

A Co-relational Study to Assess Impact of Social Media on Quality of Sleep among Nursing Students

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Abstract: *Background:* In the last ten years, the online world has changed dramatically due to the prodigious expansion of social media and their users. The past decade has shown an immense increase in the usage of smart phones, handheld devices, and computers to access SNS. However, relatively few studies have investigated the association between social media usage, especially at night, and daytime sleepiness in tertiary students. *Aim:* The present study aimed to assess the impact of social media on quality of sleep among nursing students. *Material & Methods:* Through Systematic random sampling 100 students were selected and structured questionnaire was used for collection of data. *Results:* Maximum nursing students i. e.44% were in the age group of 20 - 22 years, and around one fourth i. e.24% were in the age group 17 - 19 years. Findings shows that 33% subjects spend 30 - 60 minutes daily on social media & only 35% of subjects post daily on social media and 84% access social media while their free time. Majority of nursing students i. e.55% do less use of social media while 45% do more use of social media. Majority of nursing students i. e.60% have bad sleep and remaining 40% have good sleep. The correlation of social media and quality of sleep was found significant at level of 0.05. *Conclusion:* So it was concluded that there was a perfect positive correlation between usage of social media & quality of sleep. Therefore mass health education measures should be used in the community and colleges to make the students aware about impact of social media on quality of sleep.

Keywords: Impact of social media, quality of sleep, nursing students.

1. Introduction

*“Technology is a queer thing. It brings you great gifts with one hand, and it stabs you in the back with the other” - - - -
- - Carrie P Snowcomedian*

1.1 Background of the study

In the last ten years, the online world has changed dramatically due to the prodigious expansion of social media and their users. Social media consist of a set of websites and applications that allow the users to share contents, ideas, feelings, experience and communicate with large number of users.¹ Social media also bring down communication and distance barriers and allow real - time conversations and interactions.² What started out as a hobby for some computer literate people has become a social norm and a way of life for people from all over the world.³

Social Media users show a tendency to prolong their use of the medium after initially intending to use it only for a short duration. Such sedentary form of entertainment may alter the sleep rhythm and may lead to poor quality sleep.⁴

The most popular social media include facebook, facebook messenger, twitter, whatsapp, instagram, wechat, skype and viber.⁵ Facebook is the most popular social media around the world with total number of users of 1.65 billion and age group 20 - 29 years constitutes about 30% of users.⁶ The platform allow users to post on walls, update their status, upload photos, videos and comment on these posts. In Iraq, social media are also very popular and a recent survey by Arab Advisors Group of Iraqis above 18 years old reported that 77.9% of the responders are using one or more social network.⁷

1.2 Need & Significance

According to American Sleep Association over 35% of adults in the United States are sleep deprived that can be intentional; result from a hectic work - or social life or even be a sign of a sleep disorder or other medical problem.⁸

Researchers have also proposed a new phenomenon called Facebook depression, defined as depression that develops when preteens and teens spend a great deal of time on social media sites, such as Facebook, and then begin to exhibit classic symptoms of depression.⁹

While the association between social media and depression is well documented, research to investigate the effects of social media usage on sleep quality is largely absent. So researcher aimed at identifying the impact of social media on nursing students and how it adversely affects their sleep quality

1.3 Problem Statement

A co relational study to assess impact of social media on quality of sleep among nursing students.

1.4 Objectives

- To assess the pattern of usage of social media among nursing students of selected colleges.
- To study the quality of sleep among nursing students
- To find co relation between social media and quality of sleep.

2. Review of Literature

Mahesh D. et al (2018) conducted study to assess Impact of smartphone use on quality of sleep among medical students of KIMS, Hubballi. A cross - sectional study on sample of 240 was conducted by using a self - administered questionnaire, SAS and PSQI. SAS score and PSQI scores were co - related. Results showed that Out of 240 subjects 117 (48.75%) were poor sleepers & 123 (51.25%) were good sleepers. According to SAS score 123 (51.2%) were low users and 117 (48.75%) were high users of Smart phone. The mean (SD) PSQI global score was 4.8 (2.49) and mean (SD) SAS score was 102.93 (22.13). There was positive correlation between SAS score & PSQI score ($r=0.343$, $p<0.001$).¹⁰

Nida Nowreen & Farhana Ahad (2017) studied the effect of smart phone usage on quality of sleep among medical students of SKIMS Medical College, Srinagar. This cross - sectional study was conducted on 236 medical students from October 2017 to December 2017 using a self - administered questionnaire consisting of three parts socio demographic characteristics, smart phone SAS - SV, and PSQI. Pearson correlation coefficient was used to correlate SAS scores and PQSI scores. The prevalence of smart phone addiction in this study was found out to be 34.4%.62.7% were poor sleepers. There was a positive correlation between overall PQSI scores and SAS scores.¹¹

3. Material & Method

Research approach: A quantitative research approach

Research design: Descriptive Non-Experimental design

Variables under Study

Research variables: Social media and quality of sleep

Extraneous variables: Age, course of study, gender, residence, monthly family income, only child

Research Setting: S. B. S Institute of Nursing, Amritsar i.e. located in Village Sohian Kalan, Fategarh Churian Road, Amritsar.

Target population: Nursing students who are studying at S. B. S Institute of Nursing, Amritsar, Punjab.

Sample Size & Sampling Technique: 100 nursing students of S. B. S Institute of Nursing, Amritsar was taken through systematic random sampling technique.

Method of data collection: Structured questionnaire method was adopted.

Criteria for Sample Selection

Inclusive Criteria: Subjects who are

- doing nursing at S. B. S Institute of Nursing, Amritsar, Punjab.
- willing to participate in the study.

- available at the time of data collection

Exclusive Criteria: Subjects who are

- Absent on the day of data collection.
- Non co - operative.
- Students of other streams like arts, pharmacy and engineering

Description of Tool

Section I – Socio demographic variables.

Section II – Self structured questionnaire.

Section III - Pittsburgh's Sleep Quality Index (PSQI)

Criteria for Evaluation

Section I: Socio - Demographic data: It was related to sample characteristics which were not included in scoring system.

Section II: Self structured questionnaire related to use of social media. In this weighted averages will be use as per item response and total scoring was 13. In this respondents who will get score 6 or more will be considered as "High use of social media" & less than 6 will be considered as "Less use of social media".

Section III: Pittsburgh's Sleep Quality Index. Scoring of the answers is based on a 0 to 3 scale, whereby 3 reflects the negative extreme on the Likert Scale. A global sum of "5" or greater indicates a "poor" sleeper.

Data Collection Procedure

The data collection was carried out in month of May, 2019. Formal written permission was obtained from the Principal of Institute & researcher had taken written informed consent from subjects prior to the data collection procedure. Questionnaire technique was adopted and 30 minutes given to respondents to complete the questionnaire.

4. Data Analysis and Interpretation

Table 1: Socio - demographic profile of the sample, N = 100

Sample Characteristic	Frequency (n)	Percentage (%)
Age (in years)	17 - 19	24
	20 - 22	44
	23 & above	32
Course of study	B. Sc. Nursing	60
	G. N. M	40
Gender	Male	13
	Female	87
Residence	Rural	51
	Urban	49
Family income (Rs. /month)	<=5000	15
	5001 - 10, 000	22
	10, 001 - 15, 000	36
	>=15, 001	27
Any Sibling	Yes	89
	No	11

Table 1 describes that maximum students i. e.44% were in the age group of 20 - 22 years, followed by 32% in the age group of 23 years & above, and remaining 24% were in the

age group 17 - 19 years. As per course of study, most of students 60% were from B. Sc. Nursing and 40% from G. N. M. 87% students were females, almost half of students i. e. 51% were belong to rural area and remaining 49% from urban area and 36% students belonged to monthly family

income group Rs.10, 001 - 15, 000. Maximum students i.e. 89% had sibling and few 11% had no sibling.

Objective 1: To assess the pattern of usage of social media among nursing students

Table 2: Frequency and percentage distribution related to use of social media as per item responses, N= 100

Statement related to use of social media	Frequency (n)	Percentage (%)	
How many social media sites do you have accounts with?	a) 1	29	29
	b) 2	36	36
	c) 3	22	22
	d) 4	08	08
	e) more than 4	05	05
How many times a day do you look at social media?	a) not everyday	10	10
	b) once a day	27	27
	c) 2 - 5 times	35	35
	d) 5 - 10 times	21	21
	e) more than 10 times	07	07
How much time do you spend on social media per day?	a) less than 30 minutes	28	28
	b) 30 - 60 minutes	33	33
	c) 1 - 2 hrs	19	19
	d) 2 - 3 hrs	16	16
	e) more than 3 hrs	04	04
How often do you post on social media?	a) never	12	12
	b) every few months	14	14
	c) every few weeks	14	14
	d) weekly	18	18
	e) daily	35	35
	f) multiple times a day	07	07
When do you access social media?	a) during free time	84	84
	b) while at college/ work	03	03
	c) during social occasions	05	05
	d) meal times	01	01
	e) any spare moment	07	07
Do you check social media before you get out of bed?	a) Yes	48	48
	b) No	52	52
Is checking social media the last thing you do before going to bed?	a) Yes	55	55
	b) No	45	45
What do you use social media for?	a) keeping in touch with friends and family	80	80
	b) event planning	02	02
	c) buying and selling	03	03
	d) inspiration	03	03
	e) news	06	06
	f) to meet new friends	03	03
	g) to find employment	02	02
	h) to browse/ time waste	01	01
Has social media affected a relationship friend/ family/ romantic?	a) Yes	67	67
	b) No	33	33
Do you consider yourself addicted to social media?	a) Yes	35	35
	b) No	65	65

Table 2 shows that only few of them 5% have accounts more than 4, 35% look social media 2 - 5 times per day and 33% subjects spend 30 - 60 minutes daily on social media. Almost half of subjects i. e. 48% checked social media before getting out of bed, 80% use social media to keep in touch with friends and family and only few 1% use media to browse or time waste. 67% subjects believed that social media affected a relationship and few of them i. e. 35% considered themselves to be addicted to social media.

Table 3: Frequency and percentage distribution of students related to classification of use of social media, N = 100

S. No.	n (Frequency)	% (Percentage)
More use of social media	45	45
Less use of social media	55	55

Table 3 revealed that majority of nursing students i. e. 55% less use social media while 45% nursing students more use social media.

Objective 2: To study the quality of sleep among nursing students

Table 4: Frequency and percentage distribution of quality of sleep of nursing students, N = 100

S. No.	n (Frequency)	% (Percentage)
Good Sleeper	40	40
Bad Sleeper	60	60

Table 4 shows that majority of nursing students i. e. 60% have bad sleep and remaining 40% have good sleep.

Objective 3: To find co relation between social media and quality of sleep

Table 5: Correlation between social media and quality of sleep among nursing students, N = 100

Variable	Mean Score	Maximum Score	Minimum Score	Standard Deviation	r	P value
Social media	5.070	12	1	2.523	0.246*	0.014
Quality of sleep	4.110	8	0	1.650		

*Significant at the 0.05 level (2 - tailed)

Table 5 depicts mean score of pattern of use of social media was 5.070 and of quality of sleep was 4.110. Standard deviation of social media use was 2.523 and of quality of sleep was 1.650. The correlation of social media and quality of sleep was found significant at level of 0.05 which showed positive correlation between social media & quality of sleep.

5. Conclusion

The findings of the study revealed that majority of nursing students i. e.84% subjects access social media while their free time, 48% checked social media before getting out of bed, 67% believed that social media affected a relationship and60% have bad sleep. The correlation of social media and quality of sleep was found significant at level of 0.05. So it was concluded that there was a perfect positive correlation between usage of social media & quality of sleep.

6. Nursing Implications

Nursing Education

- We can modify the behavior of students and bring changes in their life related to limited use of social media.

Nursing Practice

- The nurse in practice setting will discuss effects of social media with parents.
- She can reinforce the good practices and discourage the practices that are unhealthy and deteriorate the health of children.
- We can create awareness among students and their parents related to prevention of sleep disorders.

Nursing Administration

- Nurse administrator should plan and organize health education programs in the community, schools so that the information can be imparted through small and large groups.
- Teaching and distribution of booklets with relevant pictures and written instructions related to impact of social media on sleep is essential.

Nursing Research

- The findings of the present study serve as the basis for the professionals and the students to conduct further studies. The generalization of the study result can be made by replication of the study.

References

- [1] Owusu - Acheaw M, Larson AG. Use of social media and its impact on academic performance of tertiary institution students: a study of students of Koforidua Polytechnic, Ghana. *JEducPract*.2015; 6 (6): 94 - 101.
- [2] Al - Rahmi WM, Othman MS. The impact of social media use on academic performance among university students: A pilot study. *J InfSyst Res Innov*.2013; 4: 1 - 10.
- [3] Boyd D. Taken out of context American teen sociality in networked publics. Massachusetts Institute of Technology affiliated to University of California, Berleley, 2008.
- [4] Levenson, J. C., Shensa, A., Sidani, J. E., Colditz, J. B., Primack, B. A. The association between social media use and sleep disturbance among young adults. *Preventive Medicine*, 85, 36 - 41
- [5] Leading social networks worldwide as of April 2016, ranked by number of users (in millions). Available from: <http://www.statista.com/statistics/272014/global-socialnetworks-ranked-by-number-of-users/> [Last accessed July 12, 2016]
- [6] Junco R. Student class standing, Facebook use, and academic performance. *J Appl Dev Psychol*.2015; 36: 18 - 29.
- [7] Arabian Gazette Reporter. Majority of internet users in Iraq have Facebook account. July 30, 2013. Available from: <http://www.arabiangazette.com/majority-internet-users-iraqfacebook-account-20130730/> [Last accessed July 12, 2016].
- [8] Davis, K.2016. Sleep Deprivation: Causes, Symptoms and Treatment. *Medical News Today*. Accessed 21.8.2017 <http://www.medicalnewstoday.com/articles/307334.php>
- [9] Copyright 2017 by Human Factors and Ergonomics Society. DOI 10.1177/1541931213601814 Proceedings of the Human Factors and Ergonomics Society 2017 Annual Meeting 1327
- [10] Mahesh D. Kurugodiyavar, Sushma H. R., ManeeshaGodbole&Manjunath S. Nekar (2018) conducted study to assess Impact of smartphone use on quality of sleep among medical students of KIMS, Hubballi International Journal of Community Medicine and Public Health Kurugodiyavar MD et al. *Int J Community Med Public Health*.2018 Jan; 5 (1): 101 - 109 <http://www.ijcmph.com> January 2018 | Vol 5 | Issue 1 pp 101 - 109
- [11] Nida Nowreen & Farhana Ahad, Effect of smartphone usage on quality of sleep among medical students, 1367 *National Journal of Physiology, Pharmacy and Pharmacology* 2018 | Vol 8 | Issue 10