Social Networking Sites: A Study to Assess Its Affect on Sleeping Habits and Social Life of Medical Students

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Abstract
Background: “The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it” (Weiser, 1991)
The growing popularity of social networking sites among students demands an introspection of the social behaviour. With advent of smartphones and better, faster internet facility, mobile phones have become the most easy way to have everything literally on the tip of fingers wherever and whenever one wants.
Objectives: The purpose of this article is to study the need for social network sites, extent of its usage and how does it affect the sleeping habits and social life of users.
Methods: A Cross-sectional study was conducted among second year medical students using anonymous, self administered, structured questionnaire. Students were asked to provide demographic details, time spent on mobile and social networking sites along with sleeping habits and their perception about its affect on their social behaviour.
Result: The mean age of the students is 19.23 years with time spent on SNS ranging from 5 minutes to 18 hours and Facebook and Whatsapp being the preferred choice. More than 2/3rd felt the need to reduce the usage as it was negatively affecting their lives.
Conclusion: There is need to encourage students to adopt healthy lifestyle which can be undertaken through counselling sessions and showing them how the social network sites can be used for constructive purposes.
Keywords: Social Networking Sites, Mobile phones, Sleep.

Introduction
Social networking is a phenomenon which has existed since society began. Social Networking Sites (SNS) are the latest online communication tool that allows users to create a public or semi-public profile and view their own as well as other users' online social networks and interact with people in their networks (1). This concept arises from basic need of human beings to stay together in groups forming a community.

Wikipedia defines social network service as online platform that focus on building and reflecting social networks or social relations among people who share interests and activities (2).
"The most profound technologies are those that disappear.
They weave themselves into the fabric of everyday life until they are indistinguishable from it". - (Weiser, 1991).
Just within a decade Social Networking sites (SNS) have grown from a niche to a mass online activity, in which tens of millions of internet users are engaged, both in their leisure time and at work (3). India is the seventh largest market worldwide for social networking after the U.S., China, Germany, Russian Federation, Brazil and the U.K (2). These networks have a huge impact on modern way of life, including the change in interpersonal communication and interaction (4). Social Networking Sites have become an essential medium of communication and entertainment among people (2). They spend hours chatting with their friends and browsing profiles on social networking sites. Thanks to it young men and women now exchange ideas, feelings, personal information, pictures and videos at a truly astonishing rate (5). Social media has become a way of life for most of the current young generations all over the world. It allows all kinds of nations to connect in ways that was previously unthinkable (6).

At first glance this may seem like a waste of time; however it also helps students to develop important knowledge and social skills, and be active citizens who create and share content. At present, whether social media is favourable or unfavourable, many students utilize these sites on a daily basis. As social media sites continue to grow in popularity this technology is a vital part of today’s student success equation (5). The increasing dependence on technology for basic communication also highlights the importance of analysing how SNS are affecting daily processes (7). It’s like people being immersed in virtual life and forgetting about the physical world around them. Though it has started to affect the daily activities of normal human beings, the popularity of SNS is not going to reduce in near future (2).

Yet now it has more influence on our lives than we could possibly imagine and the damage to health has far reaching implications (6). One of the largest issues with social media is that it’s possible to remain in contact with your friends from all over the world at all times of the day - ‘Always-on communication’ (6) (7) - these websites never shut down. With advent of smartphones and better, faster internet facility, mobile phones have become the most easy way to have everything literally on the tip of fingers whenever and wherever one wants.

Using a mobile phone in bed for messaging has been proven to increase chances of struggling to sleep - it takes longer for the brain to relax after concentrating on messaging. These social media websites allow people to stay at home and go out less to meet with friends, because they can simply chat to them online. Studies have shown that staying indoors in your home all day makes people too relaxed, which creates difficulty in initiating sleep at night (6).

Adults don’t realise what impact using computers, mobile phones and other gadgets before falling asleep is having on their night’s sleep. Being exposed to bright light from computer and mobile phone screens while in bed completely delays the brain and body’s ability to get to sleep. As a result, people aren’t able to get to sleep as quickly as they should (6).

Today 1.5 billion people across the world have their profiles in social networking sites. The growing popularity of social networking sites (SNS) among the Internet users demands an introspection of personal and social behaviour of human beings (2).

Hence the study was conducted with the intent to find the need for social network sites, extent of its usage address the affect of use of social media on sleep and social life of users and to find, why.

Method and Materials
A Cross-sectional study was conducted among medical students of a tertiary care hospital of Maharashtra.

Inclusion criteria: All 2\(^{nd}\) year MBBS students using internet on phone and willing to participate were included in the study. Participants who agreed to participate were explained the nature and the objectives of the study.

Demographic details, time spent on mobile and social networking sites along with sites visited and reason for using SNS were inquired. Details about
sleeping habits and their perception about affect of SNS on their social behaviour were collected. This was done using anonymous, self administered, structured questionnaire. Prior to administration, pilot study was done for testing the questionnaire. The questionnaire included open as well as closed ended questions.

A total of 120 students were included in the study. No reference to the participant's identity was made at any stage during data analysis or in the paper. Approval for the study was taken from the Institutional Ethics Committee.

Table 1: Most Common SNS and Messaging services used and why?

| Most Common Social Networking Sites visited |       |
|--------------------------------------------|-------|
| 1 Facebook                                  | 86%   |
| 2 Google+                                   | 54%   |
| 3 Instagram                                 | 35%   |
| 4 Twitter                                   | 15%   |
| 5 Snapchat                                  | 4%    |
| 6 Quora                                     | 1%    |
| 7 None                                      | 11%   |

| Most Common Instant Messaging Services Used |       |
|---------------------------------------------|-------|
| 1 Whatsapp                                  | 97%   |
| 2 Hike                                      | 58%   |
| 3 Nimbuz                                    | 2%    |
| 4 Others                                    | 6%    |
| 5 None                                      | 2%    |

| Reasons for using SNS                       |       |
|---------------------------------------------|-------|
| 1 Keeping in Contact                        | 65%   |
| 2 New Information                           | 34%   |
| 3 Entertainment                             | 4%    |
| 4 Time pass                                 | 7%    |
| 5 Studies                                   | 6%    |

Table 2: Sleeping Habits

| Timing of Sleep                              |       |
|---------------------------------------------|-------|
| Before 12 AM                                | 38%   |
| 12 AM – 2 AM                                | 55%   |
| After 2 AM                                  | 7%    |

| Time taken to fall asleep                    |       |
|---------------------------------------------|-------|
| <15 mins                                    | 66%   |
| 15-30 mins                                  | 23%   |
| >30 mins                                    | 11%   |

| Total Duration of sleep at night            |       |
|---------------------------------------------|-------|
| <6 hrs                                      | 12%   |
| 6-8 hrs                                     | 79%   |
| >8 hrs                                      | 9%    |

| Quality of sleep                            |       |
|---------------------------------------------|-------|
| Very Good                                   | 26%   |
| Good                                        | 71%   |
| Bad                                         | 3%    |

Table 3: Affect of SNS on Social and Academic life

| Do you think:                               | Yes  | No  |
|---------------------------------------------|------|-----|
| You need to reduce time spent on social networking sites | 66%  | 34% |
| Your studies are affected due to SNS        | 67%  | 33% |
| Your family life is affected due to SNS     | 33%  | 67% |

Results and Discussion

All of the respondents used internet on their mobiles and were in possession of smartphones. The students belonged to the age group of 18 to 21 with mean age of 19.23 years. Male respondents were 57% compared to female being only 43%.
About 36% of the students spend less than 15 minutes on voice calling compared to 11% who spend more than 1 hour on calling. Almost 49% of the students spend less than 1 hour on SNS whereas about 10% spend more than 5 hours (Range from 5 minutes to 18 hours). (Fig 1)

On the basis of data collected it can be said that the medical students preferred social media and spend much time browsing. With the advent of smartphones voice calling has taken a step back and SNS and instant messaging services have gained the limelight.

In work by Qingya Wang et al 45% of the students admitted that they spent 6-8 hours per day to check a social media site, 23% spent more than 8 hours, 20% spent 2-4 hours and only 12% spent less than 2 hours, compared to our study where the proportion for less than 1 hour was 49%, between 1-2 hours was 27%, 2-5 hours was 14% and only 10% spent more than 5 hours on SNS. This difference may be due to the fact that the first study was conducted among college students of USA who have better accessibility to internet and free time as compared to medical students of India.

Facebook (86%), Google+ (54%), Instagram (35%) were the SNS with most accounts. The instant messaging sites most preferred were Whatsapp (97%), Hike(58%). Most of them had accounts in more than one sites. (Table 1)

Facebook and Whatsapp have emerged as the clear leaders when it comes to SNS and Instant Messaging services respectively. A large majority of our participants reported using social networking sites (93%), similar to that reported in other studies — 94% in Ellison et al.'s study (2007). With regard to the particular social networking sites that were used, it was in sync with the work by Ellison et al., who have reported strong use of Facebook by their participants (1). 86% had Facebook account similar to study by Sheldon in 2008 with 90% accounts but only 60% of participants favoured Facebook, in study done by Qingya Wang et al (5) (8).

Smart phones have changed how the students connect with the outer world via surfing internet sites and online social networking sites. The most common reason to visit SNS was to keep in contact with friends and relatives (65%). Also a large portion of the medical students fraternity used it as a way to be keep themselves updated about the latest in and around the world (34%). About 7% just visited the SNS for timepass. More than 66% of the students had urge to regularly check for notifications from SNS.

In terms of the benefit of social media, in the study by Qingya Wang 20% agreed that social media helped with studies compared to only 6% in our study which is very less may be due to differential penetration of internet and much more reliability on old methods of teaching in India. Only 11% students used SNS for timepass and fun in our study compared to 55% in the study by Qingya Wang (5) may be due to the hectic nature of the MBBS curriculum and pressure to perform. About 38% of the students went to sleep before 12 midnight and 7% after 2 a.m. Out of all the students 66% fell to sleep within 15 minutes of laying on bed and most of them sleeping for 6-8 hours (79%)

Only 25% keep their internet in ON mode while asleep and more than 70% rated that they had good sleep. 11% stated that they had trouble sleeping. (Table 2)

Only 31 % of the students exercised regularly. More than 75% felt tiredness in eyes sometimes due to mobile internet usage. Mental tiredness was felt sometimes by 55% of the respondents after waking in the morning, whereas in case of physical tiredness it was 51%.

About 67% of the students felt that they need to reduce the time spent on SNS and their studies were being affected due to it as compared to 57% which stated that social media has made them less productive. (5)

In our study 33% felt that their family life was negatively impacted and they spent less time with them due to being online on SNS which was higher than 25% found in the study conducted by K. Subrahmanyam et al. (1) (Table 3)
Limitations
This study conducted had its own limitations. Firstly convenient sampling was done and study population of 2nd yr MBBS students were only included, which limits the generality of the findings. Secondly as with any self-report survey, one concern is that participants' responses may have been subject to biases. Third, this study did not consider student’s psychological state; perhaps influences and motivations for social networking use.

Conclusion
While SNSs might facilitate interaction between people and strengthen existing close social ties, there is also a concern that new technologies increasingly privatize our leisure time and undermine face-to-face community ties. Our research has revealed that medical students were likely to be affected by social media. Social media is attractive; it not only provides students another world to make friends, also provides a good way to release pressure. To some degree, it absolutely affects the lives of medical students including the grades. This study also indicates that an approach is needed to better balance the relationship between social media and academic studies. Students need to be made aware of the pros and cons of SNS and its proper usage without affecting their family life. When it’s used in a positive way, it can be an extraordinary tool.

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