

PREVALENCE OF NOMOPHOBIA AMONG MEDICAL STUDENTS IN A PRIVATE COLLEGE OF BHUBANESWAR, ODISHA

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ABSTRACT

Nomophobia literally means no mobile phobia that is the fear of being out of mobile phone contact. With the addition of multitude of applications, mobiles are being used for unwinding, so much so that it is now being considered more of a distraction and addiction for all age groups, primarily the college goers. The current study aims to assess the nomophobia among the undergraduate medical students. To study prevalence of nomophobia among study sample To determine predictive factors that may be attributing to this nomophobia Cross sectional survey among undergraduate medical students of medical college, inclusion criteria being students in their 1st to final year studying MBBS and those willing to participate & giving their informed consent. Students absent on the day of survey & those who are not willing to participate would be excluded. A structured, pretested questionnaire with sociodemographics/academic performance/frequency and expenses towards mobile use of study sample along with a validated 3 point likert scale to suggest probable nomophobia Total 284 students participated in the study, mean age 21.08 yrs; between 2nd to 8th semester; female: male being 5:4; 48% of them being from 5th semester and 34% of respondents being from Odisha. 17.2% had smartphones, mean cost being 15,000/ and highest recharge amount was in range of 3000-5000/month with data usage averaging 15.5hours/day in sample (range being 30min to 20hrs/d). Only 27% switch off mobile or put it in silent mode and those using mobiles perpetually, 44% complained of sleep problems. Score of <3 which was suggestive of severe nomophobia seen in 7.8% and were referred to counselling. Nomophobia is found to be significant in medical students and individual and group counselling should be given to control it.

Key words: Mobiles, smartphones, nomophobia, counselling, academic performance

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INTRODUCTION

Mobile phones, that were assets of only the elite in 1990s have now become an indispensable possession of almost all, from all walks of life, and some statistics claim increase in subscribers from 12.4 million in 1990 to 500 million in 2000 to 3.3 billion in 2008 and 5.3 billion at the end of 2010¹. The utility of the phones have also expanded from just connecting with friends and relatives to a multitude of other applications like calculator, search engines, camera etc. These are tabs or smart phones and there is no denial that this multitasking technology gadget is a must possess category item for most across the globe. Nevertheless the usage benefits are now being shadowed by over usage and the new disorder making rounds is "Nomophobia", the fear of being out of mobile phone contact. Acquiring the gadget at a very young age, and it serving the purpose of almost all needs of all age groups, especially the younger generation, now stress is identified with its absence. It is provoking marked changes in the behaviour and living patterns of the current generation which is being labelled as nomophobia^{2, 3}. Medical education has been scientifically proven to be a very stressing, demanding and the additional stressor to spend long time away from home, often becomes the underlying reason to use or overuse a phone. Several studies have been attempted both in India and abroad to study this problem of Nomophobia and find its predictors^{4,5,6,7}. The current study is also planned in a private medical college among the undergraduate students in Eastern part of India as a part of student counselling activities and performance appraisal.

Objectives

To study incidence of nomophobia among study sample To determine factors that may be attributing to nomophobia among students

Material and Methods

A cross sectional study was done among the undergraduate students of the medical school under KIIT University from October 2016 to December 2016 after Ethical clearance and as a part of student support and counselling programme. Inclusion criteria were students in their 1st to final year studying MBBS; students willing to participate & giving their informed consent. Those absent on the day of survey & those who are not willing to participate were excluded from the study. Thus the final sample for the study was 284 students, which was as per convenience sampling. The nonophobia operation definition used for the study means no mobile phobia that is the fear of being out of mobile phone contact. If a person is in an area of no network, has run out of balance or even worse run out of battery, the persons gets anxious, which adversely affects the concentration level of the person^{2,5}. The study instrument was a structured, pretested questionnaire containing following parts. First part - Socio demographic profile and questions related to pattern of mobile phone use. Second part – a three point Likert scale was used to see the behaviour related issues that are likely to be the outcome of mobile usage^{2, 7}. A nine questionnaire set was used to assess nomophobia. The answers to the likert's scale to rate nomophobia were summated and those

less than 9 were severe affected; 9-15 were moderate 16-20 mild and more than 20 normal.

The data was subsequently collected and entered in SPSS version 17 and analysed for statistical inferences. Percentages and Chi square was used for statistical significance among variables.

Results

Out of the 284 students from 2nd to 7th semester who participated in the study

the male: female ratio was 5:4. The first semester could not be included as the new admissions were delayed. 34% were from home state ie Odisha and 87% were hostelites.83.7% had smart phones in the range of 5000-54,000 INR, mean cost being 15,000 INR. Internet data usage for the sample averaged at 15.5hours in the sample (30min to 20hours/d) with average expenditure in month for internet and specialized services were 822 rupees for the sample.

Table1. Sociodemographics of the sample

Characteristics	N=284(%)
Father's education	
Graduate	97(34.2)
Post-graduate	187(55.8)
Father's occupation	
Pvt service/buisness	107(37.7)
Govt service	177(62.3)
Mother's education	
Graduate	168(59.2)
PG	116(40.8)
Mother's occupation	
Housewife	157(55.3)
Private job/Business	69(24.3)
Government service	58(20.4)
Own vehicle	
Yes	115(40.5)
Type of mobile	
Smartphones/tab	251(88.3)

Since the sample is from a private medical college, the education of both parents was good ie nearly 55% were postgraduates and fathers were in the very high income bracket. Even the

student had access to own vehicle ie 40.5% and 88.3% had smartphones or tabs, which served as a proxy for their very high socioeconomic status.

Table 2: Performance vs type of mobile in this sample

Performance		Gender		Total
		Female	Male	
very good	smartphone and tab	20 51.3%	19 48.7%	39
	normal phone	1 100.0%	0 0.0%	1
	Total	21 52.5%	19 47.5%	40
good >70%	smartphone and tab	92 51.7%	86 48.3%	178
	normal phone	14 53.8%	12 46.2%	26
	Total	106 52.0%	98 48.0%	204
average	smartphone and tab	16 47.1%	18 52.9%	34
	normal phone	2 33.3%	4 66.7%	6
	Total	18 45.0%	22 55.0%	40
Total	Smart phone and tab	128 51.0%	123 49.0%	251
	normal phone	17 51.5%	16 48.5%	33
	Total	145 51.1%	139 48.9%	284

Table 2 shows that, girls performance is more in the very good and good category, while boys are more in average category. In both the good performing categories , the students are in possession of smart phones, which hints that possession of these phones is not having and adverse effect on the academic career of the students($p < 0.003$). Table 3 below gives the score for nomophobia as found in the study sampe gender wise. Severe nomophobia was seen more in males ie 23.7% and 18.6% in females and total in the sample was 21.1%. This calls for psychologist referral and some stringent health promotion measures by the institution authorities. 78.6% of the females were seen to be moderately afflicted which means unless controlled, they have a propensity to go on to severe grade. Overall boys were seen to be more normal than the girls.No statistical significance was observed between

nomophobia scores between hostelites and day boarders, or the parents socioeconomic status or rising semesters. This may be attributed to the easy access to wifi internet services and cheap data card services available now-a-days and also the limitation with regards the sampling as students from only one private college were taken up in this study. The commonest cause for using mobile was attributed to use of social media applications like whatsapp and facebook (88.7%) followed by messaging and calling up friends (36.9%) as multiple responses were permitted. 28% also admitted to using the phones for academic purposes though it was limited to examination times.This strongly suggests that nomophobia is an impending danger afflicting the very young and unless controlled can cause more damage in future.

Table 3: Scoring of nomophobia in the sample

SCORE for nomophobia	Gender		Total
	Female	Male	
1. Severe	27 18.6%	33 23.7%	60 21.1%
2 .Moderate	114 78.6%	85 61.2%	199 70.1%
3. Normal	4 2.8%	21 15.1%	25 8.8%
Total	145	139	284

DISCUSSION

Medical graduates are expected to have a good understanding about health needs at least better than their counterparts pursuing other careers. However availability and multitude of purposes served by a mobile phone, makes it undoubtedly the most desirable asset, infact indispensable for many. In a recent Bangalore study among medical students 39.5% nomophobia was reported among students and another 27% to be at risk ³, more in males, which was also the case in our study. Interestingly though like in our study in this study too no statistical association was seen between performance and use of mobiles. These figures are less in studies reported in some other cities of India like 18.5% in Indore ⁶, while existence of nomophobia has been reported in studies from Poland, Pakistan and Spain ^{4, 5, 9, 10}. Though in most studies it is hinted not to affect academic performance, however that should not bring in a sense of complacency on behalf of counsellors. It could be because the place of study was a private college, wherein evaluation procedures are not very stringent and the current study patterns which are student friendly and practical oriented. The study strongly brings out a necessity of laying restrictions on mobile use in classes and libraries and such monitoring should be done from time to time and students may be apprised of the problem and given counselling thereof.

REFERENCES:

Mobithinking Global Mobile Statistics. All quality mobile marketing research, 2017 November Edition | www.jbino.com | Innovative Association

mobile Web stats, subscribers, ad revenue, usage, trends. 2011; Available from: <http://mobi-thinking.com/mobile-marketing-tools/latest-mobile-stats> last accessed on January 22th 2014.

Beranuy M, Oberst U, Carbonell X, Chamarro A. Problem-atic Internet and mobile phone use and clinical symptoms in college students: the role of emotional intelligence. *Comput Hum Behav.* 2009; 25(5): 1182–1187.

Pavithra MB, Suwarna Madhukumar, Mahadeva Murthy TS. A STUDY ON nOMOPHOBIA - MOBILE PHONE DEPENDENCE, AMONG STUDENTS OF A MEDICAL COLLEGE IN BANGALORE. *NJCM.* 2015,340-344.

Nicola Luigi Bragazzi, Giovanni Del Puente. A proposal for including nomophobia in the new DSM-V. *Psychology Re-search and Behavior Management* 2014;7 155–160.

Krajewska-Kułak E, Kułak W, Stryzhak A, Szpakow A, Prokopowicz W, Marcinkowski JT. Problematic mobile phone using among the Polish and Belarusian University students, a comparative study. *Prog Health Sci.* 2012;2(1):45–50.

Dixit S, Shukla H, Bhagwat A, Bindal A, Goyal A, Zaidi AK, Shrivastava A. A study to evaluate mobile phone de-pendence among students of a medical college and associ-ated hospital of central India. *Indian J Community Med.* 2010;35(2):339–341.

North, D., Johnston, K., & Ophoff, J. (2014). The use of mobile phones by South

African university students. Issues in Informing Science and Information Technology, 11, 115-138. Retrieved from <http://iisit.org/Vol11/IISITv11p115-138North0469.pdf>

Davey, S., & Davey, A. (2014). Assessment of Smartphone Addiction in Indian Adolescents: A Mixed Method Study by Systematic-review and Meta-analysis Approach. *International Journal of Preventive Medicine*, 5(12), 1500–1511.

Krajewska-Kuřak E, Kuřak W, Stryzhak A, Szpakow A, Prokopowicz W, Marcinkowski JT. Problematic mobile

phone using among the Polish and Belarusian University students, a comparative study. *Prog Health Sci*. 2012;2(1):45–50.

Sahin S, Ozdemir K, Unsal A, Temiz N. Evaluation of mo-bile phone addiction level and sleep quality in university students. *Pak J Med Sci* 2013;29(4):913-918.

