

Prevalence of Nomophobia and Use of Social Networking Sites and Apps- A Cross Sectional Study among Undergraduate Medical Students in SRMC, Nandyal

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Back Ground: Information and communication technologies(ICT) have become an indispensable part of our lives. With the proliferation of inexpensive mobile devices, we are now living in a mobile age in which mobile ICTs are vigorously and quickly adopted. Nomophobia is defined as the discomfort or anxiety caused by non-availability of mobile phone. It is considered as a modern age phobia.

Objectives : To study the Prevalence of nomophobia and use of social networking sites and apps, and the effect of nomophobia on health and lifestyle among undergraduate medical students.

Methodology: This cross-sectional study was conducted among 337 under graduate medical students from 16th September 2018 to 15th November 2018 at the tertiary care teaching hospital nandyal. The participants were medical students from first to final year. The data was collected by using a semi-structured questionnaire. The data was analysed using SPSS version 24 and the results expressed as proportions.

Results : The mean age of participants was 21 years. 51% of the students were females and 49 % were males. All the students had atleast one mobile phone of which 97% had smart phone. 97% of the students had access to data plan. 37% of the students spent > 5 hours per day. 48.2 % of the students spent > 3 hours in Entertaining apps like you tube, gaming apps, online shopping. Only 6.2% students actually search for medical queries or medical literature on smart phone. 59.3 % of the students had moderate nomophobia and 15.4 % had severe nomophobia. Only 8.2% does not have nomophobia. 60.9% of the students experienced headache and lethargy, 48.1 % felt insecure, 11.2 % had panic attacks when mobile phone was misplaced and 3.3 % experienced depression.

Conclusion: The prevalence of nomophobia among medical students is high and it adversely affects their health and academic performance. The students must be properly counselled to decrease mobile phone adherence.

Keywords: Nomophobia, Mobile phones, Medical students, Education, Internet, Lifestyle

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I. Introduction

Smart phones provide many features and functionalities. Their popularity is increasing among college students. They has become a platform to perform our daily activities. A single device is able to perform call (audio &video) and text functions, daily schedule with reminders, online shopping, social media network, gaming, multiple apps and e-education. Day by day the addiction towards mobile phone is increasing. Nomophobia is "NO mobile phobia" is "the fear of being out of mobile phone".^{1,2}

Mental status and social behaviour of a persons is affected by prolonged usage of mobile phone. Hence nomophobia is included in new DSM -V.³ Nomophobia is a modern age phobia. It is the by product of interaction between people and mobile information and communication technologies ,especially smart phones. As per TRAI, there are 980.81 million mobile phone subscribers in India. In 2015, India is the 2nd largest mobile phone user country.⁴

Smart phones has made things comfortable, convenient and safer. But their unregulated use led to poor health in way of tiredness, excessive stress and headache, poor concentration and decrease academic performance.^{5,6} Many studies proved a direct relationship between students performance in academic activities with mobile phone usage.^{7,8}

Aims and objectives:

- 1)To study the prevalence of nomophobia among Undergraduate medical students.
- 2)To study the usage of social networking sites and apps.
- 3)To study the effect of nomophobia on health and lifestyle.

II. Materials And Methods

This cross sectional study was conducted at the tertiary care teaching hospital, Nandyal. The participants were medical students from first to final year. The data was collected using a semi structured questionnaire. The data was analysed by using spss version 24 and the results expressed as proportions.

III. Results

After taking permission from Head Of the Department and Institution ethical committee, the study was conducted among 337 Under Graduate medical students from 16th September 2018 to 15th November 2018. The questionnaire was distributed to the students and the results were analysed.

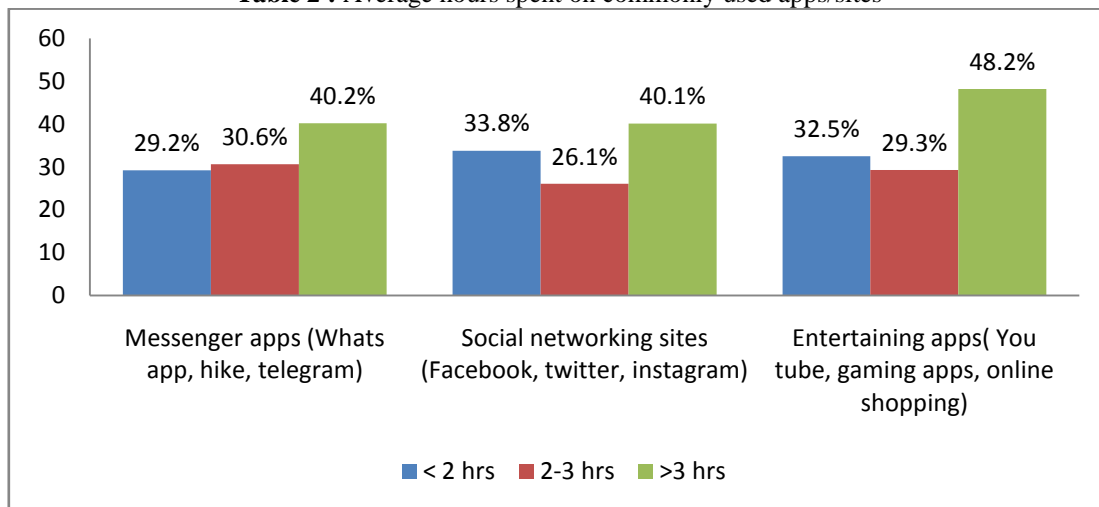
In this study, the mean age of participants was 21 years. 51% of the students were females and 49 % were males. All the students had atleast one mobile phone of which 97% had smart phone. This shows that mobile phone has become a necessity now-a-days. 97% of the students had access to data plan. 24% of the students exceeded the daily data limit atleast once a week, 64% twice a week, 12% morethan twice a week. This shows the addiction of medical students towards mobile phone.

Table 1 : Time (per day) spent using smart phone

Time	Percentage
< 1 hour	10.7 %
1-3 hours	25.5 %
4-5 hours	26.8 %
> 5 hours	37.0 %

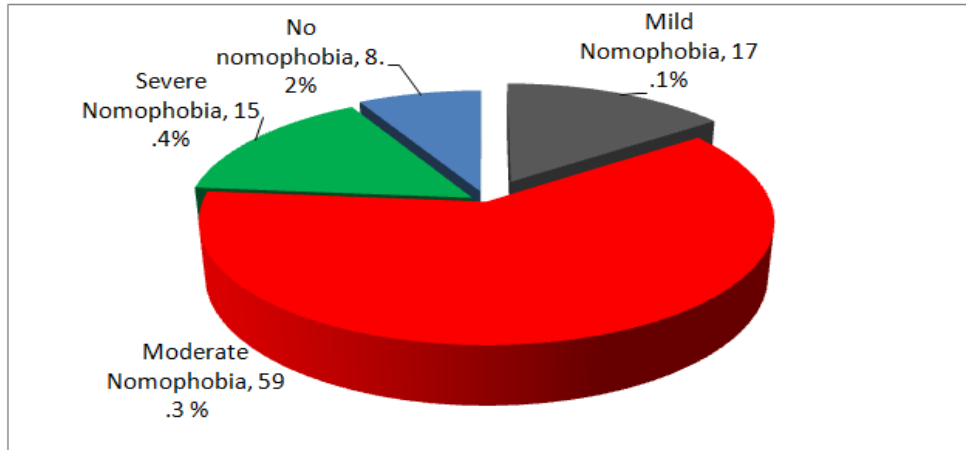
10.7% of the students spent <1 hour per day on smart phone and 37% spent > 5 hours per day.

Table 2 : Average hours spent on commonly used apps/sites



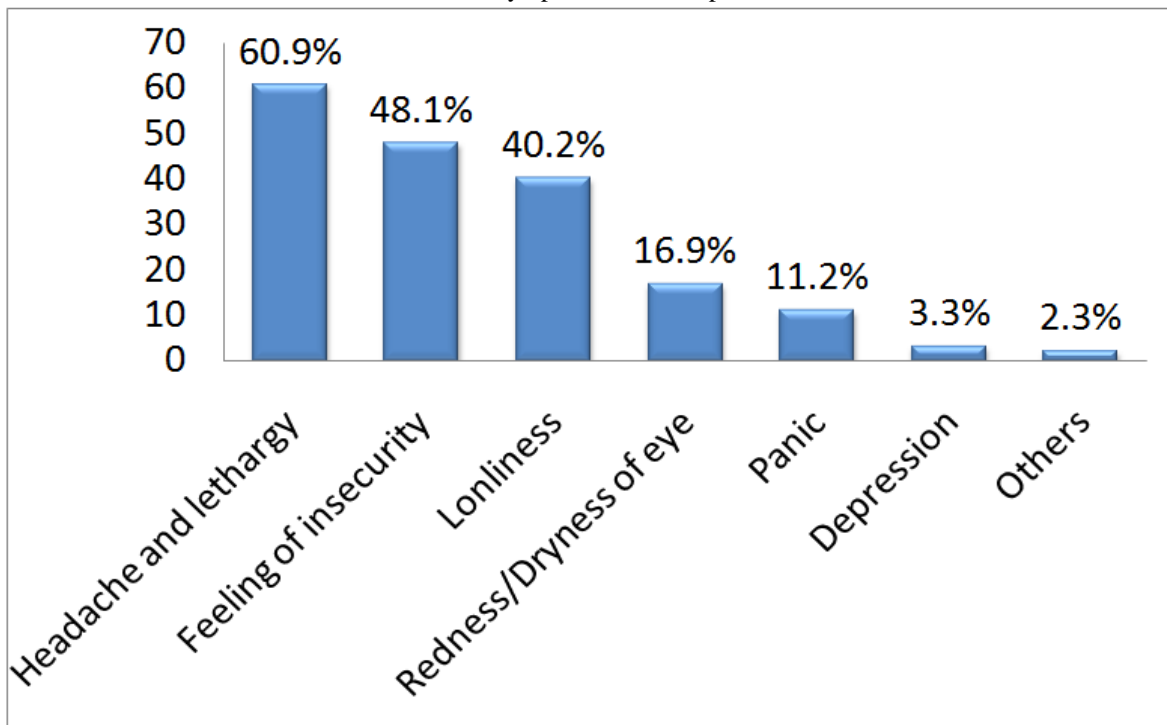
48.2 % of the students spent > 3 hours in Entertaining apps like you tube, gaming apps, online shopping. Only 6.2 % of the students actually search for medical queries or medical literature on smart phone.

Table 3 : Severity of Nomophobia



The results of severity of Nomophobia were surprising that 59.3 % of the students had moderate nomophobia and 15.4 % had severe nomophobia. Only 8.2% does not have nomophobia.

Table 4: Symptoms of Nomophobia



Most of the students experienced symptoms of nomophobia . 60.9% of the students experienced headache and lethargy, 48.1 % felt insecure, 11.2 % had panic attacks when mobile phone was misplaced and 3.3 % experienced depression. This excessive usage of smart phone is one of the causative factor of decreased concentration in studies among the medical students.

IV. Discussion

Technology conveys information to human beings with out any difficulty and allows them to stay socially connected. But, excessive usage of smart phones leads to several health problems and decreases academic performance.

In this study, we found that the prevalence of Nomophobia was 91.8% compared to Sharma N et al, where the prevalence is 73 %.⁹ Moderate nomophobia was seen in 59.3 % of the students and 15.4 % had severe nomophobia.¹⁰ In this study, headache and lethargy was seen in 60.9% and feeling of insecurity in 48.1 % compared to Sharma N et al, where 61% of the students had headache and lethargy.⁹ In this study, 37% of the students used smart phone for more than 5 hours per day, while Li M et al showed that 50.8% of the students spent more than 4 hours on mobile phone usage.¹¹

There are both advantages and disadvantages of mobile phones. There is clinching evidence of increasing subjective symptoms due to mobile phone overuse among students

V. Conclusion

This study highlights the excessive prevalence of nomophobia among medical students and its adverse outcomes. Although despite students understanding about the negative effect of excessive usage of mobile phone on academics, they still continue to use mobile phones. Thus, the students must be made aware of the positive and negative effects of excessive usage of mobile phones and they should be properly counselled to decrease mobile phone adherence

Recommendations :

1. Institutions must enforce strict rules in refraining the students from using mobile phones in classes/clincs
2. Parents and institutions should guide the students in dedicating much of their mobile phone usage time in academic activities and research work

Limitations :

1. This study was restricted to one particular college, hence the results cannot be generalised. Therefore further studies involving larger sample over a wide geographic area need to be carried out.
2. Academic performance was assessed based on the self perception of the study participants. Thus, further studies with objective assesment of academic performance should therefore be carried out.

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