"A STUDY TO ASSESS THE SLEEP DEPRIVATION ON DUAL ROLE AMONG STUDENTS WITH EARN AND LEARN SCHEME FROM DR. D.Y PATIL COLLEGE OF NURSING"

AUTHOR

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ABSTRACT:

Aim: A study to assess the sleep deprivation on dual role among students with earn and learn scheme from Dr. D.Y. Patil College of Nursing.

Objectives: a) To assess sleep deprivation among nursing students from selected Nursing college of Pune city. b) To find out the association between the sleep deprivation pattern with selected demographic variables among selected Nursing college students.

Method: The research design used in this study is quantitative research design. In research approaches we are using Non-Experimental research approach along with Descriptive research design. Sample is being selected from Dr D.Y Patil college of Nursing, Pune. Students from I & II Year MSC and I & II Year PBBSc as per the criteria. Tools used for data collection consists of demographic variable and structural questionnaire.

Result: 20% of the nursing students had negligible sleep deprivation, 41.7% of them had moderate sleep deprivation and 38.3% of them had poor sleep deprivation.

Conclusion: It is now evident that sleep is a very important factor and a key to a healthy lifestyle as deprivation of sleep not only affects physical but also mental, social and financial well-being of a person.

Key words: Assess, sleep deprivation, college students, dual role, earn and learn scheme.

INTRODUCTION

Sleep plays a vital role in good health and well-being throughout your life. Getting enough quality sleep at this night time can help protect our mental health, physical health, quality of life and safety. [**Error! Reference source not found.**]

The way we feel while we are awake plays a part on what happens while we are sleeping.

There is a wealth of evidence showing that quality of sleep is closely associated with physical mental and social well-being. [2]

This is very important and relevant in how students lose concentration on study's and are often tired after work hours.

Sleep is a naturally recurring state of mind and body, characterized by altered consciousness, relatively inhibited sensory activity, reduced muscle activity and inhibition of nearly all voluntary muscles during rapid eye movement (REM) sleep and reduced interactions with surroundings. It is distinguished from wakefulness by a decreased ability to react to stimuli, but more reactive than a coma or disorders of consciousness, with sleep displaying different, active brain patterns.

The diverse purposes and mechanisms of sleep are the subject of substantial ongoing research. Sleep is a highly conserved behavior across animal evolution.

Sleep deprivation is often seen in nursing students following earn and learn scheme as they have to cope up with their studies as well as work evening / night shifts in the hospital.

Sleep and sleepiness was found to be worse for interns and postgraduate trainees than for medical students. [3]

In a study on 244 Iranian medical students, 40.6% reported poor sleep quality; this was significantly associated with lower grades, economic and marital status, and type of training, but not gender. [**Error! Reference source not found.**]

Another study on sleep satisfaction of Iranian medical students reported that only 14% of students reported their sleep as "perfect," while 44% and 30% reported "good" and "fair" satisfaction, respectively. [5]

OBJECTIVES

1. To assess sleep deprivation among nursing students from selected Nursing college of Pune city.
2. To find out the association between the sleep deprivation pattern with selected demographic variables among selected Nursing college students.

METHODOLOGY

1. Inclusive criteria

1. The student must be of I & II Year PBBSc Nursing, I & II Year MSc Nursing.

2. The student must be working in hospital, evening or night shift.

3. The individuals interested.

2.Exclusive criteria

1. Individuals who are not interested to participate in the study.

2. Those who are not working in the hospital.

STATISTICAL ANALYSIS

Data analysis and interpretation is the process of assigning meaning to the collected information and determining the conclusions, significance, and implications of the findings. The steps involved in data analysis are a function of the type of information collected, however, returning to the purpose of the assessment and the assessment questions will provide a structure for the organization of the data and a focus for the analysis.

The analysis of *NUMERICAL (QUANTITATIVE) DATA* is represented in mathematical terms. The most common statistical terms include:

- **Mean** – The mean score represents a numerical average for a set of responses.

- **Standard deviation** – The standard deviation represents the distribution of the responses around the mean. It indicates the degree of consistency among the responses. The standard deviation, in conjunction with the mean, provides a better understanding of the data.

- **Frequency distribution** – Frequency distribution indicates the frequency of each response. For example, if respondents answer a question using an agree/disagree scale, the percentage of respondents who selected each response on the scale would be indicated. The frequency distribution provides additional information beyond the mean, since it allows for examining the level of consensus among the data.

RESULT

Section I

Description of samples (nursing students) based on their personal characteristics

Table 1: Description of samples (nursing students) based on their personal characteristics in terms of frequency and percentage

Table No. 1   **N=60**

Demographic variable	Freq	%
Age		
21 - 22 years	21	35.0%
23- 24 years	21	35.0%
25-26 years	9	15.0%
27-28 years	9	15.0%
Gender		
Male	16	26.7%
Female	44	73.3%
Marital Status		
Unmarried	50	83.3%
Married	9	15.0%
Widow	1	1.7%
Which course are you studying		
I-year MSc Nursing	30	50.0%
II-year MSc Nursing	30	50.0%
Number of children		
No child	22	36.7%
One child	4	6.7%
More than one child	4	6.7%
Not applicable	30	50.0%
Do you have any health problems		
Yes	2	3.3%
No	58	96.7%

In the above table,

25% of the nursing students had age 21-22 years, 35% of them had age 23-24 years, 15% of them had age 25-26 years and 15% of them had age 27-28 years.
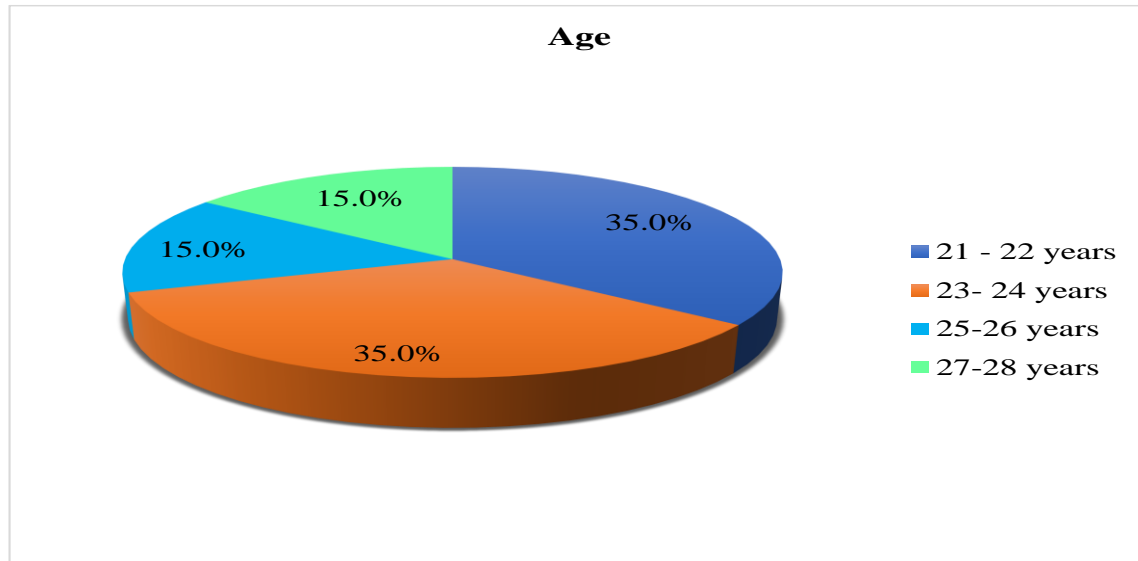
26.7% of them were males and 73.3% of them were females.

83.3% of them were unmarried, 15% of them were married and 1.7% of them were married and 1.7% of them were widow.

50% of them were I years M.Sc. Students and 50% of them were II years M.Sc. Students.

36.7% of them did not had children, 6.7% of them had single child, 6.7% of them had more than one Child and for 50% them number of children was not applicable.
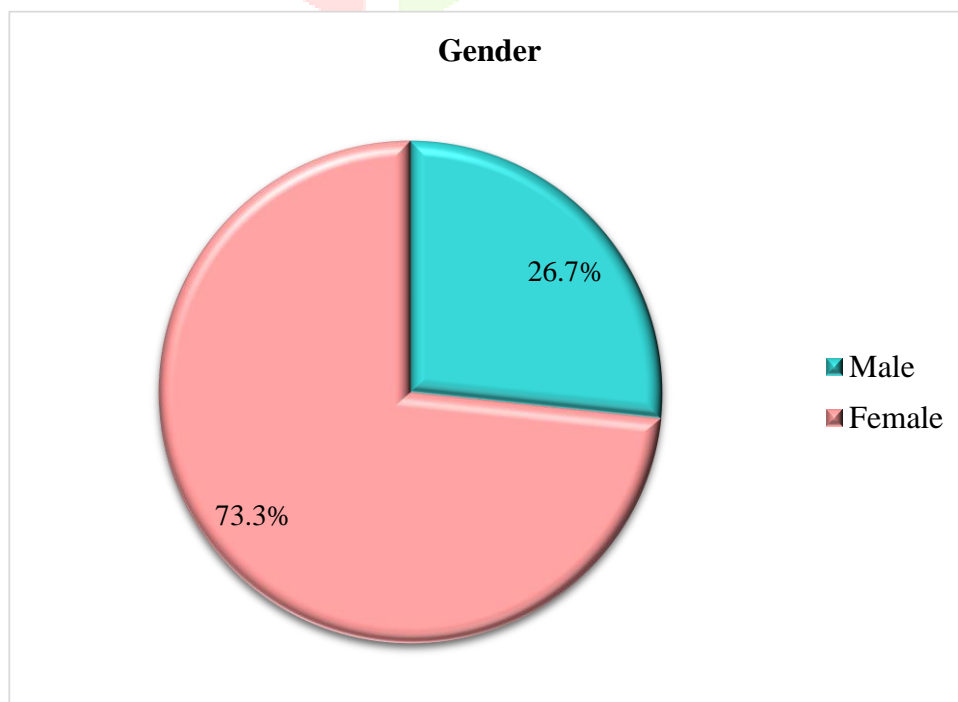
96.7% of them did not have any health problems and 3.3% of them have health Problem.
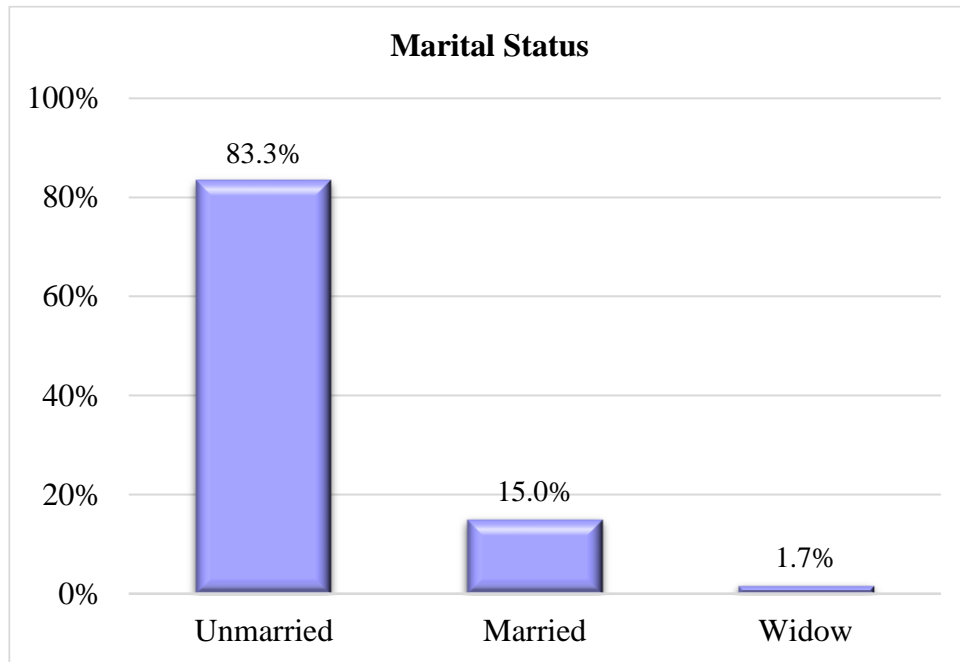

prob

In the above pie chart,

25% of the nursing students had age 21-22 years, 35% of them had age 23-24 years, 15% of them had age 25-26 years and 15% of them had age 27-28 years.
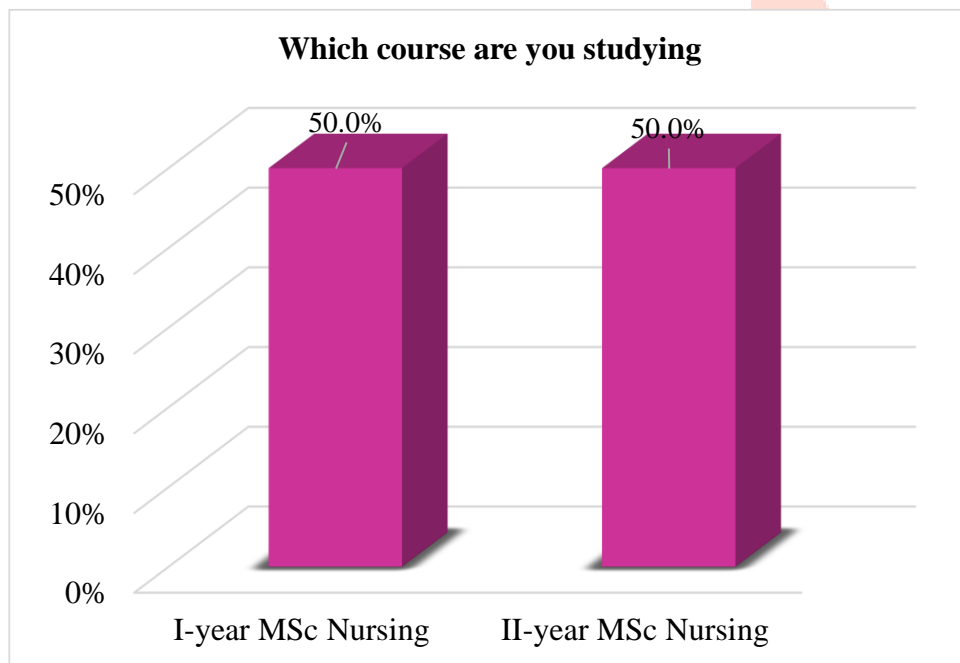
In the above pie chart,

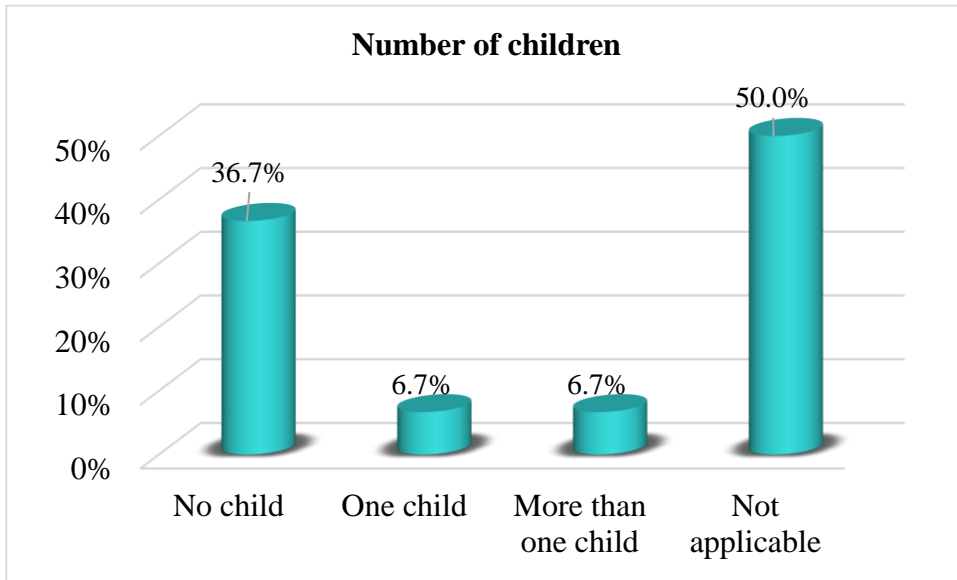26.7% of them were males and 73.3% of them were females.

Marital Status

In the above bar graph,

83.3% of them were unmarried, 15% of them were married and 1.7% of them were married and 1.7% of them were widow.

Which course are you studying

In the above bar graph,

50% of them were I years M.Sc. Students and 50% of them were II years M.Sc. Students.

Number of children

In the above bar graph,

36.7% of them did not had children, 6.7% of them had single child, 6.7% of them had more than one Chile and for 50% them number of children was not applicable.

Do you have any health problems
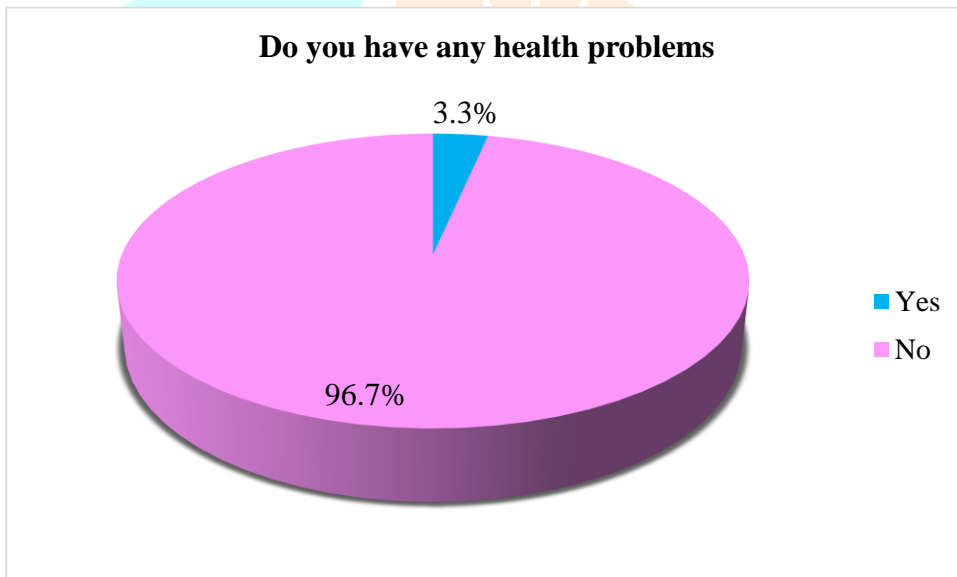
In the above pie chart,

96.7% of them did not have any health problems and 3.3% of them have health problems.

Section II

Analysis of data related to sleep deprivation among nursing students from selected Nursing college of Pune city

**Table 2: Sleep deprivation among nursing students from selected Nursing college of Pune city**

Table No. 2   **N=60**

Sleep deprivation	Freq	%
Good (Score 0-5)	12	20.0%
Moderate (Score 6-10)	25	41.7%
Poor (score 11-15)	23	38.3%

In the above table,

20% of the nursing students had good sleep deprivation (score 0-5), 41.7% of them had moderate sleep deprivation (Score 6-10) and 38.3% of them had poor sleep deprivation (Score 11-15).
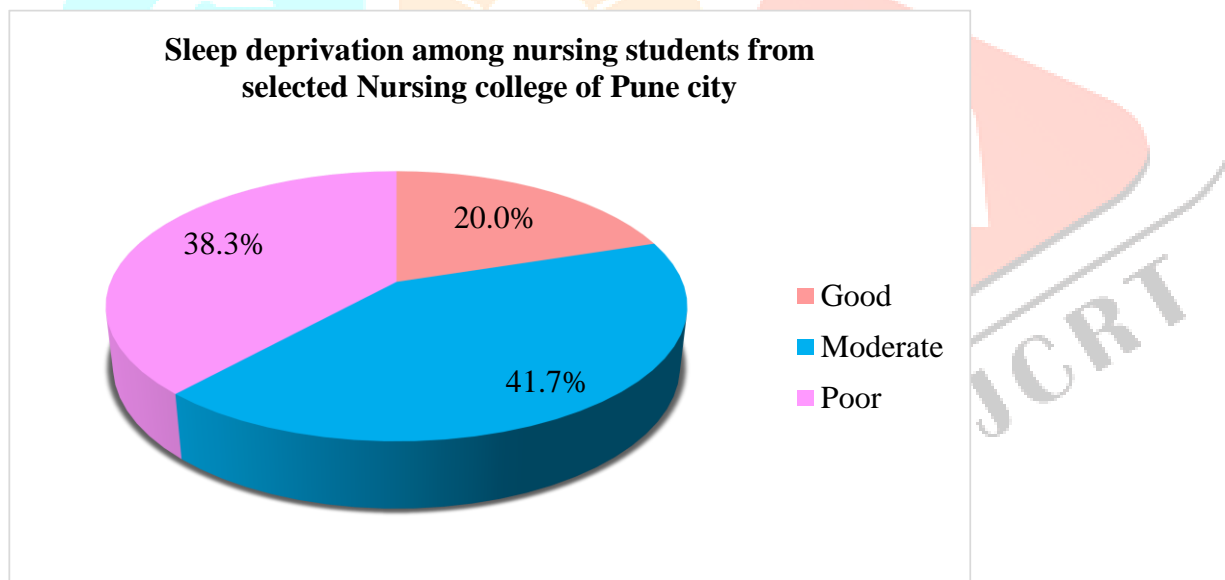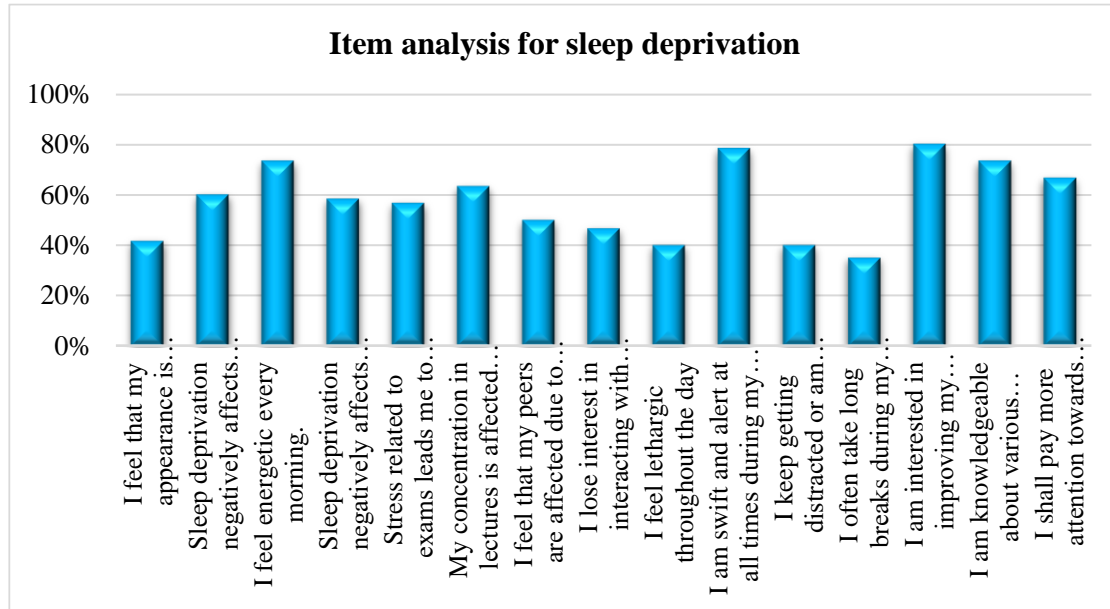
Table No. 3: Item analysis: **N=60**

Aspect	Sleep deprivation items	Freq	%
Psychological	I feel that my appearance is affected due to my sleep deprivation.	25	41.7%
	Sleep deprivation negatively affects my mood.	36	60.0%
	I feel energetic every morning.	44	73.3%
Educational	Sleep deprivation negatively affects my academic performance.	35	58.3%
	Stress related to exams leads me to sleep deprivation.	34	56.7%
	My concentration in lectures is affected due to sleep deprivation.	38	63.3%
Social	I feel that my peers are affected due to my mood caused by lack of sleep.	30	50.0%
	I lose interest in interacting with others due to drowsiness	28	46.7%
	I feel lethargic throughout the day	24	40.0%
Occupational	I am swift and alert at all times during my work shift.	47	78.3%
	I keep getting distracted or am unable to concentrate during work hours.	24	40.0%
	I often take long breaks during my work shift.	21	35.0%
Personal	I am interested in improving my sleeping pattern.	48	80.0%
	I am knowledgeable about various healthy sleeping patterns.	44	73.3%
	I shall pay more attention towards my lack of sleep and take professional help if required.	40	66.7%

In the above table,

41.7% of them felt that their appearance is affected due to their sleep deprivation. 60% of them mentioned that Sleep deprivation negatively affects their mood. 73.3% of them were feeling energetic every morning. 58.3% of them mentioned that Sleep deprivation negatively affects their academic performance. 56.7% of them mentioned that Stress related to exams leads them to sleep deprivation. 63.3% of them mentioned that their concentration in lectures is affected due to sleep deprivation. 50% of them feel that their peers are affected due to my mood caused by lack of sleep. 46.7% of them mentioned that they lose interest in interacting with others due to drowsiness. 40% of them feel lethargic throughout the day. 78.3% of them mentioned that swift and alert at all times during their work shift. 40% of them mentioned that they keep

getting distracted or would be unable to concentrate during work hours. 35% of them often take long breaks during their work shift. 80% of them mentioned that they are interested in improving their sleeping pattern. 73.3% of them mentioned that they were knowledgeable about various healthy sleeping patterns. 66.7% of them mentioned that they shall pay more attention towards their lack of sleep and take professional help if required.

Section III

Analysis of data related to association between the sleep deprivation pattern with selected demographic variables among selected Nursing college students

Table 4: Fisher's exact test for association between the sleep deprivation pattern with selected demographic variables among selected Nursing college students

Table No. 4   **N=60**

Demographic variable		Sleep deprivation			p-value
		Good	Moderate	Poor	
Age	21 - 22 years	3	9	9	0.788
	23- 24 years	5	9	7	
	25-26 years	3	2	4	
	27-28 years	1	5	3	
Gender	Male	3	5	8	0.220
	Female	9	20	15	
Marital Status	Unmarried	10	21	19	0.548
	Married	1	4	4	
	Widow	1	0	0	
Which course are you studying	I-year MSc Nursing	6	10	14	0.381
	II-year MSc Nursing	6	15	9	
Number of children	No child	2	8	12	0.080
	One child	2	2	0	
	More than one child	0	1	3	
	Not applicable	8	14	8	
Do you have any health problems	Yes	0	2	0	0.675
	No	12	23	23	

In the above table,

Since all the p-values were large (greater than 0.05), none of the demographic variable was found to have significant association with the sleep deprivation pattern among selected Nursing college students.

DISCUSSION

As it is a known fact that sleep deprivation weakens discission making ability, causes fatigue, results into loss of appetite and impacts on long term memory as well and over time sleep deprivation can also contribute to cognitive decline, memory loss and increase the risk for developing dementia.

SUMMARY

Findings of the study indicate that among the nursing college students having earn and learn scheme, 41.7% of them felt that their appearance is affected due to their sleep deprivation. 60% of them mentioned that Sleep deprivation negatively affects their mood. 73.3% of them were feeling energetic every morning. 58.3% of them mentioned that Sleep deprivation negatively affects their academic performance. 56.7% of them mentioned that Stress related to exams leads them to sleep deprivation. 63.3% of them mentioned that their concentration in lectures is affected due to sleep deprivation. 50% of them feel that their peers are affected due to my mood caused by lack of sleep. 46.7% of them mentioned that they lose interest in interacting with others due to drowsiness. 40% of them feel lethargic throughout the day. 78.3% of them mentioned that swift and alert at all times during their work shift. 40% of them mentioned that they keep getting distracted or would be unable to concentrate during work hours. 35% of them often take long breaks during their work shift. 80% of them mentioned that they are interested in improving their sleeping pattern. 73.3% of them mentioned that they were knowledgeable about various healthy sleeping patterns. 66.7% of them mentioned that they shall pay more attention towards their lack of sleep and take professional help if required.

CONCLUSION

After assessing all the data provided along with the findings and discussion, we can come to the conclusion that on an average 20% of the nursing students had good sleep deprivation, 41.7% of them had moderate sleep deprivation and 38.3% of them had poor sleep deprivation. This determines that sleep is a very important factor and a key to a healthy lifestyle as deprivation of sleep not only affects physical but also mental, social and financial well-being of a person.

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