

# Assessment of MBBS students' attitudes on social media use: A cross-sectional study in Government Medical College and Hospital, Tiruvannamalai, Tamil Nadu



Nithiya S<sup>1</sup>, Devandiran RS<sup>2</sup>, Kumaran V<sup>3</sup>, Venkatesh G<sup>4</sup>, Sai Sailesh Kumar Goothy<sup>5</sup>

<sup>1,2,3</sup>Assistant Professor, <sup>4</sup>Associate Professor, Department of Community Medicine, Government Tiruvannamalai Medical College and Hospital, Tiruvannamalai, Tamil Nadu, <sup>5</sup>Associate Professor, Department of Physiology, Sri Madhusudan Sai Institute of Medical Sciences and Research, Muddenahalli, Karnataka, India

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## ABSTRACT

**Background:** The latest internet and social media facilitate communication and increase the speed of work. However, it has a negative side also. **Aims and Objectives:** The present study aimed to assess the MBBS students' attitudes toward social media use. **Materials and Methods:** A total of 322 MBBS students (1<sup>st</sup> year, 2<sup>nd</sup>-year, 3<sup>rd</sup>-year, and final-year students) from Government Thiruvannamalai Medical College were part of the study. Willing students were included in the study. Those students who are not using the smartphone were excluded from the study. Pre-tested semi-structured questionnaires assessing the frequency of social media use and attitudes toward the use of social media in their daily activities were used in the study. **Results:** Most of the participants belong to 18 and 19 years of age. About 77.3% of participants started using the smartphone at the age of 10–15 years. About 92.8% of participants bought smartphones at age of 15–20 years. About 62.2% were not involved in physical activity. About 55.72% check their phone every 10–20 min. About 84.8% of participants sleep < 6 h in 24 h. About 56.9% of participants reported that they will not experience neck pain after prolonged use of smartphones. About 52.3% of the participants reported that they have started using spectacles due to refraction errors after using smartphones. **Conclusion:** The study results present that students in the medical field are addicted to smartphones and this overuse is associated with significant hazardous events. Hence, students should be counseled to reduce the use of smartphones.

**Key words:** Smartphone; Medical students; Sleep; Stress

## INTRODUCTION

Social media is electronic media where any individual can communicate with others and share his ideas, messages, or other content. These contents are mostly open to anyone, meaning anyone can access the contents shared by individuals. On other sites such as WhatsApp or Facebook, anyone can track an individual like how much time active on social media and to whom he is connected, etc. The latest internet and social media facilitate communication

and increase the speed of work. However, it has a negative side also. There was a significant increase in the number of people using social media. In fact, it is so hard to find any individual who is not using social media. Hence, there is a simultaneous increase in the research studies in this area to study the effect of social media usage on human behavior and other psychological aspects. It was reported that personal life is getting affected by means of social media. In fact, social media is also influencing medical services too.<sup>1</sup> Most of us including physicians use social

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### Address for Correspondence:

Dr. Venkatesh G, Associate Professor, Department of Community Medicine, Tiruvannamalai Medical College and Hospital, Tiruvannamalai, Tamil Nadu, India. **Mobile:** 9894597687. **E-mail:** drvenkat90021@gmail.com

media for reference. This is of prime importance as when social media is used by the persons involved in the health sector including medical students; it has an influence in the practical scenario as they will be handling the patients with that knowledge from the social media. It may affect the relationship between the patients and doctor and an issue of medical ethics. It is an open fact that the use of social media increases in the medical field. Research explains at least one-third of clinicians use social media for diagnosis. The usage of social media is much more common in case of the medical students.<sup>2,3</sup> Thus, the use of social media may cause some misunderstandings between clinicians and their patients. American and British Medical Associations have formulated guidelines for medical professionals in using social media. Hence, there are multiple issues related to using of social media in the medical field. The present study aimed to assess the MBBS students' attitudes on social media use.

### Aims and objectives

The present study aimed to assess the MBBS students' attitudes toward social media use.

## MATERIALS AND METHODS

The present study was a cross-sectional study. A total of 322 MBBS students (1<sup>st</sup> year, 2<sup>nd</sup>-year, 3<sup>rd</sup>-year, and final-year students) from Government Thiruvannamalai Medical College were part of the study. Willing students were included in the study. Those students who are not using the smartphone were excluded from the study. The study duration was 3 months from January to March 2022. Pre-tested semi-structured questionnaires assessing the frequency of social media use and attitudes toward the use of social media in their daily activities were used in the study. This study was approved by IEC GTVMCH Thiruvannamalai. The survey form was distributed in the classroom after the students had been informed. Data were accessible only to the researchers and individual respondents. Data were analyzed by SPSS 20.0 version. Data were expressed as frequency and percentage.

## RESULTS

Table 1 presents age-wise distribution of the participants. Most of the participants belong to 18 and 19 years of age. Table 2 presents the age group, in which the participants have started using the smartphone. About 77.3% of participants started using the smartphone at the age of 10–15 years. Table 3 presents the age of the participant at which they bought a smartphone. About 92.8% of participants bought smartphones at age of 15–20 years. Table 4 presents their engagement in physical activity. About 62.2% were not

**Table 1: Age-wise distribution of the participants (n=323)**

Age group (years)	Number of participants	Percentage
18	120	37
19	100	31
20	60	18.5
21	23	7.12
22	20	6.19

Data were expressed as frequency and percentage

**Table 2: Age at which the participants started using a smartphone (n=323)**

Age group (years)	Number of participants	Percentage
10–15	250	77.3
15–20	73	22.6

Data were expressed as frequency and percentage

**Table 3: The age at which the participants bought a smartphone (n=323)**

Age group (years)	Number of participants	Percentage
10–15	23	7.12
15–20	300	92.8

Data were expressed as frequency and percentage

**Table 4: Do you engage in physical activity (n=323)**

Variable	Number of participants	Percentage
Yes	122	37.8
No	201	62.2

Data were expressed as frequency and percentage

involved in physical activity. Table 5 presents the frequency of usage of smartphones. About 55.72% check their phone every 10–20 min. Table 6 presents the hours of sleep of the participants. About 84.8% of participants sleep <6 h in 24 h. About 56.9% of participants reported that they will not experience neck pain after prolonged use of smartphones (Table 7). About 52.3% of the participants reported that they have started using spectacles due to refraction errors after using smartphones (Table 8).

## DISCUSSION

Social networking sites help with communication and it is part and parcel of our life. Further, as communication gadgets become easily available and affordable to the common man, the use of these gadgets increased in recent years. Due to this, the interaction between individuals is greatly increased. This will help the researchers as well. As the research is available online, anyone with similar research interests can access the work and can continue the same.<sup>4</sup> It is well known that students

**Table 5: Frequency of checking the smartphone (n=323)**

Time (minutes)	Number of participants	Percentage
10–20	180	55.72
21–30	100	30.95
31–40	20	6.19
41–50	10	3.09
51–60	13	4.02

Data were presented as frequency and percentage

**Table 6: Hours of sleep (n=323)**

Time	Number of participants	Percentage
<6 h	274	84.8
More than 6 h	49	15.17

Data were presented as frequency and percentage

**Table 7: After using the smartphone for a long time do you experience neck pain (n=323)**

Variable	Number of participants	Percentage
Yes	139	43.03
No	184	56.9

Data were presented as frequency and percentage

**Table 8: After using the smartphone have you started using spectacles due to refraction errors (n=323)**

Variable	Number of participants	Percentage
Yes	169	52.3
No	154	47.67

Data were presented as frequency and percentage

in the medical field use social media a lot for their academic purpose.<sup>5</sup> It was explained that social media influence the individual's behavior.<sup>6</sup> Although there are studies relating to the use of social media and behavior, the studies related to medical students are sparse. Especially during the time of COVID, social media is the platform for medical education.<sup>6</sup> Moreover, it was the accepted method of medical education by the apex body National Medical Commission. Proper usage of social media helps to improve knowledge. However, excessive use of social media is associated with declined sleep quantity and quality.<sup>7</sup> Hence, it is important to create awareness in the medical students about the use of social media.

The present study aimed to assess the MBBS students' attitudes toward social media use. Smartphone usage become part and parcel of individual life.<sup>1</sup> Dependency on smartphones got increased tremendously in the past few years.<sup>2</sup> The cost of the smartphone was reduced a lot and this may be a reason that almost every individual is holding a smartphone. It is not just a device for communication but also for various activities on the internet. It was reported that

smartphone overuse adversely affects the personal life and academics of students.<sup>3,8</sup> On one hand, smartphones made life easier and on the other hand, it causes several side effects such as stress, headache, and neck pain.<sup>9,10</sup> Sleep deprivation, depression, a decline in cognitive abilities, and decreased academic performance are well-known side effects in the medical students due to over usage of the smartphones.<sup>11,12</sup> This is true as the present study results support that the majority of medical students are sleeping <6 h a day. Furthermore, the majority of them are addicted to their phone as the frequency of checking the smartphone was <15 min in these participants. Similar findings are reported in earlier studies.<sup>13–15</sup> Earlier studies reported that in south India, the prevalence of smartphone addiction is less.<sup>16</sup> However, in our study, we have observed a higher prevalence of over usage of smartphones by medical students. Interestingly, it was reported that female students use more time than males.<sup>17–19</sup> On the other hand, studies reported that males use more time than females.<sup>20</sup> The present study does not compare male and female usage as it is not our objective. During the use of smartphones, there will be prolonged flexion of the neck and it leads to pain in the neck, shoulders, and upper extremities.<sup>21,22</sup> It was reported that the duration of the use of smartphones is directly associated with neck pain.<sup>23</sup> The present study results are in accordance with the earlier studies as most of the participants reported neck pain followed by prolonged use of smartphones. It was reported that those who overuse their smartphone were 6 times more prone to develop neck pain compared to normal users.<sup>24</sup>

### Limitations of the study

The study was conducted at one centre. Hence the results can not be generalized.

## CONCLUSION

The study results present that students in the medical field are addicted to smartphones and this overuse is associated with significant hazardous events. Hence, students should be counseled to reduce the use of smartphones.

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**Authors Contribution:**

**NS and DRS-** Concept, and design of the study results interpretation, review of the literature and preparing the first draft of the manuscript; **VG and KV-** Concept, and design of the study, results interpretation, review of the literature, and preparing the first draft of the manuscript; **NS and DRS, SSKG-** Concept, and design of the study, statistical analysis, and interpretation, revision of the manuscript.

**Work attributed to:**

Department of Community Medicine, Tiruvannamalai Medical College and Hospital, Tiruvannamalai, Tamil Nadu, India.

**Orcid ID:**

Dr. Nithiya S - <https://orcid.org/0000-0002-1349-8501>  
 Dr. Devandiran RS - <https://orcid.org/0000-0002-5928-2167>  
 Dr. Venkatesh G - <https://orcid.org/0000-0002-3869-4226>  
 Dr. Sai Sailesh Kumar Goothy - <https://orcid.org/0000-0002-2578-6420>

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