Community Medicine

DOES SOCIAL MEDIA HAVE A ROLE IN SLEEP DISTURBANCES AMONG MEDICAL STUDENTS?

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ABSTRACT **Introduction:** The invention of the Internet has been a revolution in terms of how we access and consume content, especially in the past decade, whether it be educational, entertainment or advertising. The recent rise of social media platforms has now revolutionised how humans interact, share and connect globally, through the convenient medium of a handheld smartphone. Hence this study aims to determine if problematic social media use is a significant contributor to the development sleep disturbances among medical students.
Methodology: The study was conducted at Sri Ramachandra Institute of Higher Education and Research, Chennai from October 2019 to November 2019.
Results: A total 480 study participants were included among them 32.5% developed sleep disturbances.
Conclusion: Using social media has got some implication on sleep disturbances.

KEYWORDS :

INTRODUCTION:
India is the 2nd most populous country with a population of 1.3 billion and is expected to have around 627 million internet users by the end of 2019, owing to the recent growth in internet availability even in rural areas [1]. 28% of young adults in India use social media [2] and are more likely to use social media platforms as compared to older age groups.

Various social media platforms like Whatsapp, Facebook, Instagram, have become common sites for people, especially adolescents and young adults to use recreationally. However, its compulsive and addictive use is increasingly becoming a matter of concern, as its negative effects have shown to affect sleep quality and be linked to low self-esteem and anxiety [3,4]. This study aims to determine if problematic social media use is a significant contributor to the development sleep disturbances among medical students.

METHODOLOGY
Study area and study design:
The study was conducted at Sri Ramachandra Institute of Higher Education and Research, Chennai from October 2019 to November 2019.

Inclusion and Exclusion Criteria
Based on the current availability of the students from the current academic year were taken for the study

Sampling Technique
The availability of students and proportional allocation of the sample size to each year of MBBS students was taken into account. The random selection of the respondents was done

Data Collection
Data collection was done using a Social Media Usage Questionnaire The pattern of Social media usage was taken into account to know the level of usage among the study participants in terms of quality and quantity with responses that could range from Never, Rarely, Sometimes, Often to Always.

Ethical Issues:
Ethical approval was obtained from the Institutional Ethics Committee for research at Sri Ramachandra Institute of Higher Education and Research.

Written informed consent was taken from the students during data collection and confidentiality was maintained throughout the study.

Data Analysis
After checking the obtained data for completion, the data was entered initially into an Excel Spreadsheet and exported to analysis software i.e. Statistical Software for Social Sciences version 13.1

RESULTS
Prevalence Of Sleep Disturbance: The prevalence of Sleep Disturbance among medical students was found to be 32.5% with 95% CI as 36.2% to 44.99%

30.4% of the study participants reported obtaining less than six hours of sleep per day and 62.7% of study participants reported sleeping for 6-8 hours a day.

BACKGROUND CHARACTERISTICS OF STUDY PARTICIPANTS:
It has been found from this study that the majority of the study participants were in the age group of 17-19 (312 participants or 65%), the age group of study participants ranged from 17 to 24 years with mean as $19.01 \pm SD$ 1.20 years. Among the study participants majority were females. 37.5% of Males and 62.5 % of Females. Ratio of Males: Females was 1 :1.6, and majority belong to urban area (97.1%).

SOCIAL MEDIA USAGE:
It has been found that among the study participants majority of them started using social media from the mean age of 13.8 With SD 2.32 onwards. Among them a majority used the following applications is shown in **Table 1** below:

SR.	PLATFORM	% USERS
1.	Whatsapp	77.1
2.	Instagram	75.6
3.	Facebook	12.9
4.	Twitter	6.7
5.	Youtube	65
6.	Reddit	9.2
7.	Snapchat	35.8

Table 2: And preferred using the following devices:

SR	DEVICE	%USERS
1.	PC	59% (24)
2.	Smartphone	91.9% (441)
3.	Tablet	3% (15)

Figure: Usage of social media with the time spent
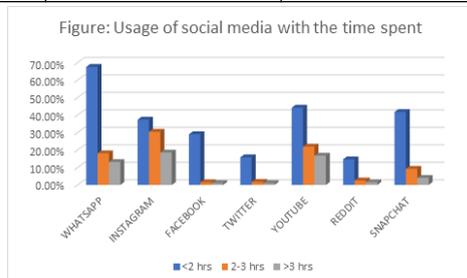
Table 3: HOURS OF USAGE OF SOCIAL MEDIA
Time spent on each platform by study participants:

SR	PLATFORM	<2 hrs daily	2-3 hrs daily	>3 hrs daily
1	WHATSAPP	67.5%	18.1%	13.1%
2	INSTAGRAM	37.3%	30.4%	18.5%
3	FACEBOOK	29%	1.5%	1%
4	TWITTER	15.8%	1.7%	1%
5	YOUTUBE	44.2%	21.9%	16.7%
6	REDDIT	14.6%	2.5%	1.5%
7	SNAPCHAT	41.7%	9.2%	4%

DAYTIME/ NIGHT IME USAGE:
167 or 34.8% of the study participants used social media mainly during daytime, and 65.2% (313 participants) during night time.

Both males (65.6%) and females (65.0%) were more likely to use social media during night time. Study participants in the age group of 20-22 years showed highest night-time specific usage of social media which came to 67.3% of participants within the age group.

DISCUSSION
The use of social media in various forms is much higher in the current generation of students. Apart from being a platform for virtual social networking, it also serves as a medium for entertainment and learning, and smart phones are the most popular means to do so. Due to its easy accessibility with a large number of popular social networking sites being available to download for free on anyone's handheld smart phone devices, the age of onset for starting social media use has also decreased in the young adult and adolescent population.

A study done by Woods HC and Scott H et al [4] reported an assessment of how social media use could be linked to sleep quality, self-esteem, anxiety and depression among 467 adolescents in Scotland. The parameters included were overall social media use, night-time-specific use, sleep quality, emotional investment in social media etc. The results clearly indicated that social media use specifically during night-time as well as overall, and those who were more emotionally invested in social media were more likely to have poor sleep quality, lower self-esteem and higher levels of anxiety and depression.

Another study done by AMA Nasirudeen et al [5], confirmed the above, stating that many students use social media daily for a variety of reasons, aided by an increased availability and usage of smart phones. One of the most common reasons identified by the students was keeping in touch with friends, followed by entertainment, sharing photos etc, which was similar to the findings of the current study. The study found a positive but weak correlation between those who stayed up late to access social networking sites and experienced daytime sleepiness. The present study also obtained similar results with 30.4% of participants sleeping for less than six hours a day. Hence, social media use should also be regarded as an important contributing factor that merits further investigation in relation to sleep quality, academic performance and overall well being of students.

CONCLUSION:
Using social media has got some implication on sleep disturbances. Hence a strong policy and recommendations is required for students to decrease the social media usage.

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