²

Insomnia is a prevailing late life concern. Elderly people's sleep disorders are also falsely considered a natural part of their lifespan. Insomnia, the far more common sleep disorder, is a subjective diagnosis of inadequate-restorative sleep despite appropriate sleeping opportunities.³

Sleep problem in aged persons is very common. For a refreshing sleep, adequate total sleep time as well as sleep in sync with the circadian rhythm of the person is required. About half the elderly have at least one chronic sleep disorder⁴

Insomnia is a disturbed condition of the sleep-in which person face difficulty in falling asleep or maintenance of the sleep. Sleep problems were categorized under three headings, first one where individual have normal habit of falling asleep but have problem of waking up too early, in the second type individual will have difficulties in the falling asleep and in the third type of sleep problem individual will have the problem with both falling asleep and maintaining asleep.

Older adults face special health problems many of the very old age people loss their ability to live independently because of limited mobility, other physical or mental health problems and require some forms of long term care.⁵

Insomnia affects ten to thirty percentage of population. Insomnia categorized under 3 main types includes, short-term, chronic, and other types. The criteria to diagnose insomnia include difficulty of the individual in falling asleep, difficulty of the individual in staying asleep and early awakening from the sleep despite the having opportunity for the sleep.

The problem of insomnia can be classified as primary insomnia and secondary insomnia on the basis of some underlying causes. The most common causes of the primary type of insomnia include the irregularity of the sleep patterns, poor hygiene of the sleep, jet lag, excessive intake of caffeinated drinks, excessive consumption of alcohol, use of certain medications and chronic stress. Primary type of insomnia is generally not associated with the presence of medical or psychological conditions. The other type of insomnia known as secondary insomnia is most commonly associated with the underlying medical or psychological conditions among the old age people.⁶

Understanding about how sleep with age it changes its characteristics has grown significantly over past few years. Research studies have found that there are typical age related physiological modifications that occurs in the pattern of sleep. However, the growing age is also associated with the variety of sleep complaints which resulting from varies determinants. Early identification and treatment of sleep problem is essential to prevent complication resulting from sleep problems. When left unnoticed, the negative impact of sleep disorders can lead to further health consequences. They can affect quality of life, decreased ability to function, produces strain in relationships. A sleeping disorder disables the individual working and lessens the personal satisfaction, as it is related to low level of scores in the areas of mental and physical quality of life among the people. Likewise sleep deprivation builds the danger of falls and mishaps particularly during hospitalization and in nursing home position. A sleeping disorder is the most significant indicator of saw uneasiness and gloom. A sleeping disorder is an expensive ailment and related with expanded wellbeing administration use.

Methodology

Objectives of the Study

- 1) To identify the level of insomnia among elderly.
- 2) To find out the association between the insomnia of elderly with selected socio-demographic and clinical variables.

Methods: The purpose of the research is to identify the prevalence of insomnia. Considering the sample, it is agreed to choose the research design for the Descriptive Survey.

Sampling: The Probability Stratified random sampling technique was used in the present study to draw the samples from the entire population. The study was conducted among elderly people living in urban areas of Belagavi.

Sample Size: In consideration of the Pilot study, the sample size is 50, which was chosen on the basis of the main research sample size of 10%.

Tool: The ISI or Insomnia Severity Index scale is a seven items self-report tool for the assessment of the sleep onset severity, maintenance of the sleep, early morning waking problems, dissatisfaction with the sleep, day functions interference of the sleep, modifiable sleep problems by the other people and distress caused by the sleep difficulties.

A pilot study was conducted from 1st April 2018 to 30th April 2018.

Inclusion criteria

- ✓ Elderly people who were-
- ✓ Read, understand, comprehend and respond the questionnaire in English/Kannada
- ✓ Willing to participate in the study.
- ✓ Samples aged above 60 years.

Exclusion Criteria

- ✓ Elderly people who are presented with mental and sensory incompetency
- ✓ Elderly people who are not willing to participate in the study

Results

Table 1. Distribution of participants by their demographic characteristics (n=50)

Characteristics	Frequency	Percentage
Age groups		
60-70	23	46.00
71-80	20	40.00
above 80	7	14.00
Educational Status		
Illiterate	6	12.00
Primary	11	22.00
Secondary	15	30.00
Degree	13	26.00
Post-Degree	5	10.00
Type of Family		
Joint	33	66.00
Nuclear	17	34.00
Religion		
Hindu	25	50.00
Muslim	16	32.00
Christian	9	18.00
Financial support		
Dependent	32	64.00
Independent	18	36.00
Marital Status		
Married	23	46.00
Unmarried	14	28.00
Widow	7	14.00
Divorced	6	12.00
Total	50	100.00

With respect to socio demographic variables of participants of pilot study the data presented in table 1 reveals that, The findings related to age group of participants the information shows that, majority 23(46%) of the participants were belonged to 60 to 70 years of age, 20(40%) of the participants were belonged to 71-80 years of age and remaining 7(14%) of participants were belonged to above 80 years of age. In aspect with educational status of the participants, majority 15(30%) of the participants were had secondary education, 13(26%) of the participants were had degree education, 11(22%) of participants were had primary education, 6(12%) of participants were illiterates and remaining 5(10%) of participants were had post degree education.

With regard to type of family the participants belongs, majority 33(66%) of participants were belonged to joint family and remaining 17(34%) of participants were belonged to nuclear family. In view of their religion of participants the information furnished in above table shows that, majority 25(50%) of the participants were belonged to Hindu religion, 16(32%) of participants were belonged to Muslim religion and remaining 9(18%) of the participants were belonged to Christian religion.

With respect to financial status of the participants, majority 32(64%) of the participants were dependent and remaining 18(36%) of participants were independent for their financial needs. Regarding marital status of the participants, majority 23(46%) of participants were married, 14(28%) of participants were unmarried, 7(14%) of participants were widow's and remaining 6(12%) of participants were divorced.

Findings related to level of insomnia among participants of pilot study**Table 2. Distribution of participants according to level of insomnia (n=50)**

No clinically	%	Sub threshold	%	Clinical	%
21	42.00	22	44.00	7	14.00

With respect to level of insomnia of the participants the data presented in table 2 reveals that, majority 22(44%) of participants were had sub threshold insomnia, 21(42%) of participants were had no clinically significant insomnia and remaining 7(14%) of participants were had clinical insomnia.

Findings related to association between levels of insomnia with participants demographic characteristics**Table 3. Association between levels of insomnia by demographic characteristics (n=50)**

Characteristics	Levels of insomnia							
	No clinically	%	Sub threshold	%	Clinical	%	Chi-square	p-value
Age groups								
60-70	12	52.17	10	43.48	1	4.35	4.21	0.378
71-80	7	35.00	9	45.00	4	20.00		
above 80	2	28.57	3	42.86	2	28.57		
Educational Status								
Illiterate	2	33.33	1	16.67	3	50.00	11.94	0.154
Primary	7	63.64	3	27.27	1	9.09		
Secondary	4	26.67	9	60.00	2	13.33		
Degree	6	46.15	6	46.15	1	7.69		
Post-Degree	2	40.00	3	60.00	0	0.00		
Type of Family								
Joint	14	42.42	15	45.45	4	12.12	0.29	0.863
Nuclear	7	41.18	7	41.18	3	17.65		
Religion								
Hindu	10	40.00	13	52.00	2	8.00	4.4540	0.348
Muslim	7	43.75	7	43.75	2	12.50		
Christian	4	44.44	2	22.22	3	33.33		
Financial support								
Dependent	11	34.38	16	50.00	5	15.63	2.1250	0.346
Independent	10	55.56	6	33.33	2	11.11		
Marital Status								
Married	9	39.13	10	43.48	4	17.39	4.0200	0.674
Unmarried	6	42.86	5	35.71	3	21.43		
Widow	4	57.14	3	42.86	0	0.00		
Divorced	2	33.33	4	66.67	0	0.00		
Total	21	42.00	22	44.00	7	14.00		
*p<0.05								

The values presented in table 3 reveals the findings related to association between level of insomnia and selected socio demographic variables of the participants of pilot study. It depicts that, there is no significant association found between the levels of the insomnia and any of the selected socio demographic variables of the participants.

Table 4. Comparison of demographic characteristics with mean insomnia scores (n=50)

Characteristics	Mean	SD	F/t value	p-value
Age groups				
60-70	8.65	2.93	0.9012	0.4130
71-80	9.60	4.02		
above 80	10.57	4.04		
Educational Status				
Illiterate	11.83	4.12	1.6777	0.1718
Primary	7.55	3.17		
Secondary	9.93	3.47		
Degree	9.00	3.61		
Post-Degree	9.00	2.55		
Type of Family				
Joint	9.09	3.48	-0.5768	0.5668
Nuclear	9.71	3.75		
Religion				
Hindu	9.04	2.92	0.4582	0.6352
Muslim	9.13	4.00		
Christian	10.33	4.47		
Financial support				
Dependent	9.91	3.46	1.6389	0.1078
Independent	8.22	3.54		
Marital Status				
Married	10.04	3.64	0.8249	0.4869
Unmarried	9.14	3.78		
Widow	7.86	3.53		
Divorced	8.50	2.59		
Total	9.30	3.55		
*p<0.05				

The information presented in table 4 reveals the comparison of demographic characteristics with mean insomnia scores, it shows that,

Age groups: The mean score of participants of age group 60-70 years was 8.65, the age group 71-80 years was 9.60 and above 80 years of age was 10.57. The calculated F value was 0.9012 with p value 0.4130 is not found significant. Hence it is concluded that, there was no significant difference among the different age groups of participants with their insomnia scores.

Educational status: The mean score of participants with no education was 11.83, with primary education was 7.55, secondary education was 9.93, with degree education was 9 and post degree education was 9. The calculated F value 1.67 with p value 0.1718 was not found significant. Hence it is inferred that, there is no significant difference among the participants of different level of education with insomnia scores.

Type of family: The mean insomnia scores of participants of joint family was 9.09 and nuclear family was 9.71. The calculated t value -0.5768 with p value 0.5668 was not found significant. Hence it is inferred that, there is no difference between the insomnia scores with participants with different types of family.

Religion: The mean insomnia score of participants of Hindu religion was 9.04, Muslim religion was 9.13 and Christian religion was 10.33. The calculated F value 0.4582 with p value 0.6352 was not found significant. Hence it is inferred that, there is no difference between the insomnia scores with participants with different types of religions.

Financial support: The mean insomnia scores of participants dependent for financial support was 9.91 and independent for financial support was 8.22. The calculated t value 1.6389 with p value 0.1078 was not found significant. Hence it is inferred that, there is no difference between the insomnia scores different types of participants for their financial support.

Marital status: The mean insomnia score among married participants was 10.04, unmarried participants were 9.14, widow participants was 7.86, and divorced participants was 8.50. The calculated F value 0.8249 with p value 0.4869 was not found significant. Hence it is inferred that, there is no difference between the insomnia scores with participants with different types of marital status.

Discussion

The study was conducted to determine the prevalence of insomnia among elderly people living in urban areas of Belagavi. With respect to level of insomnia of the participants the data explains in this study that majority 22(44%) of participants were had sub threshold insomnia, 21(42%) of participants were had no clinically significant insomnia and remaining 7(14%) of participants were had clinical insomnia. As it was Pilot study the sample size was considerable, which explains there was no statistically significant association between level of insomnia and selected demographical variables.

Conclusion

Elderly experience the tremendous life style changes which involves the disturbance of sleep. Despite the abundance of insomnia in the elderly population, and the lack of successful treatment, screening for the existence of sleep disorders is essential for older people. Patients must be advised about natural changes in sleep but also be made aware that sleep disorders can be sorted by maintain good quality of life and keep themselves active as much as possible. Sleep deficiency may have a detrimental effect on wellbeing and quality of life that is linked to health.

Conflict of Interest: The authors have no conflicts of interest to declare.

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