INSOMNIA AMONG ELDERLY PEOPLE IN ARAR, SAUDIARABIA

By: Senthilnayaki Ramasubbu & Blessy.P,RNRM***

*** Lecturer in Northern Border University, Arar, Kingdom of SaudiArabia.**

**** Lecturer in Northern Border University, Arar, Kingdom of SaudiArabia.**

Abstract

The Study Assess the levels of insomnia among elderly people in selected areas of Arar and finds association between insomnia and demographic variables of elderly, develop and provide an information booklet regarding measures to improve sleep. The research design adopted for the study was descriptive survey method. The study was conducted among elderly people who are staying in Arar. A sample of fifty elderly people was chosen, by means of convenience, non -probability, sampling technique. The investigators developed Likert's five point scale to assess insomnia. The result of the study showed that elderly people suffer from mild to severe levels of insomnia. There is association between insomnia of elderly people and the age, marital status, personal income, availability of care giver, health status, and diet pattern. It was found that the elderly people should adapt healthy measures to have a good sleep.

Key Words: Insomnia, elderly, sleep, healthy measures.

About Author

The author Mrs. Senthilnayaki Ramasubbu,RNRM is masters in Psychiatric Nursing. She is registered psychiatric Nurse. She has worked as a StaffNurse, Clinical instructor and lecturer. Currently she is working as a lecturer in Northern Border University, Arar, Kingdom of SaudiArabia.

The author Mrs. Blessy.P,RNRM, is masters in Psychiatric Nursing. She is registered psychiatric Nurse. She has worked as a Clinical instructor and lecturer. Currently she is working as a lecturer in Northern Border University, Arar, Kingdom of SaudiArabia.

Introduction

Insomnia is among the most prevalent sleep complaints reported by elderly characterized by difficulty initiating or maintaining sleep, accompanied with daytime consequences. Studies have estimated that up to 40-50 per cent of adults over the age of 60 report disturbed sleep. [1]Nearly half of elder people report difficulty initiating and maintaining sleep. With age, several changes occur that can place one at risk for sleep disturbance including increased prevalence of medical conditions, increased medication use, age-related changes in various circadian rhythms, and environmental and lifestyle changes (Susan K, et al 2010).

Sleep complaints are common among all age groups, older adults have increased prevalence of many primary sleep disorders. Several physical and psychological changes are known to occur with normal ageing; however, adjustment to changes in sleep quantity and quality can be among the most difficult. Subtypes of insomnia include sleep onset insomnia (difficulty initiating sleep), sleep maintenance insomnia (difficulty maintaining sleep throughout the night), early morning insomnia (early morning awakenings with difficulty returning to sleep), and psycho physiologic insomnia (behaviourally conditioned sleep difficulty resulting from maladaptive cognitions and/or behaviours), the most common among older adults being maintenance and early morning insomnia.

Chronic insomnia affects approximately 9% to 12% of the population and is more prevalent than heart disease, cancer, aids, neurologic disease, breathing problems, urinary problems, diabetes, and gastrointestinal problems. Researchers estimate the total annual cost of insomnia is $30 to $35 billion. Although insomnia is highly prevalent, it is not commonly viewed as a significant threat to health. However, research has shown that a strong relationship exists between insomnia, depression, and anxiety, where insomnia may be a risk factor (Daniel. J.et al 2005)

Krishnan P & Hawranik P (2007) found in their study that complaints of sleep disturbance among elderly people are often not taking into account and is considered a normal ageing process by those caring for elderly people. They noted that quality of life can be improved if those caring for elderly people are conscious and knows how to manage their problem. On the other hand, if sleep disturbance is not diagnosed at an earlier stage, it exposes elderly people at high risk of falls, motor vehicle accidents, depression, stroke, cancer and even suicide.

Jennifer Martin (2000), Insomnia is often caused by pain associated with medical illness. Insomnia can also be caused by stimulating medications. In institutionalized elderly, sleep becomes even more disturbed and fragmented than in community-dwelling older adults. Accurate assessment and diagnosis is crucial since effective treatment strategies are available for these sleep disturbances.

Insomnia in older adults is associated with significant morbidity and mortality. Older adults with difficulty sleeping report poorer quality of life and more symptoms of depression and anxiety. Napping during the day and sleeping less than 7 hours a night have been associated with a greater risk of falls. Cognitive decline, difficulty ambulating, difficulty with balance, and difficulty seeing are also associated with poor sleep, even after controlling for medication use. The relative risk for greater mortality in older adults has been associated with taking more than 30 minutes to fall asleep and with a sleep efficiency (time asleep as a percentage of time in bed) of less than 80% (Harrison G. Bloom et al.2005).

A common misconception of the public is that this increased prevalence of insomnia is a normal and expected phenomenon of aging, but this higher prevalence of sleep disruption is often the result of the presence of medical and psychosocial comorbidities in this population. The investigator felt assessing insomnia would help to identify problems related to sleep in elderly people and to provide guidelines to improve sleep pattern. Hence this study was undertaken.

By this study investigator assesses level of insomnia in elderly people. Based on the information collected, the researcher would like to prepare one information booklet. This can be utilized by the elderly people for self-learning. The information booklet provided to the elderly will helps them to identify the measures to improve sleep, so that they can improve their sleep pattern and their health status.

Materials and methods:

A quantitative approach was adopted for this study. Descriptive research design was selected by the investigator to conduct this study. The study was conducted in selected areas of Arar, Kingdom of Saudi Arabia . The population under study consisted of elderly people. The samples were selected by using non probability convenience sampling

technique. Sample size of the study constitute of 50 elderly people . Both sex of elderly people who were living at home rather than in an institution , included in this study, Elderly who were in the treatment for insomnia, excluded from the study. After having been exposed to the rules of ethics, the participants were briefed on the objective of the study and encouraged to actively participate.

The study instrument was formulated so as to be cogent and brief to enhance positive feedback with minimal exhaustion of the participants. A study questionnaire, to assess levels of insomnia was assembled and distributed to the elderly; the research study instrument consisted of two measures: a demographic list, the questionnaire to assess levels of insomnia. Also, the questionnaire was translated into the vernacular language (Arabic). Demographic data of elderly consist of age, sex, marital status, family status, occupation, personal income, availability of care giver, health status, dietary Pattern and exercise. Levels of insomnia was assessed by the self structured tool consists of twenty items in a statement form, with a five point rating scale. The maximum scoring for the statement is '5' and minimum of '1', The scores: never-1, rarely-2,occasionally-3, Mostly-4, always-5. All the questions are in a positive statement form. The tool was given to experts in the field of nursing for content validity. Items were modified based on the suggestions of experts. A Split half method was used to establish the reliability of the tool. The reliability co-efficient of the observational check list was found to be r =0 .79 , In order to test the relevance and practicability of the study a pilot study was conducted. Inferential and descriptive statistics were used to analyze the data. The findings revealed that the study was feasible.Permission from concerned authority was taken. The data collection period for this study was one month. The samples for this study were identified through convenience sampling. The investigator maintained good interpersonal relationship with the elderly people and explained about the study. After obtaining a written informed consent from the elderly people for willingness to participate in the study, a demographic data sheet was given to the elderly people. Followed that the data were collected by using questionnaire. Information booklet about measures to improve sleep where issued and explained.

Results:

The data were organized and presented in the following three sections.

1. Description of socio demographic characters of elderly people.
2. Levels of insomnia among elderly people.
3. Association between insomnia among elderly people and selected demographic variables.

Table-1, Demographic Characteristics of elderly people

S.No	Demographic variables	Frequency	Percentage	χ2 value
1	Age in years			
	a) 60-65	20	40	
	b) 66-70	14	28	df=0.05
	c) 71-75	10	20	.036
	d) More than 75	6	12	S
2	Sex			df=0.05
	a) Male	26	52	1
	b) Female	24	48	NS
3	Marital Status			
	a) Unmarried	1	2	
	b) Married	34	68	
	c) Divorced	3	6	df=0.05
	d) Widow	8	16	.000
	e) Widower	4	8	S
4	Occupation			
	a) House wife	10	20	
	b) Government	12	24	df=0.05
	c) Private	7	14	.061
	d) Business	5	10	NS

	e) Retired	16	32	
5	Personal Income per month in SAR			
	a) Below 2000	5	10	
	b)2001- 3000	7	14	df=0.05
	c) 3001-4000	14	28	.000
	d) Above 4000	24	48	S
6	Availability of the care giver			df=0.05
	a) Yes	39	78	.000
	b) No	11	22	S
7	Health Status			
	a) Healthy	26	52	
	b) Presence of physical illness	12	24	df=0.05
	c) Presence of chronic illness	11	22	.00
	d) Presence of Mental illness	1	2	S
8	Dietary Pattern			df=0.05
	a) Regular	27	54	.00
	b) irregular	23	46	S
9	Exercise			
	a) Regular	8	16	df=0.05
	b) Irregular	19	38	.232
	c)No	23	46	NS

Table-1 depicts that envisages the association between insomnia and selected socio-demographic variables of elderly people such as age, sex, marital status, occupation, personal income, availability of care giver, health status, dietary pattern and exercise. Of these variables insomnia of elderly people and the age, marital status, personal income, availability of care giver, health status, diet pattern were significant at 5% level ie, p<.05. The rest of the socio-demographic variables like sex, occupation and exercise were not significantly associated with insomnia.

Table-2: Frequency and Percentage distribution of insomnia among elderly people. n=50

Level of insomnia	Classification of elderly		Mean	Standard deviation
	Number	Percentage		
Normal sleep (1-20)	0	0		
Mild Insomnia (21-40)	28	56%	**41.58**	**11.58**
Moderate Insomnia (41-60)	18	36%		
Severe Insomnia (61-80)	3	6%		
Very Severe (81-100)	1	2%		
Total	50	100		

The above table -2 shows the frequency and percentage distribution of elderly people according to level of insomnia. More than half of elderly people 28(56%) had mild insomnia, 18(36%) had moderate insomnia, 3(6%) had severe insomnia and only one person 1(2%) had very severe insomnia and none of them had normal sleep.

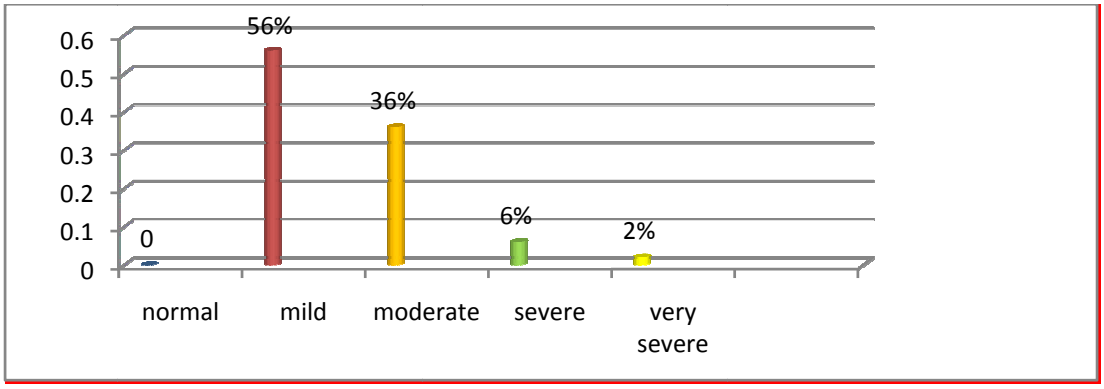

Figure 1: Bar diagram showing level of insomnia of elderly people.

Discussion:

Elderly population is associated with numerous individual and socioeconomic consequences. Elderly people are more likely to suffer from chronic insomnia characterized by difficulty maintaining sleep than difficulty initiating sleep. Management of insomnia in these patients requires very careful evaluation and exclusion of an underlying medical or psychiatric condition. Nonpharmacologic interventions in elderly patients, especially use of behavioral therapy, have demonstrated some success.

A study investigates the prevalence and socio demographic correlates of insomnia by considering a community sample of elderly individuals in South Korea. A face-to-face household survey among a total of 3,074 individuals aged 65 years and over, 2,002 participants were interviewed. Insomnia was found in 29.2% of the participants. DIS, DMS, EMA, and NRS(difficulty in initiating sleep (DIS), difficulty in maintaining sleep (DMS), early morning awakening (EMA), and non-restorative sleep (NRS) more than three times per week in the last month. The Restless Legs Syndrome (RLS) Questionnaire, a short form of the Geriatric Depression scale (GDS)) accounted for 19.4%, 21.7%, 19.6%, and 8.0% of the participants respectively. Insomnia accompanied by daytime consequences accounted for 17.1% of the participants. The participants who were females, had no education, lived alone, showed symptoms of RLS or depression, and had a lifetime history of physical illness were significantly more likely to report insomnia. The prevalence of DIS, DMS, EMA, or insomnia increased slightly with age, whereas that of NRS decreased slightly. The lifetime history of head trauma, hyperlipidemia, heart disease, anemia, or depression was significantly related to insomnia. Sleep problems are common among elderly individuals and are closely related to their lifetime history of physical illness (Won-Hyoung Kim,2013)

Evidence published in the past three decades points to insomnia endured by elderly people These findings are in accordance with those of the study, wherein elderly people suffered by various levels and symptoms of insomnia and association with many variables and history of physical illness.

Conclusion:

In summary, elderly people suffer insomnia. We found association of insomnia levels with age, marital status, personal income, availability of care giver, health status, diet pattern of elderly. Healthy measures for good sleep must be implemented by elderly people by advocating health promotion policies to ensure a healthy population of elderly. We believe that interactive sessions on sleep measures can further encourage elderly people to recognize the importance and improve their sleep. Since the sample size was limited, generalizability of the finding is limited. Convenience sampling technique was used for conducting this study. This restricts the generalization of result. The data collection tools used for the investigation were prepared for this purpose and used for the first time, where adequacy of the content of the tool cannot be established.

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