



A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING MOBILE PHONE USAGE ON SLEEP AMONG B.SC. NURSING STUDENTS AT SRM COLLEGE OF NURSING, KATTANKULATHUR.

Mental Health Nursing

Ranjana Gupta	BSC N students, SRM College of Nursing, SRM Institute of Science and Technology, Kattankulathur, India.
Kopila Yadav	BSC N students, SRM College of Nursing, SRM Institute of Science and Technology, Kattankulathur, India.
Sabita Yadav	BSC N students, SRM College of Nursing, SRM Institute of Science and Technology, Kattankulathur, India.
Mrs. Selva Mary Devakani. J*	Assistant professor, SRM College of Nursing, SRM Institute of Science and Technology, Kattankulathur, India. *Corresponding Author

ABSTRACT

Introduction: Smart phone have become a pervasive part of our daily lives but the continuous usage and craving to mobile phone has affected the people in various aspects like psychologically, physically and socially. **Objectives:** To assess the study of pretest and post test level of mobile phone usage and sleep among of B.Sc. Nursing students, To determine the effectiveness of Structured Teaching Programme regarding mobile phone usage on sleep among B.Sc. Nursing students. **Method:** Quasi experimental pre test and post test only design for the study. 195 students who fulfilled the inclusion criteria were selected by using non probability convenient sampling method. Structured questionnaire was used to assess the demographical variables and standard questionnaires used for mobile phone use and sleep pattern. Reliability of the tool established by split half method. **Results:** In pre test, majority (83%) of subjects were had severe addiction, (17%) of them had moderate addiction on smartphone; (100%) of subjects were had poor sleep. Whereas in post test majority (98%) of subjects were had moderate addiction, (2%) of them had mild addiction on smartphone; majority (88%) of B.Sc. nursing subjects were had poor sleep and (12%) of them had good sleep. There was highly significant ($p < 0.01$) association between "Age and Year of present graduation" and "Cell phone addiction" and there was significant ($p < 0.05$) association between "monthly income" and "sleep quality". **Conclusion:** Necessary to guide the students regarding healthy usage and negative effects of mobile phones.

KEYWORDS

Effectiveness, Structured Teaching Programme, Mobile phone, Sleep, Nursing Students

INTRODUCTION

A smart phone is a device that include sophisticated characteristics along with fundamental characteristics of getting call, calling, and text messages. Today, smart phones can conduct many computer functions, have a color display, touch screen, mobile phone operating system and internet access which have capacity of running "apps". Smart phone is technologically popular, it is now a part our life.

Smart phone has become a pervasive part of our daily lives. Initially, it was only used for communications tools, but nowadays mobile phone operates as computer that provides us games, music players, internet, calculator, video camera, alarm clock, and many other advantages such as enhanced social connectivity, availability, emergency, safety and decreased loneliness [1].

Lamentably, communication technology has some negative effects also. Continuous usage and craving to mobile phone have affected the people in various aspects like psychologically, physically and socially. Excess mobile phone use was discovered and found it cause variety of unhealthiness, including inadequate concentration, pain in head, ditzzy, exhaustion, acne in face, tension, nighttime sleeping problem and frustration [2]. Improper use of mobile phone by students nowadays presents many deleterious effect [3].

Students used to maintain their phone on bed or near bed table while sleeping at night, as it also discovered in another research. Only a few users turn off their phone while sleeping. These findings conclude that individuals who are usual users of mobile phones get so engaged with mobile phones that during sleep they find it difficult to shut down their phone [4].

Various theories are there that explains the sleep disturbance mechanism due to uncontrolled use of mobile phones. It disturbs the sleep by increasing psycho physiological arousal, through exposure to bright light which cause delay in the circadian rhythm, and due to prolonged use of mobile phone physical discomfort are seen [5].

MATERIALS AND METHODS

An extensive review of literature for the study was done, which helped to analyze and report on existing information of the problem selected for the study and design tool for data collection. Quasi experimental

pre test and post test only design for the study. 195 students who fulfilled the inclusion criteria were selected by using non probability convenient sampling method. Structured questionnaire was used to assess the demographical variables and standard questionnaires (SAS and PSQI) used for mobile phone use and sleep pattern. Reliability of the tool established by split half method. The r value of tool was $r = 0.82$.

RESULTS AND DISCUSSION

Table-1: Frequency And Percentage Distribution Of Demographic Factors Of B.Sc. Nursing Students N=195

S. No	Demographic Factors	Class	No. of respondents	Percentage (%)
1	Age (in years)	17 – 18	52	26.7
		19 – 20	93	47.7
		21 – 22	46	23.6
		23 – 24	4	2.1
2	Gender	Male	25	12.8
		Female	170	87.2
3	Year of present graduation	First	59	30.3
		Second	48	24.6
		Third	42	21.5
		Fourth	46	23.6
4	Place of residence	Rural	67	34.4
		Urban	74	37.9
		Semi urban	54	27.7
5	Monthly family income (in rupees)	<5,000	1	0.5
		5,000 - 10,000	48	24.6
		10,001 - 15,000	80	41
		>15,000	66	33.8
6	Type of family	Nuclear	121	62.1
		Joint	74	37.9
7	Number of siblings in family	No	38	19.5
		One	97	49.7
		Two	49	25.1
		Three	10	5.1
		More than three	1	0.5
8	Working member in the family	Father	59	30.3
		Mother	25	12.8

		Both	97	49.7
		Others	14	7.2
9	Currently staying in	Home	80	41
		Hostel	115	59
10	Whether place of stay has good mobile network connection	Yes	180	92.3
		No	15	7.7

Table-2: Frequency And Percentage Distribution Of Demographic Factors (Regarding Cell Phone Usage) Before Intervention And After Intervention Of B.Sc. Nursing Students N=195

S. No.	Demographic Factors	Class	No. of respondents			
			Before Intervention	%	After Intervention	%
1	Mobile phone possession	Yes	195	100	195	100
		No	0	0	0	0
2	I call my friends	Once in a while	7	3.6	0	0
		Once a day	82	42.1	24	12.3
		At least 2- 3 times a day	99	50.8	2	1
		Once in a week	1	0.5	97	49.7
		Whenever I need help	6	3.1	72	36.9
3	I call my parents	Whenever I need help	9	4.6	60	30.8
		Once in a while	5	2.6	0	0
		Once a day	89	45.6	67	34.4
		Twice a day	92	47.2	0	0
		Every week	0	0	68	34.9
4	How many percentages of calls are related to education?	100	0	0	32	16.4
		80	8	4.1	89	45.6
		60	81	41.5	74	37.9
		40	106	54.4	0	0
5	How many percentage of calls are personal?	100	13	6.7	1	0.5
		80	109	55.9	6	3.1
		60	63	32.3	78	40
		40	10	5.1	110	56.4
6	Independently possessed mobile phone at the age of (in years)	<16	61	31.3	59	30.3
		16 – 18	125	64.1	126	64.6
		19 – 21	9	4.6	10	5.1
		22 – 24	0	0	0	0
7	Pocket money per month (in rupees)	<3,000	65	33.3	66	33.8
		3,000 - 5,000	95	48.7	93	47.7
		> 5000	35	17.9	36	18.5
8	Amount of money spent on mobile phone usage (in rupees) per month	<500	181	92.8	181	92.8
		500 - 1,000	14	7.2	14	7.2
		1,001 - 1,500	0	0	0	0
		>1,500	0	0	0	0
9	Availability of internet connection at home/hostel	Yes	139	71.3	140	71.8
		No	56	28.7	55	28.2
10	If yes, money (in rupees) spent on internet at home/hostel per month	Nil	53	27.2	52	26.7
		200	2	1	84	43.1
		400	75	38.5	59	30.3
		800	65	33.3	0	0

Table-3: Frequency And Percentage Distribution Of Pretest And Post Test Of Demographic Factors About Sleep Of B.Sc. Nursing Students N=195

S. No	Demographic Factors	Class	Sleep Quality		Chi-Square test	DF	P-Value
			Good	Poor			
1	Age (in	17 – 18	9	43	4.707	3	0.195
		19 – 20	13	80			

		21 – 22	2	44			
		23 – 24	0	4			
2	Gender	Male	3	22	0.003	1	0.960
		Female	21	149			
3	Year of present graduation	First	10	49	7.702	3	0.053
		Second	9	39			
		Third	4	38			
		Fourth	1	45			
4	Place of residence	Rural	9	58	0.643	2	0.725
		Urban	10	64			
		Semi urban	5	49			
5	Monthly family income (in rupees)	<5,000	1	0	9.612	3	0.022*
		5,000 - 10,000	4	44			
		10,001 - 15,000	13	67			
		>15,000	6	60			
6	Type of family	Nuclear	18	103	1.949	1	0.163
		Joint	6	68			
7	Number of siblings in family	No	7	31	3.664	4	0.453
		One	8	89			
		Two	7	42			
		Three	2	8			
		More than three	0	1			
8	Working member in the family	Father	9	50	2.381	3	0.497
		Mother	3	22			
		Both	9	88			
		Others	3	11			
9	Currently staying in	Home	9	71	0.141	1	0.708
		Hostel	15	100			
10	Whether place of stay has good mobile network connection	Yes	21	159	0.891	1	0.345
		No	3	12			

*-Significant at 5% level

**.-Significant at 5% level

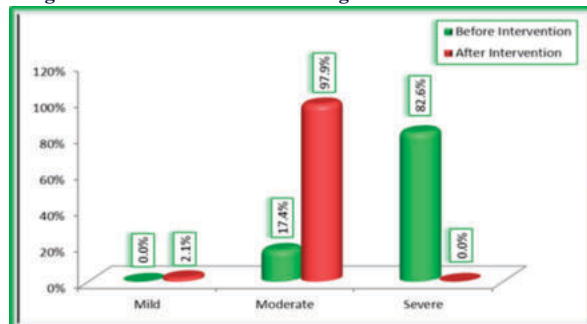


Figure 1: Frequency and percentage distribution of pretest and post test level of mobile phone usage among B.Sc. Nursing students.

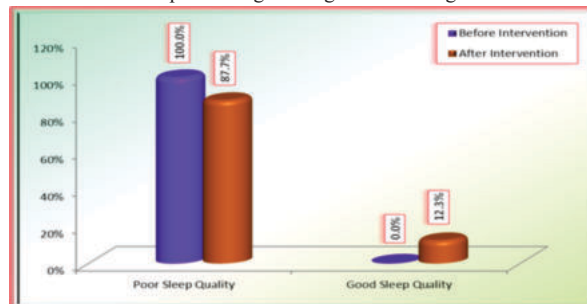


Figure 2: Frequency And Percentage Distribution Of Pretest And Post Test Of Level Of Sleep Among B.Sc. Nursing Students

The result revealed it was significant ($p < 0.05$) connection between “monthly income” and “sleep quality” and no significant ($p > 0.05$) connection between all other demographic factors.

CONCLUSIONS

The present study concludes that, between the pre test and post test level of mobile phone usage at $p = 0.01$ a high significant difference

found and there was a highly significant difference found between the pre test and post test level of sleep at $p=0.01$ level. Though mobile phones has positives role in our daily lives, its overuse has more negative effects on sleep, health and hence academic performance. So, it is necessary to guide the students regarding healthy usage and negative effects of mobile phones.

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