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Prevalence of Internet Addiction among Medical Students

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Original Research Article

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Abstract: There has been exponential growth in the use of internet since last decade in the whole world. Internet use is known to foster addictive behavior and may become major public health problem. Most medical schools in India are provided with free internet services, along with stressful medical education may leave them disproportionately vulnerable to internet addiction. The main objective of this study was to measure prevalence of internet addiction and the usage pattern among undergraduate medical students. The present cross-sectional study was carried out among 150 undergraduate students of final year MBBS, selected by simple random sampling, in SVS Medical College, Mahabubnagar. A 20 item Young's Internet Addiction test which is a Likert scale based interview schedule was used to measure the prevalence of internet addiction. Data was analyzed using SPSS version22. Chi square test was applied and p value <0.05 considered significant. Among the 150 study subjects, 57.3 %(86) were males and 42.6 %(64) were females. Males were more addicted to internet than females. The prevalence of internet addiction among the study subjects in the present study was 53.33 %(80) mild, 19.33 %(29) moderate, while 28 %(42) students reported normal internet usage. It was found that severity of internet addiction is in inverse relationship with academic performance. Internet addiction is a growing health problem among medical students, hence necessary preventive and therapeutic interventions are vital to promote healthy and safe usage of Internet.

Keywords: Internet addiction, Medical students

INTRODUCTION

In the new generation, the Internet has become an important tool for education, entertainment, communication, and information-sharing. Easy access and social networking are two of the several aspects of the Internet fostering addictive behavior [1]. In tandem with the splurge in access to the Internet globally, with the rise of new-generation gadgets, the risk of "internet addiction" is emerging as a significant behavioral addiction pandemic to be tackled worldwide [2].

Internet addiction in adolescence can have a negative impact on identity formation and may negatively affect cognitive functioning, lead to poor academic performance and engagement in risky activities, and inculcate poor dietary habits [3].The absence of large-scale epidemiological studies and huge disparities in the use of diagnostic criteria have resulted in difficulties in establishing the prevalence of Internet addiction [4]. This study attempts to understand the prevalence of Internet addiction among medical students and its impact on academic performance in SVS medical college, Mahbubnagar.

MATERIALS AND METHODS

Study design

Cross- sectional prevalence study

Place of study

SVS medical college, Mahabubnagar

Sample size

150 final year MBBS medical students

Institutional ethical committee approval

Inclusion criteria

MBBS Final year Undergraduate Medical students
History of using internet for the past 1-year or more

Subjects who have given written informed consent

Exclusion criteria

Not using internet or a history of using internet for less than a year

Not willing to give valid consent.

Materials

Semi Structured Intake proforma for patient's demographic data specifically prepared by investigator.

Written informed consent.

Young's Internet Addiction test (IAT)[5].

Method

After obtaining informed consent from medical students for the study, Young's 20-item scale for Internet addiction (YIAT 20) was applied to qualify for the prevalence of Internet addiction. It is a 20-item questionnaire measured on the five-point Likert Scale. After all the questions have been answered, numbers for each response are added to obtain a final score. The higher the score range, the greater the level of addiction; normal range: 0-30 points, mild: 31-49 points, moderate: 50-79 points, and severe: 80-100 points.10. Academic performance of past exams was recorded and correlated with internet addiction severity. The study findings were entered in IBM SPSS version 22 and subjected to descriptive and inferential statistical analysis. The difference in the patterns of internet usage among males and females was analyzed using Chi-square test. p value<0.05 was considered statistically significant.

RESULTS

Out of the 150 study subjects, 86 (57.3%) were males and64 (42.7%) students were females (Table 1). Mean age of the study population was 22.4±1.7 years. It was found that 109 (72.66%) reported internet addiction and 42 (28.0%) reported normal internet usage. The internet addiction test scores revealed 42 (28.0%) in the score range of 0-19 i.e. no addiction, hence normal users, 80 (53.33%) in the score range of 20-49 i.e. mild internet addiction and 28 (18.7%) in the score range of 50-79 i.e. moderate internet addiction and none of the study subjects reported severe addiction i.e. with a score range of 80-100 (Table 2). Hence the prevalence of internet addiction among the study subjects in the present study was 53.33% mild, 18.7% moderate, while 28.0% students reported normal internet usage. Severe internet addiction was not reported among the study participants.

Table-1: Gender wise distribution of study participants.

Gender	Frequency	Percentage
Male	86	57.3
Female	64	42.7
Total	150	150

It was observed that there was a difference in the presence of internet addiction between males and females. Chi square test was applied as a test of proportions and it was found to be statistically significant, with males being addicted to the internet more than the females ($\chi 2$=7.236, P<0.05) (Table 2).

Table-2: Gender wise comparison of internet addiction scores

Severity of addiction	Male	Female	Total
Normal(0-19)	18(20.93)	24(37.5)	42(28.0)
Mild addiction(20-49)	47(54.65)	33(51.56)	80(53.33)
Moderate (50-79)	21(24.41)	07(10.93)	28(18.7))
Sever(80-100)	0(0)	0(0)	0(0)
Total	86(100)	64(100)	150(100)

There was no statistically significant difference between the male and female students in terms of behavior aspects of internet use. (Table 3).

Table-3: Comparison between behavior aspects of internet users by gender

characteristics	Response	Gender		Value of Chi square	P value
		male	Female		
Felling getting bored without internet	Yes	31	20	0.376	P=0.540,p >0.05, not significant
	No	55	44		
Using internet is better than going out with friends and family	Yes	39	22	1.813	P= 0.176,p >0.05, not significant
	No	47	42		
Feel preoccupied with internet when offline	Yes	61	47	0.114	P= 0.735,p >0.05, not significant
	No	25	17		
Feel annoyed when anyone interrupts while on internet	Yes	35	19	1.931	P= 0.165,p >0.05, not significant
	No	51	45		
Feelin depressed when offline	Yes	9	7	0.009	P=0.926, p >0.05, not significant
	No	77	47		

The academic performance of students was reported to be good among those without internet addiction (43%) when compared to those with internet addiction (12%) and 17% without internet addiction reported below average performance whereas it was 26% among those with internet addiction. A statistically

significant association was found between presence of internet addiction an dadverse academic performance ($\chi2$=12.38, p<0.05).

DISCUSSION

The present study was undertaken with the aim of measuring the prevalence, levels of internet addiction and the usage pattern among undergraduate medical students at SVS Medical College, Mahabubnagar. The prevalence of internet addiction among the study subjects in the present study was 53.33% mild, 18.7% moderate, while 28.0% students reported normal internet usage. Severe internet addiction was not reported among the study participants.

In another similar study in China, by Lie u X *et al*. a prevalence of 16.2% was reported [6]. Naffise Mashaei et al observed the prevalence of internet addiction in students of Rafsanjan University of Medical Sciences, Iran, as 51.3% mild, 5.4% moderate and 0.9% severe, while 42.4% students were not addicted to the internet [7]. In this study internet addiction prevalence was in consistent Naffise mashaei *et al*. study in terms of mild internet addiction.

In the present study, it was observed that the male students were more addicted to internet than the female students and it was found to be statistically significant ($\chi2$=7.236, P<0.05). In a similar study by Arvind Sharma *et al*. the male students were more addicted to internet than the female students ($\chi2$=22.673, P=0.0001).23.

In the present study, there was no significant difference males and females in terms of behavioral characteristics like feeling getting bored without internet $\chi2$ =0.376, p>0.05 felt preoccupied with internet when offline $\chi2$=0.114, p>0.05; found using internet better than going out with friends/family during leisure time $\chi2$=1.813,p>0.05. Gopala VV Raju Srijampana et al reported an equal susceptibility for internet addiction between males and females [8]. In contrast to the present study.Subhaprada *et al*. found significant difference between behavioural characteristics in male and feme students in terms of felt preoccupied with internet when offline found using internet better than going out with friends/family during leisure time [9], Similarly Sharma A *et al.* reported that significantly more males than females felt sleepless because of being continuously online till late night; feared about life becoming bored without internet [10].

The academic performance of students was reported to be good among those without internet addiction (43%) when compared to those with internet addiction (12%) and 17% without internet addiction reported below average performance whereas it was 26% among those with internet addiction. A statistically significant association was found between presence of internet addiction and adverse academic performance ($\chi2$=12.38, p<0.05).

CONCLUSION

Internet addiction is a growing problem among students of professional courses, which has psychological, physical, and social impact on student's life. So it is necessary to develop strategies for prevention, as well as therapeutic interventions to promote healthy and safe use of the Internet. Awareness should be created among the undergraduate medical students to improve their ability to reduce internet addiction, promoting healthy growth.

Limitations

Small sample size
Sample was a professional group
There may be recall bias and Social desirability bias in participants

REFERENCES

1. Kuss DJ, Griffiths MD. Online social networking and addiction — A review of the psychological literature. Int J Environ Res Public Health 2011;8:3528-52.
2. Christakis DA. Internet addiction: A 21st century epidemic? BMC Med 2010;8:61.
3. Pfaff DW. Neuroscience in the 21st Century: From Basic to Clinical. New York: Springer; 2013.
4. Spada MM. An overview of problematic internet use. Addict Behav 2014;39:3-6.
5. Young KS, de Abreu CN. Internet Addiction: A Handbook and Guide to Evaluation and Treatment. New York: Wiley;2010. p. 23.
6. Liu X, Bao Z, Wang Z. Internet Use and Internet Addiction Disorder Among Medical Students: A Case from China. Asian Social Science 2010; 6: 1.
7. Mashaei N, Mohammad A, Ahmad PB, Omid R, Ayatollahi A, Reza B. The Prevalence ofInternet Addiction Among The Students Of Rafsanjan University Of Medical Sciences. ASEAN J Psychiatry. 2013;14:109-16
8. Srijampana VVGR, Endreddy AR, Prabhath K, Rajana B. Prevalence and patterns of internetaddiction among medical students. 2014;7:709-13.
9. Subhaprada CS, Kalyani P. A cross-sectional study on internet addiction among medical students. Int J Community Med Public Health 2017;4:670-4.
10. Arvind Sharma, Rupesh Sahu, Pradeep Kumar Kasar, Richa Sharma. Internet addiction among professional courses students: A study from central India. 2014;3:1069-73.