

QUALITY OF SLEEP AMONG OLD AGE PATIENTS

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Abstract

Background: In old age having poor quality of sleep is a common problem due to work and way of living life. As age grows it increases and its effect on wellbeing in all ways.

Objectives: research has been conducted with the objective of assessment of quality of sleep among old age.

Methodology: Cross-sectional research was conducted with a sample size of 50, which was selected by non-probability convenient sampling method in a tertiary care hospital in Karad to determine the quality of sleep among old age people with PSQI and statistics were calculated by descriptive and inferential statistics.

Result: 11 (22%) of the sample were having good quality sleep and 39 (78%) were having poor quality sleep.

Conclusion: Based on the research findings, the result reveals that the maximum population is having poor quality sleep and measures should be taken to improve the quality of sleep.

Keywords: Quality of sleep, old age patients.

INTRODUCTION

Common problem of old age patients is not having good quality sleep. Fulfilling demands of work and changes in lifestyle may be causes of not having good quality sleep.¹

According to DSM IV criteria (4th edition of Diagnostic and Statistical Manual of Mental Disorders) primary insomnia, long-lasting more than one month, is called persistent insomnia. It can affect and impair the sleep quality.²

Poor sleep is going to have a negative impact on older age people's life like social, physiological, and psychological wellbeing.³ In old age population, poor quality health, problems with physical functioning, risk of falling, impairment in cognitive functioning, and some time mortality kind of consequences can occur.⁴ Lifestyle habits, physical and psychological conditions, sociological and demographical factors are having correlation with sleeping disorders like insomnia, which can affect the quality of sleep.⁵ Relations, driving, leisure time, holidays, life style, behavior changes in professional and personal life, etc. are affecting due to poor quality sleep.⁶

Approximately 1/3rd part of life humans are spending for sleep. Proper sleep or good quality sleep will help to give physiological and psychological energy⁷ which can maintain good psychological and physiological health.⁸ Evidences prove that aging affects lifestyle factors like sleep.⁹

Changes in quality of sleep are increasing as age increases in older populations. Prevalence of sleep problems like insomnia is high in older population and it may be associated with other comorbidities in older age.¹⁰ Ariel B. Neikrug and Sonia Ancoli-Israel conducted a meta-analysis of 65 researches, which reveals that sleep problems in age above 60 can occur due to degenerative changes in the nervous system, not due to non-pathogenic things.¹¹ Common sleep problems in old age people are

sleep apnea and sleeplessness. Delirium, depression anxiety kind of mental health disorder and physical problems like variation in cardiac rhythms, disease of respiratory system can brought by age related sleep disorder . 11

From 2000 to 2015 worldwide population of old age people having age above 60yrs was increased by 48 % and it was approximately 901 million. Out of 8 one person was having age above 65yrs in 2015 whereas in 2010 it will become 1 out of 6 persons. 12Male to female ratio of sleeping disorders like insomnia which can affect quality of sleep is approx 1:4. As age increase ratio of male to female ratio of sleeping disorders like insomnia will increase by 1.7 after 45yrs of age.5Retired peoples are at high risk to have poor quality sleep due to symptoms of sleeping disorder like insomnia.13

Due to fluctuation in course of sleeping disorders like insomnia there is difficulty in evaluation of chronicity of it. Study conducted by Foley DJ et al reported that in 50% population reoccurrence of sleeping disorder like insomnia may be occur.14To improve quality of sleep and get prevented from sleeping disorders like insomnia, identification of prevalence and finding out associated factors which affect on sleep quality and sleep disorders like insomnia in old age population investigative studies should conducted by researchers.15According to demographic population characteristics quality of sleep among old age peoples will affect on prevalence rate.16

PROBLEM STATEMENT:

“Quality Of Sleep Among Old Age Patients”

OBJECTIVES:

To assess quality of sleep among old age patient.

MATERIAL AND METHODS:

Present cross-sectional research was conducted in general ward of tertiary care hospital in karad namely Krishna Hospital and Medical Research Center Karad (K.H. & M.R.C.). Ethical consent was received from ethical committee of Krishna Institute of Medical Sciences Karad (KIMSDU).Sample size of this study was 50. The samples were selected by non probability convenient sampling technique. Inclusion criteria for sample were patient above age of 60 years, who know Marathi and not taking any medication for sleep. Patient those who are critically ill, having impaired consciousnessPatients who are under sedation before bed time, patients with amputation of feet/foot, patients with lower limbs injury, patients who are paralysed, patients with substance abuseand patient who are mentally challenged were excluded. Consent was taken after explanation of purpose of research. Quality of sleep was assessed by Pittsburgh Sleep Quality Index (PSQI).17Analysis was done with inferential and descriptive statistics

Description of the Tool:

Section I: Deals with demographic data of the sample there are total 7 items in this section which includes personal data of the elderly patients, like age, gender, religion, education, occupation, income, residence.

Section II: Deals with The Pittsburgh Sleep Quality Index (PSQI) is a scale for assess the quality of sleep that consisted of 9 factors.Good quality of sleep is 0-4 score, were as above 5 score is the poor quality of sleep.

RESULTS:

Table 1: Showing Frequency and percentage distribution of samples according to their socio-demographic Variables N=50

Demographic Variables	Distribution of socio-demographic variable	
	Frequency	Percentage
1)Age Group (in yrs)		
65-70	30	60%
71-75	10	20%
76-80	8	16%
81 and above	2	4%
2)Sex		
Male	29	58%
Female	21	42%
3)Religion		
a)Hindu	42	84%
b)Muslim	5	10%
c)Christen	0	0%
d)Others	3	6%
4)Education		
a)No Education	12	24%
b)Primary	19	38%
c)Secondary	11	22%
d)Higher Secondary	6	12%
e)Graduate	2	4%
5)Occupation		
a)Working	14	28%
b)Not working	36	72%
6)Income		
1)1000-5000	9	18%
2)5001-10000	19	38%
3)10001-15000	18	36%
4)Above 15000	4	8%
7)Residence		
A)Urban	8	16%
b)Rural	42	84%

Table No. 1 reveals that:

- Maximum sample i.e. 30 (60%) belongs to age group of 95-75yrs whereas only 2(4%) samples belongs to age group of 81 and above.
- 29 (58%) samples are males whereas 21 (42%) samples were female.

- Maximum sample belongs to Hindu religion i.e. 42 (84%)
- 19 (38%) sample have completed their primary education whereas only 4 (8%) sample have completed their education till graduation.
- 36 (72%) samples were not working whereas 14 (28%) sample were working
- Maximum sample i.e. 19 (38%) sample were having monthly income between 5001-10000 whereas only 4 (8%) sample were have monthly income above 15000.
- As per residence 42 (84%) sample stay in rural area whereas 8 (16%) sample stay in urban area.

Table No. 2: Assessment of quality of sleep N=50

Sr.No.	Quality of sleep	Scoring	Frequency	Percentage
1.	Poor	5-21	39	78%
2.	Good	0-4	11	22%

Table No. 2 shows that

- 11 (22%) sample were having good quality sleep
- 39 (78%) sample were having poor quality sleep

DISCUSSION:

Present research study findings shows that Maximum sample i.e. 30 (60%) belongs to age group of 65-75yrs 29 (58%) samples are males whereas 21 (42%) samples were female, Maximum sample belongs to Hindu religion i.e. 42 (84%), 19 (38%) sample have completed their primary education , 36 (72%) samples were not working whereas 14 (28%) sample were working, Maximum sample i.e. 19 (38%) sample were having monthly income between 5001-10000 and as per residence 42 (84%) sample stay in rural area whereas 8 (16%) sample stay in urban area.11 (22%) sample were having good quality sleep and 39 (78%) sample were having poor quality sleep.

Similar kind of study was conducted by GEORGE, Sobhaet. al. on Study on sleep quality and associated psychosocial factors among elderly which shows that 27.6% sample were having good quality sleep whereas , 72.4% sample were having poor quality sleep by global PSQI score.18

Research conducted by Reddy MukkuSSet. al. on Insomnia in elderly: A neglected epidemic shows that 32% of research sample were suffering with insomnia. 39% were suffering with early insomnia. 89.45% were suffering with chronic insomnia. This can have effect on quality of sleep.19

Study conducted on Sleep quality among residents of an old folk's home in Malaysia by Rashid et. Al. shows that 116 (78.6%) sample were having global PSQI score ≥ 5 whereas 35(23.2%) were having score less than it.20

Thichumpa, Wet. Al. conducted study on Sleep quality and associated factors among the elderly living in rural Chiang Rai, northern Thailand shows that 44.0% population were having poor quality sleep whereas 56% population were having good quality sleep.21

Gouthaman, R. et. Al. conducted research on sleep quality and its associated factors among elderly urban population shows that Among 227 elderly maximum population belongs to age group of 55 to 60 years i.e. (44.9%), (59%) population were

females,(43.6%) were house wives, (69.6%) were educated, (60.5%) were married (60.5%). 34.8% population were having good sleep quality whereas 65.2% population have poor sleep quality.22

Research conducted by Gadie, A et. Al. on how are age-related differences in sleep quality associated with health outcomes? There results shows that 8.5% are poor sleepers, 9.28% were delayed sleepers, 14.01% were inefficient sleepers 'and 68.1% were good sleepers.23

Conclusion:

Impaired quality of sleep among old age people is common problem and it can have wrong effect on physical, psychological, social etc. aspects of life. So identification of poor quality of sleep among old age people should be done and actions should be taken for improve quality of sleep. So they can survive good and quality life.

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