

A Study on Internet Addiction Among Medical Undergraduate Students in Shimoga, Karnataka: Cross-sectional Study

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Abstract

Background: Modern day life is turning towards more and more devices and internet fever is just spreading like wild fire. For young people the life is just meaningless without internet, for some it's just like oxygen without which it's impossible for them to survive. Excessive use, which may be accompanied by impaired sense of the passage of time and/or neglecting basic drives and withdrawal may be manifested as anger, tension or depression. *Objective:* To study the proportion of Internet addiction and its determinants among medical undergraduate students. *Materials and Methods:* A cross-sectional study was conducted among 215 medical students of Subbaiah Institute of Medical sciences, Shimoga for a period of 2 months (July–September 2017) with the help of semi-structured questionnaire consisting of questions related to demographic information, information related to internet use, and Young's internet addiction test. *Results:* We found that the proportion of internet addiction among medical students was 63.7% (mild 61%, moderate 38%, severe 0.7%) and significantly associated factors with internet addiction being age, year of study and number of years since using internet. More than 50% students use internet for WhatsApp (78%), YouTube (74%), Facebook (68%), communicating friends and family (66%), Instant messaging (54%) and scientific search (51.6%). *Conclusion:* Medical students are vulnerable for internet addiction and efforts should be taken to increase awareness and prevent the problem of internet addiction in them

Keywords: Internet; Addiction; Medical students.

Introduction

There has been a rapid increase in the use of Internet by all sections of the society. It is predicted that there are more than 600 million users of the Internet worldwide¹ and more than 300 million internet users in India which has increased from 100 to 200 million in just four years. Internet usage has many benefits but it is used by some to indulge

in social networking, pornography and chatting for long hours²

The term internet addiction was first used by Dr. Ivan Goldberg in 1995 for pathological compulsive internet use and later different researchers referred it differently, such as internet addiction disorder, pathological internet use, or Internet dependency³ Internet addiction has been defined as an individual's uncontrollable use of the Internet

that has created psychological, social, and/or work problems in one's life¹.

Several studies reported that younger population and especially college going students are more vulnerable² and various factors have been attributed to its increased usage among adolescents such as psychosocial and environmental characteristics, ready access to the Internet and an expectation of computer/Internet use⁴. As per the Diagnostic and Statistical Manual of Mental Disorders (DSM IV), Fifth Edition, Internet addiction is not yet recognized as a disorder, but is being considered as an area in need of further research⁵. Internet addiction (IA) has negative consequences on the mental health and affects daily activities¹ and its association with psychological distress can impact student academic progress and long term career goals⁶. Excessive internet use has been reported to cause socio-occupational dysfunction⁷

In view of this, the present study was undertaken to study Internet addiction and its determinants among medical undergraduate students

Materials and Methods

A cross-sectional study was conducted among 215 undergraduate medical students of Subbaiah Institute of Medical sciences, Shimoga for a period of 2 months (July–September 2017). Sample size was calculated based on 58.8% prevalence of Internet addiction among students by earlier studies³ at 95% confidence level and 5% of allowable error. Medical undergraduate students with history of using internet at least since a year and willing to participate in study were involved in present study. The information was collected using semi-structured questionnaire consisting of

questions related to demographic information and information related to internet use. Young's internet addiction test⁸ (IAT) was used to assess internet addiction. The validity and reliability of Young's internet addiction scale has been tested in many studies and its reliability in Indian population and college students has also been established³. Total IAT scores ranged between 20 to 100. Scores less than 30 indicate no addiction, 31 to 49 indicate mild and 50 to 79 indicate moderate and 80 to 100 severe internet addiction. Statistical analysis was done using percentages and chi square test

Results

Out of total 215 study subjects majority (39.5%) aged 21 years, studying in 3rd MBBS (38.6%). Many of them (85%) were from rural back ground and 90.1% were staying in hostels. It was found that predominant time of internet usage was between night to midnight (53.5%). Many said (46%), they spend 30 minutes – 2 hours per day on internet. The common mode of internet usage was smart phones (97.7%) and 73% said they use internet during working hours

It was found that the overall proportion of internet addiction among medical students was 63.7%. 61% of students had mild addiction, 38% had moderate and 0.7% had severe addiction (Table 1). Factors associated significantly with internet addiction were age, year of study and time spent on internet usage per day (Table 2). More than 50% students use internet for whats App (78%), you Tube (74%), Facebook (68%) and more than half said the use internet to communicate friends and family (66%), Instant messaging (54%) and scientific search (51.6%) (Table 3).

Table 1: Distribution of study subjects based on Young's IAT score

Score	Frequency	Percentage
0–30 (None)	78	36.6
31–49 (Mild)	84	39.2
50–79 (Moderate)	52	24.5
80–100 (Severe)	1	0.5

Table 2: Association between Internet addiction and various variables

Variables	Internet addiction		2	p-Value	
	Present N (%)	Absent N (%)			
Gender	Male	34 (32)	72 (68)	1.6	0.206
	Female	44 (40)	65 (60)		

Variables	Internet addiction		Z	p-Value	
	Present N (%)	Absent N (%)			
Age in Years	20	31 (49.2)	32 (50.8)	9.3	0.025
	21	25 (26.3)	70 (73.6)		
	22	22 (38.5)	35 (61.4)		
Year of Study	II	42 (56)	33 (44)	23.5	<0.001
	III	27 (32)	56 (67)		
	IV	9 (15)	48 (84)		
Home town	Rural	65 (35)	120(65)	0.75	0.386
	Urban	13 (43)	17 (57)		
Time Spent on Internet usage per day	<30 mins	11(68)	5 (32)	25.37	<0.001
	30 mins -2 hrs	47 (47)	52 (53)		
	2-5 hrs	15 (24)	47 (75)		
	>5 hrs	5 (13)	33 (89)		
Number of years since using internet	1-5	50 (37)	84 (63)	0.268	0.875
	6-10	25 (35)	46 (64)		
	>11	3 (30)	7 (70)		
Location of dormitory	Hostel	72 (37)	123 (63)	0.38	0.540
	Parents	6 (30)	14 (70)		

Table 3: Distribution of study subjects based on Purpose of internet use

Variables	Frequency	Percentage (%)	
Google	Yes	189	87.9
	Sometimes	22	10.2
	No	4	1.9
Whats App	Yes	169	78.6
	Sometimes	27	12.6
	No	19	8.8
You Tube	Yes	160	74.4
	Sometimes	35	16.3
	No	20	9.3
Facebook	Yes	148	68.8
	Sometimes	40	18.6
	No	27	12.6
Communicating friends and Family	Yes	142	66
	Sometimes	59	27.4
	No	14	6.5
Instagram	Yes	123	57.2
	Sometimes	35	16.3
	No	57	26.5
Scientific search	Yes	111	51.6
	Sometimes	86	40
	No	18	8.4
Recreational surfing	Yes	90	41.9
	Sometimes	89	41.4
	No	36	16.7

Variables		Frequency	Percentage (%)
Reading news	Yes	89	41.4
	Sometimes	82	38.1
	No	44	20.5
Online shopping	Yes	66	30.7
	Sometimes	93	43.3
	No	56	26
Online games	Yes	53	24.7
	Sometimes	41	19.1
	No	121	56.3
Downloading study material	Yes	56	26
	Sometimes	118	54.9
	No	41	19.1
Writing weblogs	Yes	25	11.6
	Sometimes	31	14.4
	No	159	74

Discussion

In present study we found that the proportion of internet addiction among medical undergraduate students was 63.7%. About 61% of students had mild addiction, while 38% and 0.7% of the students had moderate and severe addiction respectively. Present study finding is comparable with the prevalence of 58.8% reported by Bhushan Chaudhari *et al.*³ in a study conducted among medical students and 56.6% as reported by Paul *et al.*⁹ in a study among college students from South India. Lower prevalence of internet addiction was also reported by some studies. A study on Iranian medical students¹⁰ showed prevalence of internet addiction to be 10.8%. This variation in prevalence can be attributed to different diagnostic tools used.

In the present study, male students were found to be more addicted compared to females. Though this is not significant statistically similar finding has been reported by many previous studies including Bhushan Chaudhari *et al.*³ and Paul *et al.*⁹ Present study showed time spent on internet usage is directly related to internet addiction which is similar to study findings by Bhushan Chaudhari *et al.*³ The study also showed that students using internet since many years are more in number to get internet addiction which is similar to results showed by Bhushan Chaudhari *et al.*³ It was observed that the common reasons for using internet was social networking (WhatsApp, Facebook), you tube, and to communicate with friends and family. Similar findings have been shown by study conducted by Paul *et al.*⁹

Conclusion

The present study showed internet addiction among majority of medical students. Efforts should be taken to increase awareness and prevent the problem of internet addiction

Limitations

It is difficult to term them as Internet addicts because of cross-sectional study design and data collection was based on self-reporting of symptoms by the students with no clinical confirmation

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