Original Research Article

DOI: http://dx.doi.org/10.18203/2394-6040.ijcmph20181709

Prevalence of internet addiction and its association with sociodemographic factors among MBBS students at medical college, Jhansi, Uttar Pradesh

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Received: 22 February 2018 Accepted: 27 March 2018

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ABSTRACT

Background: Internet addiction is known by many other terms such as pathological internet use or problematic internet use. It is an issue of growing concern especially in the youth of our country. Besides causing physical problems like headache, backache, neck pain, vision problems and insomnia, it can also cause problems in an individual's social relationships and personal life. The objectives of the study were to assess the prevalence of internet addiction and to find the association of socio-demographic factors with internet addiction.

Methods: Young's internet addiction test was used to measure the prevalence of internet addiction among 402 study participants. Their socio-demographic profile was also obtained via a different questionnaire after obtaining the consent from the students themselves. Data were analyzed using SPSS version 20.

Results: Out of total 402 participants 235 (58.45%) were males and 167 (41.55%) were females. Score of 80 and above (out of 100) was obtained in 13 (3.23%) students and the score between 50 to 79 was observed in 25 (6.21%) students. It was significantly higher in male students.

Conclusions: With changing lifestyles, youths are becoming more inclined towards internet which when taken to the level of addiction can cause various health and social issues. It is relatively a newer kind of addiction that is developing in the youth of today. De-addiction centers are being established in many cities in our country to face this problem.

Keywords: Internet addiction, Young's internet addiction test, MBBS students

INTRODUCTION

Launching of ERNET (Educational Research Network) in India in 1986 marked the initiation of internet in the country. With over 460 million internet users, India is the second largest online market, ranked only behind China. By 2021, there will be about 635.8 million internet users in India. Despite the large base of internet users in India, only 26 percent of the Indian population accessed the internet in 2015. This is a significant increase in comparison to the previous years, considering the internet penetration rate in India stood at about 10 percent in

2011. Furthermore, men dominated internet usage in India with 71 percent to women's 29 percent. Internet can be a source of plenty of information available quickly but like anything else when used excessively it can cause some problems which may affect their health, job, relationships etc. Youth are particularly vulnerable for excessive internet use due to their state of psychological and physical development. The concern has been growing worldwide regarding excessive internet use and India, a rapidly developing nation, has also encountered this problem. The term "internet addiction" was proposed by Dr. Ivan Goldberg in 1995. As per DSM-V, it is not yet

recognized as a disorder, but the health problems caused by it like sedentary lifestyle causing weight gain, dry eye, headache, backache, depression, sleep disturbances etc. have necessitated the need of further research. Therefore the present study was conducted with the objectives of determining the prevalence of internet addiction and finding its association with certain demographic factors among MBBS students of MLB Medical College, Jhansi. Young's internet addiction test (IAT) is the only available test whose psychometric properties have been tested by Widyanto and McMurran, so this test was used to assess the prevalence. ^{3,4}

METHODS

A cross sectional study was conducted in the month of December, 2017 which aimed at including all 487 students of MBBS batches from 2013 to 2017 but following were the exclusion criteria/reasons which resulted in a total of 402 participants-

- 1. Those who did not give their consent for participation.
- 2. Those who were absent on the day of interview.

The study was conducted after obtaining approval from the ethical committee of the college. All the students were explained the purpose of study and assured that their information will not be used for any other purpose. Students gave their verbal consent for participation in the study. Batch by batch the students were called and were asked to fill Young's Internet Addiction Test which consists of 20 questions to be answered on a 5 point likert scale to self-report the severity of internet addiction. Score ranges from 20-100 with following interpretation-

- 20-49 points- average online user.
- 50-70 points- causing occasional or frequent problems.
- 80 points and above- causing significant problems.

Additional information like their age, sex, address, socioeconomic status, purpose of internet use, parents' education, type of phone used etc. was collected using a different structured questionnaire. Students were asked to fill the questionnaires in the presence of the researchers and queries of students, if any, were answered by the researchers.

Definition

According to International Telecommunication Union (ITU) an internet user is defined as 'someone of age 2 years and above who went online in the past 30 days' (5). All the students fulfilled this definition and no one reported never using internet till the date of interview.

Data were analyzed using the SPSS version 20. Chisquare test was used for categorical variables and P value of <0.05 was considered significant.

RESULTS

Out of total 402 respondents, 21.89% were in the late adolescent age group (most of whom were first year students) and the rest were of age 20 years and above. 58.45% were males and 41.55% were females. Most of them (85.58%) were from the urban areas and majority (78.85) belonged to upper socioeconomic class. 66.41% of the participants used internet for both academic as well as entertainment purpose which included watching movies, listening songs, social networking websites etc. Fathers of 84.07% of students were having education of graduation and above while mothers of 66.41% of students were graduate and above. 98.25% of them used smartphones and 78.85% were having internet connection at their homes. Results have been summarized in Table 1.

Table 1: Socio-demographic profiles of participants (N=402).

Variables	Number (%)				
Age (in years)	Trumber (70)				
17-19	88 (21.89)				
20 and above					
Sex	314 (78.11)				
Male	225 (59.45)				
Female	235 (58.45)				
Area of residence					
Rural	58 (14.42)				
Urban	344 (85.58)				
Socioeconomic class					
Upper	317 (78.85)				
Upper middle	35 (8.70)				
Middle	26 (6.46)				
Lower middle	12 (2.98)				
Lower	12 (2.98)				
Purpose of internet use					
Academic	37 (9.20)				
Entertainment	98 (24.37)				
Both	267 (66.41)				
Father's education					
Illiterate	2 (0.49)				
Primary	3 (0.74)				
High school	24 (5.97)				
Intermediate	35 (8.70)				
Graduate and above	338 (84.07)				
Mother's education					
Illiterate	10 (2.48)				
Primary	22 (5.47)				
High school	49 (12.18)				
Intermediate	54 (13.43)				
Graduate and above	267 (66.41)				
Type of phone used					
Smartphone	395 (98.25)				
Basic phone	7 (1.75)				
Internet access at home					
Yes	317 (78.85)				
No	85 (21.15)				
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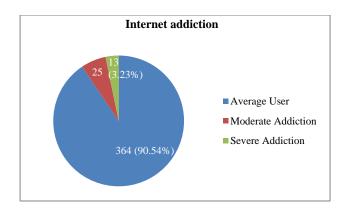


Figure 1: Prevalence of internet addiction among study participants.

Using the Young's internet addiction test, score of 80 and above was observed in 13 (3.23%) of students while 25 (6.21%) were having moderate level of addiction (score between 50 and 79). Rest of the participants were having

score of less than 50 (classified as normal). This is shown in a pie diagram in Figure 1.

For the purpose of studying association of various sociodemographic factors with presence of internet addiction, score of 50 and above was considered as presence of internet addiction (thus it included moderate and severe addiction) making the number of addicted individuals a total of 38. On applying the chi-square test it was seen that presence of internet addiction was significantly associated with sex and area of residence. Yates' correction was applied where necessary. Results have been shown in Table 2. Males (12.76%) were found to be more addicted for internet as compared to females (4.79%). Interestingly, students from rural background (18.96%) were more addicted as compared to those from urban areas (7.84%). Although the percentage of addicted students increased with parents' education and internet access at home but statistical significance was not observed.

Table 2: Association of socio-demographic factors with internet addiction.

Variables	Addiction present (%)	Addiction absent (%)	Chi-square	P value
Age (in years)				-
17-19	8 (9.10)	80 (90.90)	0.017	0.896
20 and above	30 (9.55)	284 (90.45)	0.017	
Sex				
Male	30 (12.76)	205 (87.24)	7.255	0.007
Female	8 (4.79)	159 (95.21)		
Area of residence				
Rural	11 (18.96)	47 (81.04)	7.166	0.007
Urban	27 (7.84)	317 (92.16)		
Socioeconomic class				
Upper	25 (7.88)	292 (92.12)		0.772
Upper middle	4 (11.42)	31 (88.58)		
Middle	4 (15.38)	22 (84.62)	1.799	
Lower middle	2 (16.66)	10 (83.34)		
Lower	3 (25.00)	9 (75.00)		
Father's education				
Illiterate	0 (0.00)	2 (100)	_	0.938
Primary	0 (0.00)	3 (100)	0.796	
High school	2 (8.33)	22 (91.67)		
Intermediate	3 (8.57)	32 (91.43)		
Graduate and above	33 (9.76)	305 (90.24)		
Mother's education				
Illiterate	1 (10)	9 (90)		0.668
Primary	1 (4.54)	21 (95.46)	2.367	
High school	2 (4.08)	47 (95.92)		
Intermediate	4 (7.40)	50 (92.60)		
Graduate and above	30 (11.23)	237 (88.73)		
Type of phone used				
Smartphone	37 (9.36)	358 (90.64)	0.044	0.833
Basic phone	1 (14.28)	6 (85.72)	0.044	
Internet access at home				
Yes	33 (10.41)	284 (89.59)	1 605	0.205
No	5 (5.88)	80 (94.12)	1.605	0.205

DISCUSSION

This study highlights that internet addiction is prevalent to significant extent in the students of this medical college. 3.23% of students were having a score of more than 80 making them severely addicted. A male preponderance was found for the addiction and this can be explained by the fact that boys are more likely to get involved in gaming, web surfing and social sites. Residents of the rural area were found be having more addiction. This may be due to the fact that in recent months there has been dramatic decrease in the internet expenses due to launch of cheap internet plans making it affordable to people of lower socioeconomic status also. Although students with educated parents were found to be more addicted to internet but the statistical significance could not be established. It was also found to be more prevalent among those who have internet connection at their homes. Few studies have been conducted regarding internet addiction among medical students. Endreddy et al reported 64.4% as average users, 11.8% as possible addicts, 0.4% as addicts and in 23.2% the usage was less than average.⁶ Krishna Murthy et al reporter in their study that 37.6% were average online users and 8.2% adolescents experienced frequent problems with internet.⁷ In a study conducted by Goel et al, 74.5% were moderate users, 24.8% were possible addicts and 0.7% were addicts.8 In Sharma et al study, 57.3% were normal users, 35% were mild, 7.4% were moderate and 0.3% were severely addicted to internet.9

CONCLUSION

Internet has become an integral part of our day to day life, more so in recent years. Besides giving us convenience, it has made individuals addicted to it causing various physical and social problems. Care needs to be taken so that it is used only as a medium and does not become a lifestyle. Awareness among people, especially youth, regarding these needs to be spread and early recognition of the problem is warranted so that preventive measures can be taken.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

REFERENCES

- Available at: https://www.statista.com/topics/2157/ internet-usage-in-india/. Accessed on 3 August 2017.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Arlington VA: American Psychiatric Publishing; 2013: 796.
- 3. Available at: http://www.globaladdiction.org/dldocs/GLOBALADDICTION-Scales-Internet AddictionTest.pdf. Accessed on 3 January 2018.
- 4. Widyanto L, McMurran M. The psychometric properties of the internet addiction test. Cyberpsychol Behav. 2004;7:443-50.
- Surfing and Site Guide: Internet World Stats. http://www.internetworldstats.com/surfing.htm. Available at:http://www.webcitation.org/6n6oI9PgG. Accessed on 3 January 2018.
- 6. Endreddy A, Prabhath K, Rajana B, Raju Srijampana VV. Prevalence and patterns of internet addiction among medical students. Med J Dr Patil Univ. 2014;7(6):709.
- 7. Krishnamurthy S, Chetlapalli SK. Internet addiction: Prevalence and risk factors:A cross-sectional study among college students in Bengaluru, the Silicon Valley of India. Indian J Public Health. 2015;59(2):115-21.
- 8. Goel D, Subramanyam A, Kamath R. A study on the prevalence of internet addiction and its association with psychopathology in Indian adolescents. Indian J Psychiatry. 2013;55(2):140-3.
- 9. Sharma A, Sahu R, Kasar P, Sharma R. Internet addiction among professional course students: A study from central India. Int J Med Sci Public Health. 2014;3(8):1.

Cite this article as: Arya V, Singh H, Malhotra AK. Prevalence of internet addiction and its association with socio-demographic factors among MBBS students at medical college, Jhansi, Uttar Pradesh. Int J Community Med Public Health 2018;5:1980-3.