

Original Research Article

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A cross sectional study on social media usage and health status among under graduate medical students studying in Government medical college Telangana

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ABSTRACT

Background: Today utilization of social media has become an integral part of young population. India is on the hike for development and internet has been the center point of that. Thus finding the current status is necessary.

Methods: The design of the study was cross sectional observational study. Sample size of the study was 140 students from second year MBBS. The place of study was at Government Medical College, Telangana. The subject of the study was second year MBBS students. The study period was from November 2018 to January 2019. Study tool was standard social media addiction scale and a pre-tested semi structured questionnaire.

Results: Total number of participants was 138. Amongst the social media users out of 136 about 88 (63.76%) students were found to be mild social media addict and about 50 (36.23%) students were found to be moderately social media addict. Most common physical symptom observed in social media users overall was disturbance in sleep, i.e., 13.2%.

Conclusions: In today's world were internet has become the basic need for growth of science and technology, it has also encroached on to the routine daily activity thus inhibiting the performance of the student by affecting him physically and psychologically.

Keywords: Social media, Internet addicts, Young population, Harmful effect

INTRODUCTION

Worldwide around 7.34 billion people are using Internet through modern gadgets such as smartphones and computers with a coverage of 85% in developed countries and around 45% amongst the developing countries with a overall coverage of 55%.¹ 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. 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.²

Most common use of the Internet is to share and learn innovative information through academic data, Google, g-mail, apps, social media, etc. Social media is close to becoming an integral part of the day-to-day lives of most people amongst all the above options. Adolescents are worstly affected by this. The social media websites are linkedin.com, facebook.com, twitter.com and orkut.com etc. are continuously distracting students from their studies. The main focus of students should be education but unfortunately today's students are emphasizing on such sites which can be complete wastage of time.³ Effects of using social media have been found to be far reaching and potentially dangerous in affecting the health and mental related behavior of youth, who are not yet

mature enough to differentiate between fantasy and reality. Apart from this, over utilization of social media, decreases the amount of time available for pursuing other activities which are useful for their physical health and mental health and spending of time with family members.⁴

Like any other addiction like smoking, alcohol and i.v drug users, social media usage also creates addictive behavior. Social media addiction may have a deleterious effect on the physical health, psychological health, and behavioral problems for users in their formative years. Off late, blue whale has emerged as a dangerous social media tool which is being blamed for deaths of adolescents and endangered the lives of teenagers.⁵ To calculate the level of addiction scaling is necessary. One such standardized pre-tested scale was used in our study.

Turne & Serenko have identified three notionally different perspectives to explain the formation of social network addiction: Cognitive-behavioral model; this model emphasizes that 'abnormal' social networking arises from maladaptive cognitions and is amplified by various environmental factors, and eventually leads to compulsive and/or addictive social networking. Social skill model; this model emphasizes that 'abnormal' social networking arises because people lack self-presentational skills and prefer virtual communication to face-to-face interactions, and it eventually leads to compulsive and/or addictive use of social networking. Socio-cognitive model; this model emphasizes that 'abnormal' social networking arises due to the expectation of positive outcomes, combined with internet self-efficacy and deficient internet self-regulation eventually leads to compulsive and/or addictive social networking behavior.⁶

Thus social media addiction is an emerging health issue in India, more so among the young population. The research over this topic is limited and no such work has been conducted in our present institute. Hence, it was found necessary to study the pattern of social media usage and associated physical and mental health issues among college students as they are the vulnerable group.

Objectives

- To assess the prevalence of social media addiction in the Government medical college study subjects.
- To assess the health problems related to social media usage among the study subjects.
- To assess the various factors associated with social media addiction.

METHODS

Study design: Cross sectional observational study.

Sample size: 140 students from second year MBBS.

Place of study: Government Medical College, Telangana.

Study subject: Second year MBBS students.

Study period: From November 2018 to January 2019.

Study tool: Standard Social Media Addiction Scale and a pre-tested semi structured questionnaire.

The scoring of the scale

This is a 5-point Likert type scale which consists of 29 items and 4 sub-dimensions. 1-5 items are within virtual tolerance sub dimension; 6-14 items are within virtual communication sub dimension, 15-23 items are under virtual problem sub dimension and 24-29 items are under virtual information sub dimension. All of the items in the scale are positive. The highest point that can be scored from the scale is 145, and the least one is 29. The higher scores indicate that agent perceives himself as a "social media addict".⁶

Analysis of data

The data is analyzed through use of SPSS software version 22.

Ethics approval and consent of the study participants. The ethical clearance was obtained before the start of the study. Consent of the students was taken. Confidentiality of the study participants was ensured.

RESULTS

Total number of participants was 138. It is a batch of 150 but 8 students failed and 4 were absent on the day of conduction of study. Out of 138 students (i.e. study subjects) 112 were females and 26 were males. Total number of social media users were 136 and 2 were non social media users. The median age of the study subjects was 19 (18 to 20) years. The Median expenditure of the student on social media was 149 (ranging from 60 to 448) per month with SD of 52.8%. The median time spent by the student on social media was about 3 hours with maximum time spent upto 9 hours per day (Figure 1). Out of total 138 students 122 (88.4%) students consumed junk food.

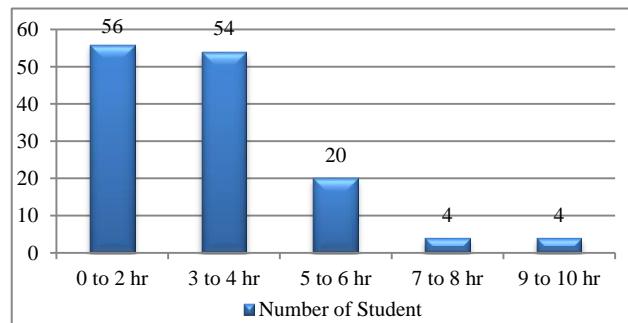


Figure 1: Total amount of time spent by students on social media.

The present study showed that 44% of the social medial addict student belonged to high socio-economic status in which both the parent is working. Highest number of such parent where in some business profession.

Table 1: Distribution of study subjects according to grading of social media addiction (n=136).

Grading	Total number of subjects	Standard error	Z	P value
Mild	86	0.709	0.56	0.215
Moderate	50	0.953	1.68	0.342
Severe	0	-	-	-

Table 2: Association between individual variable and social media addiction by multivariate logistic regression (n=136).

Variables	Adjusted odds ratio	Standard error	Z	P value
Gender				
Male	-	-	-	-
Female	0.334	0.28	3.42	0.415
Junk food				
No	-	-	-	-
Yes	5.639	0.42	3.29	0.2001
Selfitis				
No	-	-	-	-
Yes	1.381	0.23	3.68	0.999

Amongst the social media users out of 136 about 88 (63.76%) students were found to be mild social media addict and about 50 (36.23%) students were found to be moderately social media addict. None of the student was severely addicted for social media. This categorization is based on the social media addiction scale.⁶

Among the social media addict the students were categorized into mild (86), moderate (50) and severe social media addict. Among the mild social media addict commonly used application was Whatsapp (56.8%) followed by Instagram (27.3%) and Facebook (9.09%). Similarly among moderately social media addict the common application used were Whatsapp (52%) followed by Instagram (13.6%) and Facebook (4%). None of the students gave history of addiction to smoking and alcohol.

Most common physical symptom observed in social media users overall was disturbance in sleep, i.e., 13.2% followed by Blurring or strained vision, i.e., 11.7% and least observed physical symptom was neck pain, i.e., 4.41%. Fifty percent of the student didn't showed any physical signs and symptoms. The most common emotion symptoms observed was depression i.e. 10.2% followed by no sense of time and avoiding studies i.e. 8.82%. About 64% of the patient didn't had any emotional symptoms. As per the study conducted by Anand et al among MBBS student in south India depression was the most common psychological

DISCUSSION

As per the survey of New pew research centre in U.S. adults finds that the social media landscape in early 2018 is defined by a mix of long-standing trends and newly emerging narratives. Most of the Americans use Facebook and YouTube, but Snapchat and Instagram is rampantly used by young adults.⁷ Because of the blend of academics with social media the use of social media has become much more rampant as compared to past.

In our study second year undergraduate medical students were involved. In our study 81.1% of the student was female and 18.8% were male. In a study conducted by Mansoor et al in Srinagar 59% post graduate students were female and 41% were male.⁸ Median age of the social media users was 19 in our study. In study conducted by Manjulata et al the median age of the study participants was 22.⁹

The average time spent by the student on social media was 3.28 hours which ranged from half hour to nine hours. Thus maximum time spent by the student was nine hours a day. As per the study by El-Badawy & Hashem 50% of the respondents spend 1-3 hours studying a day and 33% spent that same amount of time on social media per day. From this it is clear that the overall grade averages time spent by our study subject is quite high.¹⁰ The frequency of consumption of junk food by the student spending more than 3 hours a day was about 4 times a week. Maximum going upto 7 times a week. A recent news by BBC claimed that Social media stars might be encouraging children to eat more unhealthy snacks, a new study suggests and the young generation watching these star went on consume 26% of their calorie intake more from junk food.¹¹

As compared to other studies that mostly included use of single social media sites here in our study we study the use of multiple social media sites to measure the burden of social media addiction. Commonly among the social media addict commonly used application was Whatsapp followed by Instagram and Facebook. As per the latest statistical facts Facebook has became the most commonly visited social media site as compared to previous stats were Whatsapp was commonly used social media site.¹²

In our study the most common physical symptom observed in social media users overall was disturbance in sleep, i.e., 13.2% followed by Blurring or strained vision, i.e., 11.7% and least observed physical symptom was neck pain, i.e., 4.41%. In a study carried out by Yumei Zheng most common physical symptom observed was Dry eyes (78.1%) followed by cervical pain (48.1%).¹³ The most common emotion symptoms observed was depression i.e. 10.2% followed by No sense of time and avoiding studies i.e. 8.82%. About 64% of the patient didn't had any emotional symptoms. As per the study conducted by Anand et al among MBBS student in south India depression was the most common psychological

symptom associated with social media addicts followed by anxiety and social isolation.¹⁴ Similarly other studies are in support of the present study regarding high prevalence (34%) of being depressed, moody, and nervous when not online.^{15,16}

CONCLUSION

The present study deals with study of social media addiction among the undergraduate medical students. The study shows high prevalence of social media addiction. Large number of social media addict were females, those belonging to higher socioeconomic status. Large number of social media addict were junk food addict also. Multiple social media sites were visited by the students. Also use of social affected the students physically as well as psychologically. Thus in today's world was internet has become the basic need for growth of science and technology, it has also encroached on to the routine daily activity thus inhibiting the performance of the student by affecting him physically and psychologically.

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