

Research Article

Rising concern of nomophobia amongst Indian medical students

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ABSTRACT

Background: Aims and objectives of current study were to assess the pattern of mobile phone usage and prevalence of nomophobia amongst third year medical students in north India.

Methods: A cross sectional study was conducted amongst 130 medical students of third year MBBS of Sri Aurobindo institute of medical sciences, Indore. A pre-formed pre-tested questionnaire was used. Data were analyzed statistically by simple proportions.

Results: Response rate was 90.76%. Female preponderance (65 females out of 118 respondents) was seen in our study. Most of the students were in the age group of 22-24 years. All of them were having possession of at least one mobile phone with activated internet services in 87% of students. 34% were having two mobile phones, while 4% had more than two mobiles. 61% students had to recharge the internet services once a month, 28% twice a month, while 11% students had to recharge it more than three times a month. 73% of students were nomophobics. 21% of nomophobics experienced rinxity. 83% of students experienced panic attacks when their mobile phone was misplaced. Headache and lethargy were the commonest side effects that were experienced by 61% of students.

Conclusion: Our study gives a brief idea about the woeful outcomes of nomophobia. There is a definite need of further studies in this field.

Keywords: Nomophobia, Rinxity, Mobile phones, Medical students

INTRODUCTION

The rising use of mobile phones is adversely affecting the daily activities as well studies of medical students. "No mobile phobia" or 'the fear of being out of mobile phone contact' is the literal meaning of "Nomophobia".^{1,2}

When we talk about nomobhobia statistics, in UK, 66% people are afraid of either losing or being separated from their phones while 41% of people own more than one phone. Female preponderance (70%) of concentration levels and is responsible for increased level of anxiety, has been seen in a study.³

It has been documented that, low-energy electromagnetic radiations (EMR) are received during mobile phone use and seem to cause structural and functional cellular changes which leads to abnormal cell response within the Central Nervous System (CNS) as well as auditory system.⁴

Nomophobia has been affecting the mental status of the mobile phone users. That's why, it has been proposed that nomophobia should be included in the DSM-V (Diagnostic and Statistical manual of Mental disorders, fifth version). Currently we are using DSM-IV (Diagnostic and Statistical manual of Mental disorders,

fifth version) which is the gold standard manual for assessing the psychiatric diseases.⁵

Most of the nomophobics experience 'Rinxiety'.⁶ Ringxiety (a portmanteau of ring and anxiety) is also known as 'Phantom vibration syndrome', phantom ringing, hypovibrochondria fauxcellarm, which means a false sensation of ringing of mobile phones.⁷

There is a lacuna of research work in this field and hence we decided to carry out our study to screen nomophobics amongst third year medical students of our medical college.

METHODS

This is an anonymous, questionnaire-based survey. A Self-developed, pre-validated questionnaire was used. Data is expressed as counts and percentages. This study has been carried out in Shri Aurobindo institute of medical sciences, Indore, amongst third year medical students. A semistructured questionnaire was prepared based on previous studies consisting of 13 questions including 5 questions to assess nomophobia⁸ and to assess subjective symptoms because of mobile phone usage.^{9,10}

Statistical analysis

Data were analyzed statistically by simple proportions.

RESULTS

After taking permission from the head of the department, the questionnaire was distributed amongst 130 third year medical students in the lecture hall of community medicine department of the SAIMS medical college. We could recollect 118 completely filled questionnaires. Incompletely filled 12 questionnaires were excluded from the study.

Response rate was 90.76%. Out of 118 included respondents, 65 were females and 53 respondents were male. Female preponderance was seen in our study.

Most of the students were in the age group of 22-24 years. All of them were having possession of at least one mobile phone. This shows that mobile phones have become a necessity now a day. 34% were having two mobile phones, while 4% had more than two mobiles. Most of the students were having android phones of branded companies.

87% of respondents were having activated internet services on their mobiles. 61% students had to recharge the internet services once a month, 28% twice a month, while 11% students had to recharge it more than three times a month. This shows the addiction of medical students towards internet. Very few students actually search for medical queries or medical literature on medical app or Google, but most of them check

Facebook, e-mails, WatsApp, and other downloaded applications on their phone. Only 19% of medical students were having downloaded medical applications (like Medscape, etc.), rest were either unaware of it or they were not interested.

While calculating results for nomophobia, we were surprised to see the percentage of nomophobics. 73% of students accepted that they are actually nomophobics but they were unaware of this fact before this study. 16% of students were on a slippery note and only in 11% of students, nomophobia was absent. 21% of nomophobics experienced rinxiety. Nomophobia score has been depicted in Table 1.

83% of students experienced panic attacks when their mobile phone was misplaced. Headache and lethargy were the commonest side effects that were experienced by 61% of students, which might be because of overuse of mobile phones. Serious side effects like skin infection and difficulty in hearing were not reported by any of the student. This is one of the causative factor of decreased concentration in studies amongst the medical students.

Table 1: Nomophobia score among the male and female respondents in the study.

Score	Grade	Males	Females	Total
10-15	No evidence of nomophobia	8%	3%	11%
16-28	On a slippery note	7%	8%	15%
29-40	Nomophobic	35%	38%	73%

DISCUSSION

In our study, we found female preponderance which is in contradiction to a study conducted by Dixit et al. 2010.³ We found prevalence of nomophobia in 73% of study population which shows its rising trend amongst medical students.³

We could recollect headache and lethargy in 61% of students. But, in a study by Szykowska A et al. 2005, the scenario of subjective symptoms of mobile phone use was different. The most prevalent symptom reported in was the thermal sensation within the auricle and behind/around the ear. Impaired concentration (56%) and facial dermatitis (11%) was also reported in that study.⁹

There are both pros and cons of mobile phone usage during student life. It helps us to connect with our family and friends, but on the other hand, there is clinching evidence of its increasing subjective symptoms due to its overuse amongst nomophobics.

CONCLUSION

This study highlights the prevalence of nomophobia amongst medical students and its woeful outcomes. There

should be increased awareness about increasing incidence of nomophobia not only amongst medical students, but general population also. We suggest more study in this field specially in larger sample of population to get more accurate results.

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