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NOMOPHOBIC (NMP) BEHAVIOURS OF THE SMARTPHONE USERS AMONG THE STUDENTS OF A MEDICAL COLLEGE IN ANDHRA PRADESH

Community Medicine

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ABSTRACT

Background: Mobile phone is one among the best inventions of man. With the advancement of technology, it had been upgraded as smartphone and it had almost replaced everything like video games, digital camera, television, newspapers etc. With the availability of various data plans from different network providers its usage has been increased among all the age groups especially among the students. The increased use of smartphones affects the students both physically and psychologically. The current study was regarding the mobile phone addiction among the students of a private medical college in Andhra Pradesh state.
Objective: The objective of this study was to find out the prevalence of NMP and its predictors among smartphone using medical undergraduates.
Methodology: An Analytical Cross Sectional study was conducted among MBBS students (n=254) for a period of two months i.e., 1st March 2019 to 30th April, 2019, using NMP Questionnaire consisting of Four factors, it was validated with Cronbach's alpha test with a result of 0.873. Sample was selected using systematic random sampling method from each batch. SPSS trial version 23 was used for data entry and analysis. Comparison of means of individual questions and factor scores was done.
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Results: The prevalence of NMP behavior among the study subjects was 78 p.c. Significant higher means was observed for the factor "Not being able to communicate" and individual variables like "when they could not use smartphone," "loss of contact with family and friends," and "could not look information up on smartphone". Nomophobic behavior among males was 54.54 p.c and females was 45.46 p.c. More than 80 p.c of the subjects spent time on social media and on texting.
Conclusion: NMP has emerged as a noteworthy problem. Smartphones as a self-learning tool providing sleek connectivity are essential. Their benefits lead to over use resulting in addiction or NMP. Increased awareness is needed among the youth regarding this. Standardized measures for identification and appropriate psycho-behavioral therapy for those seeking help might alleviate the problem.

KEYWORDS

Medical Undergraduates, Mobile phone addiction, Nomophobia.

INTRODUCTION:

As the technology is improving day by day and a decrease in the cost of smartphones, caused mobile dependence throughout the world.[1-3] In urban India, there was an increase in the usage of mobile phone over 90% since 2012.[4] Now a new disorder termed Nomophobia (NMP) or Mobile phone addiction has garnered attention.[5] It has been proposed to be included in the new Diagnostic and Statistical Manual of Mental Disorders V.[10]

Sharma et al. [6] reported that 75% of the participant medical students had NMP and 83% experienced panic attacks when unable to access their mobiles. Similar studies among medical students have been conducted in Indore[9] and Bengaluru.[7]A majority of college and university students from varied socioeconomic background in India are touched by the effects of widely available smartphones. The current study was regarding the mobile phone addiction among the students of a private medical college in Andhra Pradesh state.

OBJECTIVE:

To study the prevalence of Nomophobia (NMP) and to find out its predictors among the smartphone using medical undergraduates.

Methodology:

The present study is an Analytical Cross Sectional study conducted among the MBBS students of all batches of a Private Medical College, West Godavari District for a period of two months i.e., from 1st March to 30th April, 2019. The study subjects were selected using Systematic Random Sampling technique. A total of 254 students were included in the study.

Sample Size Calculation :

The Prevalence estimate of 42.6 p.c. was taken from the study done by P. Dasgupta, et.al,[8]

Formula: $n = [(Z\alpha/2)2\,p \times q]/l^2$

$Z = 1.96$; $p = 42.6\%$; $q = (100-p)$;

L= Relative Precision : 15% of p.

Sample size, n = 254 (actually total is 230)

Data was collected using a Pre-designed, Pre-tested and a Semi-structured questionnaire i.e., NMP Questionnaire consisting of Four factors, it was validated with Cronbach's alpha test with a result of 0.873. The study questionnaire was developed basing on Yildirim and Correia Standard Questionnaire, 2015[3], aimed to measure the nomophobic behaviors of college students, i.e.,(1) Not being able to communicate, (2) Losing connectedness, (3) Not being able to access information and (4) Giving up convenience. All items are rated using 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).[3] The NMP-Q has 20 questions, each scored on a 7-point Likert scale. The total score on the NMP-Q is 20 at its lowest (20 * 1) or 140 (20 * 7) at its highest. A score of 0-69 is considered as absence of nomophobia and a score of 70-140 is taken as presence of nomophobia. A database was created and analyzed using SPSS Vr. 23 software (trail).

Ethical Clearance: Prior permission from the ASR institutional ethics committee was taken to conduct the study with the no. IEC/ASR/APPROVAL/01/2019. Consent was taken from each participant after explaining the nature and purpose of study.

RESULTS:

A total of 254 medical students had completed the questionnaire. There were no incomplete forms. The mean age of subjects in years was 20.08 ± 1.512. Gender proportion of the subjects was male - 128 (50.4 p.c.); female - 126 (49.6 p.c.) Students staying in hostel was 200 (78.7 p.c.). In the present study the prevalence of Nomophobia among the participants was 78 p.c. Nomophobic behavior among males was 54.54 p.c (108) and females was 45.46 p.c(90).

Significant higher means was observed for 1) If I did not have a data signal or could not connect to Wi-Fi Mean – 5.09 + 1.905 S.D. 2) If I did not have my smartphone with me, I would be worried because my family and/or friends could not reach me – Mean – 4.97 + 1.784 S.D. 3)

I would be annoyed if I could not use my smartphone and/or its capabilities when I wanted to do so Mean – 4.7 + 1.892 S.D. I would be annoyed if I could not look information up on my smartphone or mobile when I wanted to do so Mean – 4.69 + 1.948 S.D.

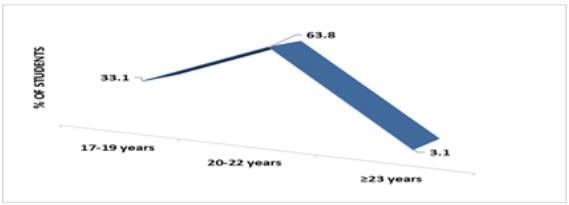

Fig :1 Showing Age Distribution Of Study Subjects

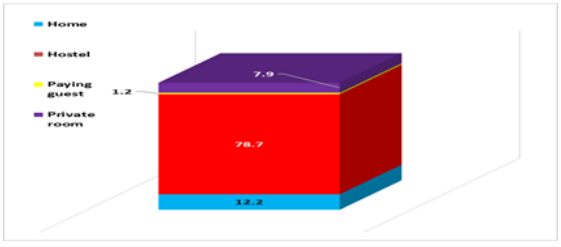

Fig :2 Showing Distribution Of Study Subjects Based On Place Of Stay

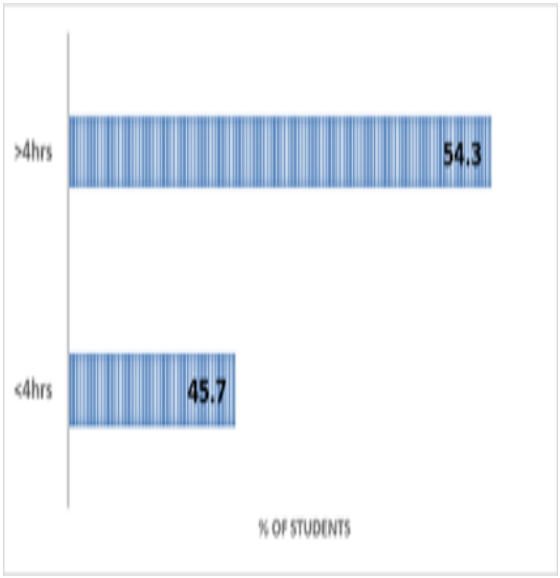

Fig :3 Showing Distribution Of Study Subjects Based On Hours Spent On Using Mobile

Table 1: Association Between Nomophobia And Socio-demographic And Its Predictors

Factor		Nomophobic Behaviour		Chi-square	d.f	p-Value
		Present	Absent			
Gender	Male	108	20	6.192	1	0.013
	Female	90	36			
Data plan	Present	193	51	4.733	1	0.03
	Absent	5	5			
Smart phone usage per day	<4 hours	75	41	21.967	1	0.001
	>4hours	123	15			
Social media usage	Present	175	40	9.656	1	0.002
	Absent	23	16			
Gaming,music/killing time	Present	169	37	10.590	1	0.001
	Absent	29	19			
While dining	Present	50	5	6.857	1	0.009
	Absent	148	51			
At travelling	Present	159	35	7.669	1	0.006
	Absent	39	21			
During or between classes	Present	66	6	10.996	1	0.001
	Absent	132	50			
While hanging out with friends/talking to someone	Present	98	16	7.725	1	0.005
	Absent	100	40			
While alone/bored/in restroom	Present	179	43	7.352	1	0.007
	Absent	19	13			
Before sleep, on waking up	Present	142	27	10.830	1	0.001
	Absent	56	29			
While waiting for someone/something	Present	141	28	8.822	1	0.003
	Absent	57	28			

p value < 0.05 was considered statistically significant. p value <0.001 was considered statistically highly significant.

DISCUSSION:

NMP is a relatively newer concept Sharma et al ., in their study reported that 75% of the participant medical students had NMP and 83% experienced panic attacks when unable to access their mobiles.[6] Pavithra MB et al 39.5% students were Nomophobic in this study and another 27% were at risk of developing Nomophobia.[7] People with nomophobia always tend to keep their phone switched on[9], sleep with mobiles with a habit to look at the screen frequently to the point of hearing "false mobile sounds" or ringxiety.[10,11,12] Significant association of mobile phone dependence (MPD) with place of stay. Availability of newer smartphones with multitasking features has led to increased time spending with smartphones.

CONCLUSION:

NMP probably due to higher proportion of nomophobics staying in hostel and utilizing smartphone for using social media and talking or texting family. NMP has emerged as a noteworthy problem. The present study, however, did not assess socioeconomic status, pocket money of students, which might influence nomophobic behaviors.

Recommendations:

Standardized measures for identification of the NMP behavior should be made and appropriate psycho-behavioral therapy for those seeking help might alleviate the problem.

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