Original Article

A Study On Prevalence Of Internet Addiction Among Students Of A Private Medical College, Kanchipuram

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Abstract

Introduction:

Internet has become an essential tool in day to day life[1]. It has become an important and convenient mode for networking and internet exchange. In 2020, India had nearly 700 million internet users across the country, this figure will grow over 974 million users by 2025. These young people are at risk of developing internet addiction disorder and suffering from health consequences resulting from inadequate sleep as they stay long for chatting, gaming and social status updates

Objectives: To estimate the prevalence of internet addiction and its associated factors among medical undergraduate students.

Methodology: This cross sectional study was conducted from January to March 2021 among undergraduate students of a private medical college. A Structured and validated questionnaire i.e. Young's Internet Addiction Test was used. Data entered in Microsoft Excel, results analyzed using SPSS 25.

Results: Among 220 students, 65(29.5%) students were normal, 108(49.1%) were with mild internet addiction, 27 (12.3%) were moderate internet addiction and 20(9.1%) with severe internet addiction. This study concludes there is a significant association between internet addiction with male gender, place of current stay, mode of internet and using internet for academic, social, communication and gaming purposes.

Conclusion: There should be proper differentiation between usage and over usage of internet. Awareness must be given to the youth of the nation through proper channel.

Keywords: Internet addiction, Medical undergraduates, Young's internet addiction test.

Introduction:

In this modern era, there is an increased use of internet by general population which has increased during Covid times and thereafter. Globally, recent internet statistics has shown over 803 million people[1]. Though there are benefits of the internet which includes education and research, communication, health-related services, online monetary transactions, trade, buying goods, entertainment, etc there are demerits also[2]. The use of internet is both beneficial and detrimental to the user's health. Internet addiction has led to an increase in mental health disorders[3].

Many studies have shown that 73% of college students accessed the internet at least once a day and spent approximately 1.6 to 4.5 hours/day online, preferably during the night[4, 5, 6]. Problems associated with over usage of internet were academic failure, poor self-confidence, poor psychological well-being, sleep deprivation, social withdrawal, poor diet, and cardiopulmonary complications [7,8,9].
Like other students, medical students are also facing similar problems like gaming, online shopping, etc. This unlimited usage becomes internet addiction which leads to co-morbidities like lack of sleep, dryness and discomfort of eyes, depression, stress which shows its affect on academics[10].

However over usage leads to physical and psychological problems like lack of sleep and excessive tiredness, which leads to poor study performance. Young people are at particular risk of developing internet addiction disorder, and suffer health consequences resulting from loss of sleep, as they stay up later to chat online, check for social network status
updates or to reach the next game levels[11].

Due to enormous use of internet among adolescents, it is important to analyze the pattern of internet usage among medical undergraduates. There were very little studies done on this topic in Kanchipuram district. The aim of the present study was to estimate prevalence of internet addiction and sleep quality among undergraduate students.

Objectives:

1. To assess the prevalence of internet addiction and its associated factors among medical undergraduate students.

Methodology:

1. **Study design:** Cross-sectional study
2. **Study population:** Students of the medical college
    a) **Inclusion criteria:** Undergraduates of the Medical College who consent to participate in this study will be included.
    b) **Exclusion criteria:** Students not willing to consent will be excluded.
3. **Study area:** A private medical college in Tamil Nadu
4. **Sampling method:** Probability Proportional to Size (PPS).

S.NO	Designation in the college	Total population	Needed sample
1	1st year Undergraduates	250	79
2	2nd year Undergraduates	150	47
3	3rd year Undergraduates	150	47
4	4th year undergraduates	150	47
	Total	700	220

By the end of Probability Proportional to Size (PPS), 220 sample has been finalized. This study was approved by the Ethics committee of Meenakshi Medical College Hospital and Research Institute, Deemed University. Online survey

forms was sent through Google forms to the participants which includes their informed consent for the study, a semi-structered proforma and Young's internet addiction test.

5. Data Collection Tools:

A) Young's Internet Addiction Test:

Young's internet addiction test was used, which contains 20 items. Each item is rated on a 6-point Likert scale ranging from 0 to 5; 0 = Not Applicable, 1 = Rarely, 2 = Occasionally, 3 = Frequently, 4 = Often, 5 = Always. The maximum score is 100 points. The higher the score is, higher is the severity of your problem.

Total score of

0-30 points are considered as normal level of Internet usage.

a) 31-49 points – Mild internet addiction
b) 50 – 79 points – Moderate addiction
c) 80 – 100 points – Severe addiction

This instrument was found to have a Cronbach's alpha of 0.90

B) Pittsburgh sleep quality index:

0-Good sleep quality

1-Poor sleep quality

Results:

Out of 220 medical students, majority 133(60.5%) were males and 182(82.7%) were in the age group of 20 years and above. More than half of them 134(60.9%) were exposed to internet usage before 20 years of age. In this study many of them 90(40.9%) were hostellers. Majority of them 172(78.2%) were using mobile data for surfing in internet. The study revealed, nearly one third 69(30.9%) were spending 200-500 Rs per month for internet usage. Many of the study participants 127(57.7%) were use internet for their academic purpose.

Table 1: Socio-Demographic details of study participants (n=220):

S.NO	Socio-demographic profile	Frequency (n=220)	Percentage
1	Age		
	a) <20 years	38	17.3
	b) >20 years	182	82.7
2	Sex		
	a) Males	133	60.5
	b) Female	87	39.5
3	Education		
	a)1st year	79	35.8
	b)2nd year	47	21.4
	c)3rd year	47	21.4
	d)4th year	47	21.4
4	Place of current stay		
	a)Hostel	90	40.9
	b)Home	82	37.3
	c)Private stay	48	21.8
5	Gadgets used for internet		
	a)Mobile	82	37.3
	b)Tabs	63	28.6

	c)Laptops	44	20.0
	d)Computers	31	14.1
6	Mode of internet usage		
	a)Wi-Fi	48	21.8
	b)Mobile data	172	78.2
7.	Expenditure per month		
	a)< 200 RS	52	23.6
	b)200 to 500 Rs	68	30.9
	c)500 to 1000 Rs	54	24.5
	d)> 1000 Rs	46	20.9

Table 2: Purpose of usage of internet among the study participants (n=220):

S.NO	Purpose of usage	Yes	No
1	Academic	127(57.7%)	93(42.3%)
2	Social networking	104(47.3%)	116(52.7%)
3	Communication	100(45.5%)	120(54.5%)
4	Gaming	97(44.1%)	123(55.9%)

Table 3: Prevalence of Sleep quality among the study participants (n=220):

Pittsburgh sleep quality index	Frequency	Percentage
Good (≤5)	72	32.7%
Poor (>5)	148	67.3%

Fig 1: Prevalence of Internet addiction among study participants (n=220)

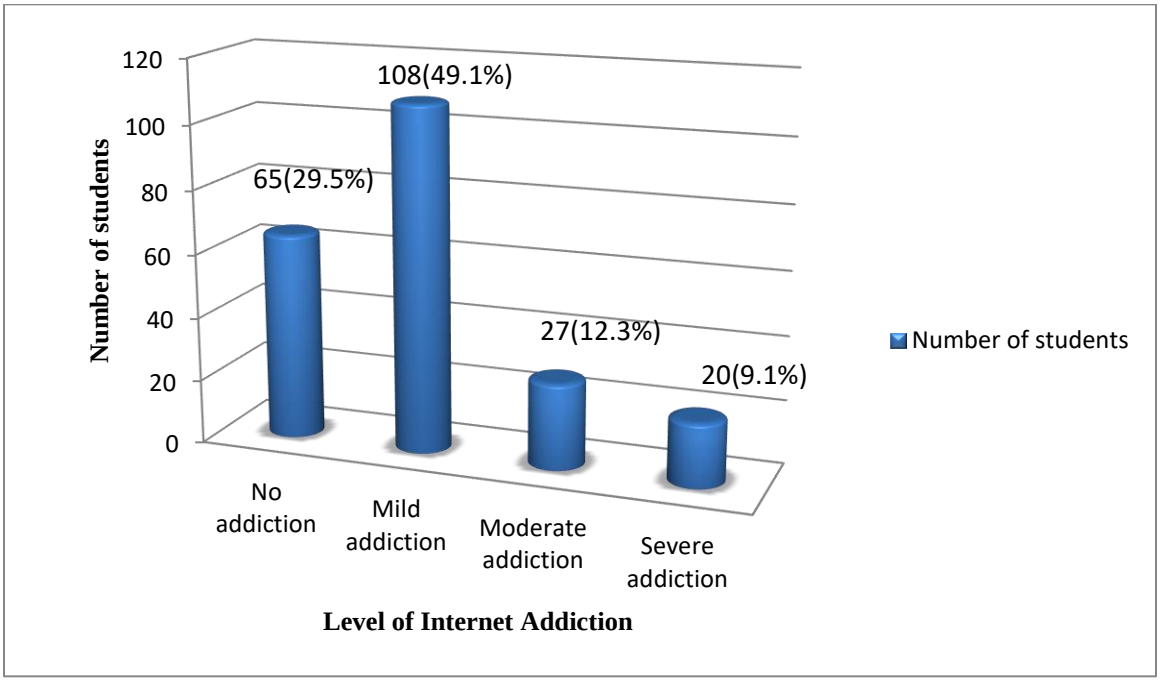

Table 4: Association between Socio-demographic Characteristics and Internet addiction among the participants (n=220)

S.NO	Factors	N	No addiction	Mild addiction	Moderate addiction	Severe addiction	P value
1	Age						
	a)<20 years	38	16 (42.2%)	11 (28.9%)	11 (28.9%)	-	0.000*
	b)>20 years	182	49 (26.9%)	97 (53.3%)	16 (8.8%)	20 (11%)	
2	Sex						
	a)Male	133	27 (20.3%)	64 (48.2%)	24 (18.0%)	18 (13.5%)	0.000*
	b)Female	87	38 (43.7%)	44 (50.6%)	3 (3.4%)	2 (2.3%)	
3	Education						
	a)1st year	79	50 (68.3%)	29 (36.7%)	-	-	0.000*
	b)2nd year	47	-	22 (46.8%)	21 (44.7%)	4 (8.5%)	
	c)3rd year	47	15 (31.9%)	22 (46.8%)	-	10 (21.3%)	
	d)4th year	47	-	35 (74.4%)	6 (12.8%)	6 (12.8%)	
4	Place of current stay						
	a)Hostel	90	11 (12.2%)	77 (85.6%)	-	2 (2.2%)	0.000*
	b)Home	82	50 (61.0%)	23 (28.0%)	7 (8.5%)	2 (2.4%)	
	c)Private stay	48	4 (8.3%)	8 (16.7%)	20 (41.7%)	16 (33.3%)	
5	Gadgets used for internet						
	a)Mobile	82	6 (7.3%)	39 (47.6%)	21 (25.6%)	16(19.5%)	0.000*
	b)Tabs	63	23 (36.5%)	35 (55.6%)	3(4.8%)	2(3.2%)	
	c)Laptops	44	23 (52.3%)	19 (43.2%)	1(2.3%)	1(2.3%)	
	d)Computers	31	13 (41.9%)	15 (48.4%)	2(6.5%)	1(3.2%)	
6	Mode of internet usage						
	a)Wi-Fi	48	8(16.7%)	2(4.2%)	21 (43.8%)	17 (35.4%)	0.000*
	b)Mobile data	172	57 (33.1%)	106 (61.6%)	6 (3.5%)	3(1.7%)	
7	Expenditure per month						
	a)< 200 Rs	52	20 (38.5%)	32 (61.5%)	-	-	0.000*
	b)200 to 500 Rs	68	39	25	2(2.9%)	2(2.9%)	

			(57.4%)	(36.8%)			
	c)500 to 1000 Rs	54	5(9.3%)	39(72.2%)	8(14.8%)	2(3.7%)	
	d)> 1000 Rs	46	1(2.2%)	12(26.1%)	17(37.0%)	16(34.8%)	

*Denotes statistically significant value ($p < 0.0001$)

Horizontal summing of each cells will give 100%

Discussion:

In this study, the overall prevalence of internet addiction was found as 70.5% in the medical students in which 49.1% with mild addiction, 12.3% with moderate addiction and 9.1% with severe addiction. In another study done by Sharma et al [13]. reported 42.7% prevalence of internet addiction in which 35% was mild, 7.4% moderate, and 0.3% severe addiction in professional college students in India.

In the present study males are found to be more addicted when compared to females and same is proved in previous studies done by Duraimurugan et al [12]. We have found association between device used i.e smart phone and internet addiction which is also proved in the study done by Sharma et al[13] and Park et al[14].

We have found that internet addiction is high in students staying outside the home and similar finding is seen in the study done by Goel et al[15].

Conclusion:

It is concluded that high prevalence of internet addiction & poor sleep quality in medical undergraduate students. Internet addiction is positively associated with age, gender, place of stay, gadgets used and mode of internet and expenditure. There should be proper differentiation between usage and over usage of internet. Awareness must be given to the youth of the nation through proper channel.

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