



ASSESS THE QUALITY OF SLEEP AND PERCEIVED SLEEP DISTRACTORS AMONG THE ADULT PATIENTS ADMITTED IN SELECTED HOSPITAL OF MULLANA, AMBALA DISTRICT.

Nursing

Preeti*	Post Graduate student, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University, Mullana-133207. Haryana. India *Corresponding Author
Adiba Siddiqui	Department of obstetrics and gynecological nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University,
Eenu	Department of obstetrics and gynecological nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University,

ABSTRACT

Background: Sleep is required for many reasons: to rest mind and body, prevent fatigue, conserve energy and to cope with daily stress. Inadequate amount of sleep decreases the concentration, ability to make judgment and increases irritability.

Aims and objectives: The study aim to assess the quality of sleep and perceived sleep distractors among the adult patients in selected hospital, Haryana. The objectives of the study were to assess the quality of sleep and perceived sleep distractors among the adult patients, determine relationship between quality of sleep and perceived sleep distractors and to find out the association with selected variables.

Material and methods: It was a Quantitative Non- Experimental study. The study includes adult patients who were between age group of 18-65 years, hospitalized minimum for 7days, willing to participate in the study and who were present at the time of data collection. Data was collected by interview technique. A total of 150 patients were selected from surgical, orthopedic and medical wards to participate in the study 50 patients from each ward. Total 150 adult patients were selected using convenience sampling technique. Reliability of the tools was calculated by test- retest method to confirm the stability of the tool. The data was collected by Modified Standardized Pittsburgh Sleep Quality Index and Structured Perceived Sleep Distractors Performa.

Results: Majority of the adult patients (87%) were married and less than half (45%) were home maker and 31% of adult patients were employed. Nearly half of the adult patients (54%) were non-literate and (55%) were having income <10,000 rupees. Most of the adult patients (67%) were living in nuclear families and (67%) were suffering from acute illness. More than half (57%) of adult patients were living in rural area. Majority of them (78%) were hospitalized in between 7-14 days and (77%) were not taking a day time nap. Most of the adult patients (68.7%) were having poor quality of sleep and nearly 1/3rd (31.3%) of the adult patients were having good quality of sleep. Majority (92.6%) of the adult patients perceived sleep distractors as mild distraction, only (0.7%) adult patients perceived sleep as moderate distraction. Majority of the adult patients (96%) in surgical ward as well as orthopedic ward perceived sleep distractors as mild distraction. Only (16.7%) adult patients always perceived pain as sleep distractors. All the adult patients (100%) never perceived humidity, ventilation, banging of doors, trolley wheels, sweeping/dusting and monitor alarm as perceived sleep distractors. There is moderate positive relationship between quality of sleep score and perceived sleep distractors score among adult patients. In the present study age, living place, type of present illness and what time have you usually gotten up in the morning had significant association with quality of sleep scores of adult patients. Also age and employment status and what time have you usually gotten up in the morning and department had significant association with perceived sleep distractors score of adult patients.

Conclusion: The study provides a complete picture of the quality of sleep and their relationship with perceived sleep distractors in the hospital settings. Most of the adult patients had poor quality of sleep and most of them perceived mild sleep distractions.

KEYWORDS

Quality of sleep, Perceived Sleep Distractors, Adult Patients.

Introduction:

Proper sleep is important to health as good nutrition. Sleep is required for many reasons: to rest mind and body, prevent fatigue, conserve energy and to cope with daily stress. Inadequate amount of sleep decreases the concentration, ability to make judgment and increases irritability. It promotes proper day time functioning. Duration of sleep needed for maintenance of good health varies according to the individual.¹

Sleep is one of the important elements of daily cycle and is referred to as the source of energy, mental improvement and pacifier. As Shakespeare put it: "Sleep is the second servant of the nature's glorious feast and the premier banquet of the life meal." Sleep is a circadian rhythm and a complex biological pattern. When sleep-wake pattern follows the biological clock of the body, it has adapted itself to daily biological cycles. Sleep leads to physical and mental rehabilitation of the individual.²

Adequate sleep is essential to restore biological functions. During sleep body produces growth hormone for the renewal of epithelial and neuron cells. REM sleep is associated with improved blood flow to the brain, increased cortical activity, oxygen consumption, and release of nephrine. So it is needed for restoration of brain tissue and thus the restoration of cognitive function as memory and learning.³

Sleep is a biological necessity. It is a natural and restorative behavior that involves temporary disengagement of the perception and unresponsiveness to the environment around us. It is not an unconscious state and it alternates with a period of wakefulness (state

of arousal), wherein, one is alert and conscious of one's surroundings. Short habitual sleep (<6-7 hours) is a risk factor for increased blood pressure, decreased anabolic hormone level and reduced tissue repair higher levels of inflammatory cytokinins and increased levels of cortisol during evening hours, when it is usually low. Therefore, insufficient sleep makes one susceptible to chronic diseases such as hypertension, diabetes, depression, and obesity, cancer and is associated with increased mortality, and reduced quality of life and productivity.⁴

A good high-quality of sleep and its have an effect on in daily existence of both the healthful and sick character turns into one of the most important cognizance of problem for the researchers for many time, due to the fact sleep has a good sized role within the functioning of any character.⁵

The recommended amount of sleep for healthy adults is between 7-8 hours per night in order to feel rested with optimal sleep quality.⁶

The main causes of sleep disturbances are environmental factors including noise and temperature Furthermore, of the inpatients could not sleep, because of their medical condition and became insomniac because of psychological problems.⁷

Methodology:

A Quantitative Non- Experimental study design was used to collect data from adult patients. A total of 150 adult patients were enrolled into the study by using convenience sampling technique. The modified Pittsburgh sleep quality index and structured perceived sleep

distractors performa to assess the quality of sleep and perceived sleep distractors among adult patients was used to collect the data. Reliability of tools was calculated by using test- retest to confirm the stability of the tool.

Procedure for data collection:

Formal Ethical approval as taken from the institutional ethical committee of M.M. University, Mullana, Ambala, Haryana for conducting the study. The research participants were enrolled in the study after written informed consent and they were assured about the confidentiality of their responses. The study was conducted from mid December 2016 – mid January 2017.

Data collection was done in Maharishi Markandeshwar Institute of Medical Sciences& Research Hospital, Mullana, Ambala.

The sample included were 150 (50 adult patients from surgical, 50 adult orthopedic and 50 adult patients from medical ward.) patients.

Data was collected in following manner:

- Gave introduction to the participants about research and the researcher.
- Got the informed consent from the participants and collected data regarding selected variables, career preference by open ended questionnaire with interview technique.
- On average, data was collected from 5 to 6 adult patients each day. It was found that adult patients took 35-45 minutes to complete the data collection from each subject. The data is presented in the master data sheet.

Results:

Frequency and Percentage Distribution based on Level of Quality of Sleep among Adult Patients.

Most of the adult patients (68.7%) were having poor quality of sleep and nearly (31.3%) of the adult patients were having good quality of sleep. The findings shows that majority of the adult patients had poor quality of sleep as shown in Figure 1.



Figure 1 Bar graph showing the Level of quality of sleep among adult patients

Frequency and Percentage Distribution based on Level of Perceived Sleep Distractors among Adult Patients. Majority of the adult patients (92.6%) perceived sleep distractors as mild distraction, only (0.7%) adult patients perceived sleep as moderate distraction. Only (6.7%) adult patients perceived no distraction as shown in figure 2.

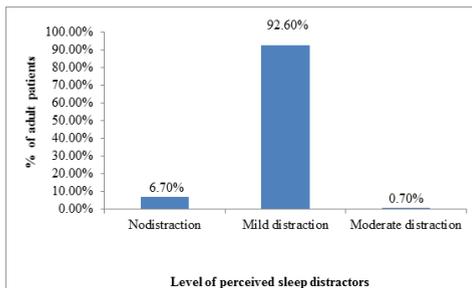


Figure 2 Bar graph showing Level of perceived sleep distractors among adult patients

It depicts the range, mean, standard deviation and mean % of quality of sleep scores among adult patients admitted in Surgical, Orthopedic and Medical wards. The calculated mean quality scores of Surgical, Orthopedic and Medical wards were 7.26+3.99, 6.74+3.59, and 6.78+3.19 respectively. Based on mean %, orthopedic ward was ranked 1st on their quality of sleep scores with mean % of (28.08)

followed by Medical ward (28.25) and Surgical ward (30.25). Further table infers that patient admitted in orthopedic ward were having good quality of sleep in comparison to patients admitted in Medical and Surgical wards as shown in table no. 1.

Table 1 Range, Mean, Standard deviation and Mean % of Quality of Sleep Scores among Adult Patients admitted in Surgical, Orthopedic and Medical wards

N=150

Variable Quality of sleep	Actual Range	Obtained range	Mean ± S.D	Mean %	Rank
Surgical ward	0-24	1-16	7.26+3.99	30.25	III rd
Orthopedic ward	0-24	2-16	6.74+3.59	28.08	I st
Medical ward	0-24	2-17	6.78+3.19	28.25	II nd

It depicts the range, mean, standard deviation and mean % of perceived sleep distractors score among adult patients admitted in Surgical, Orthopedic and Medical wards. The calculated mean perceived sleep distractors score of Surgical ward, Orthopedic ward and Medical ward were 4.04+2.65, 6.70+4.23 and 3.30+1.95 respectively. Based on mean %, Orthopedic ward ranked 1st on their perceived sleep distractors score with mean % of (9.30) followed by Surgical ward (5.61) and Medical ward (4.58). Further table infers that the patients admitted in orthopedic ward were having more distractions in comparison to patients admitted in Surgical and Medical wards as shown in table no.2.

Table 2 Range, Mean, Standard Deviation and Mean % of Perceived Sleep Distractors Score among Adult Patients admitted in Surgical, Orthopedic and Medical Wards

N=150

Variable Perceived Sleep distractors	Actual Range	Obtained range	Mean ± S.D	Mean %	Rank
Surgical ward	0-72	0-14	4.04+2.65	5.61	II nd
Orthopedic ward	0-72	0-21	6.70+4.23	9.30	I st
Medical ward	0-72	0-9	3.30+1.95	4.58	III rd

It shows the Coefficient of Correlation between Quality of sleep and Perceived sleep distractors score among adult patients. The computed “r” value (0.46) between Quality of sleep and Perceived sleep distractors was significant at 0.05 level of significance. The findings suggest that there is moderate positive relationship between Quality of sleep scores and Perceived sleep distractors score among adult patients as shown in table no.3.

Table 3 Correlation between Quality of Sleep and Perceived Sleep Distractors Score among Adult Patients

N=150

Adult patients score	r	p-value
Quality of sleep score	0.46	(0.001*)
Perceived sleep distractors score		

*Significant (p<0.05)

NS=Not Significant (p>0.05)

Only (16.7%) adult patients always perceived pain as sleep distractors and only 0.07% of adult patients always perceived uncomfortable bed, bright light and telephonic conversation as perceived sleep distractors and (40.70%) of adult patients sometimes perceived pain as sleep distractors and no one perceived humidity, ventilation, uncomfortable bed, banging of doors, trolley wheels, sweeping/dusting, monitor alarm and Telephonic conversation of visitors as sleep distractors. All the adult patients (100%) never perceived humidity, ventilation, banging of doors, trolley wheels, sweeping/dusting and monitor alarm as perceived sleep distractors. Whereas only (30%) of adult patients never perceived pain as perceived sleep distractors.

In the present study age, living place, type of present illness and what time have you usually gotten up in the morning had significant association with quality of sleep scores of adult patients

Also age and employment status and what time have you usually gotten up in the morning and department had significant association with sleep distractors score of adult patients.

Discussion

The present study was aimed to assess the quality of sleep and perceived sleep distractors among adult patients admitted in selected hospital of Mullana, Ambala district.

The present study shows that most of the adult patients (68.7%) were having poor quality of sleep and nearly 1/3rd of the adult patients (31.3%) were having good quality of sleep. In consistent with these findings a study was conducted by **Mohsen Adib-Hajbaghery** in Kashan's Hospital, Iran, on Quality of sleep and its related risk factors in hospitalized older patients. The results of the study reported that out of 220 subjects (55%) had a poor sleep quality.⁵

The present study shows that (16.7%) adult patients always perceived pain as sleep distractor. Similar study conducted by **Lane et al.** and **Sendir et al.** on Quality of sleep for hospitalized patients in **Rasoul-Akram** hospital which showed the comparison between the environmental factors and physical conditions. It was concluded that pain had a greater effect on sleep quality as compared to the environmental factors.

The findings of present study (15.30%) adult patients sometimes perceived unfamiliar environment as a sleep distractor. These findings were consistent with another study conducted by **Shintiaviana da costa** on Factors that affect inpatients' quality of sleep. The study findings revealed that (34.6%) patients perceived the environmental factors as sleep distractions.

Results of present study depicts that employment status of the adult patients have a significant association with perceived sleep distractors. Similar findings were reported in a study conducted by **Mohsen Adib-Hajbagher in Kashan's** Hospital, Iran, on Quality of sleep and its related risk factors in hospitalized older patients, revealed that employment status have a significant relationship with the distractors perceived by hospitalized patients. The quality of sleep of some patients was good as compared to the other groups such as non-literate patients and home makers.⁵

Conclusion:

The study provides a complete picture of the quality of sleep and their relationship with perceived sleep distractors in the hospital settings. Most of the adult patients had poor quality of sleep and most of them perceived mild sleep distractions.

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