

Survey of Usage of Social Media among Medical Students: A Cross-sectional Study

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ABSTRACT

Social media platforms provide MBBS students with a vast amount of medical information, research studies, and case studies shared by healthcare professionals and organizations. This can be beneficial for staying updated with the latest developments in the medical field.

Materials and methods: A cross-sectional study with pre-validated questionnaire was built using Google Form to assess the type and frequency of social media usage as well as its impact on academic performance among medical students at SN Medical College, Agra, Uttar Pradesh and G.S.V.M. Medical College, Kanpur, Uttar Pradesh from January 2022 to March 2022 which was distributed via e-mails and through WhatsApp groups. A total of 1,179 participants which included all undergraduates, interns and postgraduates, responded to the survey.

Results: The average duration of usage was 3–4 hours as responded by majority of the participants. Sleep disturbance was seen in 27% of respondents although most of them used social media at nighttime. Only 27.2% of students deactivate their social media accounts during exam; however, only 15.9% of students always deactivate their account. About 32.3% of students had positive impact of social media on grades whereas 35.9% have responded that their grades were not affected by use of social media.

Conclusion: Our study has shown that MBBS students were quite familiar with various applications, but very few are using it for the purpose of study. However, it also presents challenges, such as distractions, potential negative impacts on mental health, and ethical considerations.

Keywords: Medical graduates, Medical education, Social media, YouTube.

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INTRODUCTION

Social media refers to internet-based tools that allow individuals and various communities to share and communicate and gather information as well as ideas with similar interest for achieving common or individual goals.^{1,2} The networking sites have been bombarded with innumerable social applications like professional networking (linked in), media sharing (YouTube), content production (blogs), and information aggregation (Wikipedia).^{3,4} It was reported that there were approximately 2.31 billion users globally with the use of 12% in 2005 to 90% in 2015.⁵ Even the National Medical Council has emphasized the importance of social networking in medical education, using it for professional education, organizational promotions, patient care, and public health programs. Social media platforms provide MBBS students with a vast amount of medical information, research studies, and case studies shared by healthcare professionals and organizations. This can be beneficial for staying updated with the latest developments in the medical field and accessing resources that enhance learning. According to various studies, almost 75% of the students used some or the other forms of social networking sites, out of which 20% use them for educational interactions and learning process and to upgrade and enhance their knowledge.^{1,6} Social networking sites are mainly used to stay connected, upload photos and videos and to share their individual posts, and encourage their friendships.⁷ Although many surveys have been conducted to analyze the pattern and frequency and motive of use of social media but still there is insufficient information about the proper usage as well as ethical norms of social networking sites by the medical students. This study has been designed to analyze the extent and the kind of usage of various social networking site by the medical students as well as their impact on their academic performance.

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MATERIALS AND METHODS

A cross-sectional study with pre-validated questionnaire was built using Google Form to assess the type and frequency of social media usage as well as its impact on academic performance among medical students at SN Medical College Agra and G.S.V.M. Medical College, Kanpur from January 2022 to March 2022 which was distributed via e-mails and through WhatsApp groups.

A total of 1,179 participants, which included all undergraduates, interns, and postgraduates, responded to the survey.

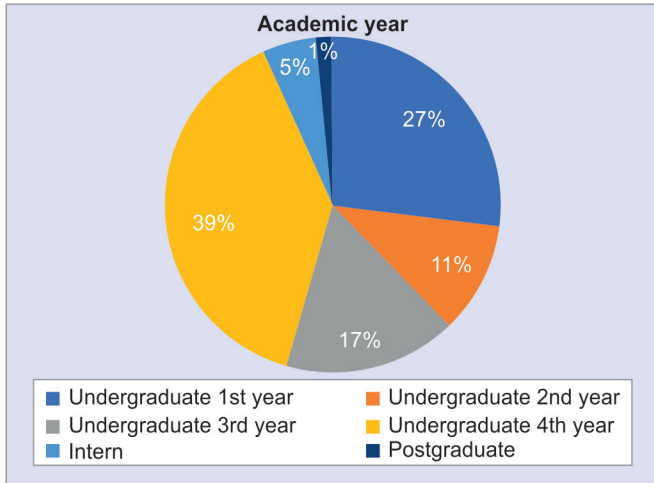


Fig. 1: Pie chart showing the percentage of participants who answered the Google Form

The study was approved by the Ethical Review Committee of both the colleges. Informed written consent was taken from the students.

The questionnaire consisted of four sections: the first section included questions on student’s demographics (age, gender, year of undergraduate). The second part was about the patterns of social media (usage of social media, frequency, type of social media, and preferred platform). The third part included questions on the use and influence of social media on learning, performance, and sleep. Descriptive analyses of the data were represented in tables in terms of percentages.

RESULTS

About 52.7% were female students who responded to the survey and most students were first-year undergraduates (Fig. 1). Majority of the students (45%) visited 3–4 social media sites daily (Table 1). The most common social media platform used was WhatsApp followed by Instagram and the least commonly used site was Tumblr (Fig. 2).

The duration of usage was 3–4 hours as responded by majority of the participants (Table 1). It was found in our study that students still preferred live lectures as compared with recorded lectures on you tube (Table 2). This may be due to the compulsory attendance during the lecture for taking up the exams.

Sleep disturbance was seen in 27% respondents as most of them used social media at night time (Table 3). Only, 27.2% students deactivate their social media accounts during examination; however, only 15.9% always deactivate their account. And 32.3% students had positive impact of social media on grades whereas 35.9% have responded that their grades were not affected by the use of social media (Table 2).

About 9.8% respondents always used social media during lectures; however, most respondents, that is, 40.5% never used social media during their lectures (Table 2).

It was found in our study that social media has negligible impact on the use of recreational drugs or addiction to e-cigarettes or alcohol (Fig. 3).

DISCUSSION

The tremendous advancement in various social media sites with easy accessibility along with the availability of android phones

Table 1: Frequencies of how many social media sites visited in a day

	Counts	% of Total
<i>How many social media sites you visit in a day?</i>		
1–2	465	39.4%
3–4	530	45.0%
5–6	184	15.6%
<i>How frequently do you use social media sites in a day?</i>		
Always	173	14.7%
Never/rarely	12	1%
Sometimes/often	994	84.3%
<i>Average time spent on social media</i>		
1–2 hours	366	31.0%
2–3 hours	370	31.4%
3–4 hours	346	29.3%
Less than an hour	17	1.4%
More than 4 hours	80	6.8%

Frequencies of What do you prefer, live lectures or lectures on social media platforms?

	Counts	% of Total
<i>What do you prefer, live lectures or lectures on social media platforms?</i>		
Lectures on social media platforms like YouTube	464	39.4%
Live lectures	715	60.6%

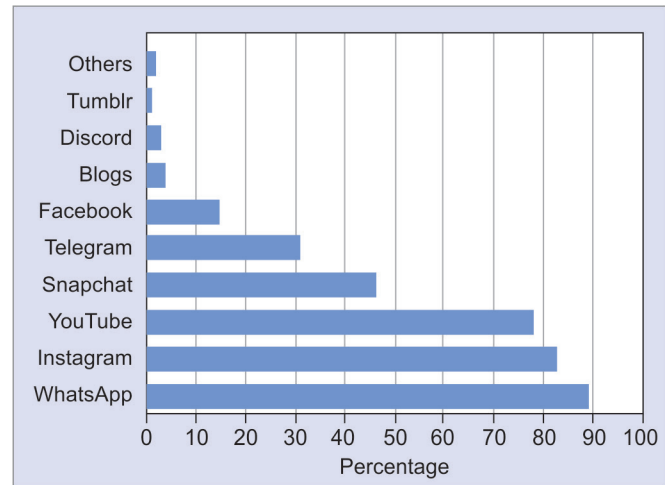


Fig. 2: Different social media used by medical students

has totally transformed the communication as well as overall educational methods among the students including medical undergraduates and postgraduates especially after COVID-19 pandemic.

Various social networking sites, such as Facebook, Twitter, and Instagram have been used as teaching and learning modalities to modify and disseminate the knowledge to larger network of people. Majority of respondents in our study were females although the difference was insignificant; similar studies showed that females outnumbered the males in responding to Google questionnaire.⁸

The most common websites used by the students in our study was WhatsApp and Instagram which were similar to the findings conducted by Nisar et al. and Ajay et al. These social media sites



Table 2: The impact of social media on academic performance

<i>Frequencies of do you use social media during lectures?</i>		
<i>Do you use social media during lectures?</i>	<i>Counts</i>	<i>% of Total</i>
Never	478	40.5%
Rarely	236	20.0%
Sometimes	206	17.5%
Always	116	9.8%
Often	143	12.1%
<i>Frequencies of do you deactivate your social media accounts during exams?</i>		
<i>Do you deactivate your social media accounts during exams?</i>	<i>Counts</i>	<i>% of Total</i>
Never	242	20.5%
Rarely	291	24.7%
Always	187	15.9%
Often	138	11.7%
Sometimes	321	27.2%
<i>Frequencies of the effect of social media on your grades</i>		
<i>Effect of social media on your grades</i>	<i>Counts</i>	<i>% of Total</i>
Negative	375	31.8%
None	423	35.9%
Positive	381	32.3%

Table 3: Impact of social media on sleep pattern

<i>Frequencies of duration of sleep at night</i>		
<i>Duration of sleep at night</i>	<i>Counts</i>	<i>% of Total</i>
6–8 hours	897	76.1%
<6 hours	128	10.9%
>8 hours	154	13.1%
<i>Frequencies of is your sleep schedule disturbed by social media usage</i>		
<i>Is your sleep schedule disturbed by social media usage?</i>	<i>Counts</i>	<i>% of Total</i>
Never	238	20.2%
Rarely	233	19.8%
Sometimes	318	27.0%
Always	183	15.5%
Often	207	17.6%

were used for the purpose of communication and learning as they are easily accessible, and data sharing is easy.^{7–10} Around 700 million photos and 100 million videos and enormous amount of data can be shared to larger groups who are present on a common platform.^{11,12}

Although social media has been recognized as one of the factors which reduces cognitive skill and hamper the academic performance, but in our study, mixed results were observed as most of the users did not use social media during their examination.¹³

The study revealed that the use of social media by the students was quite frequent and regular than it was originally thought of despite having such an extensive undergraduate and postgraduate curriculum, which may be quite worrying. Since majority of the students used WhatsApp and Instagram in our study, therefore, the purpose of using social media was merely a source of entertainment;

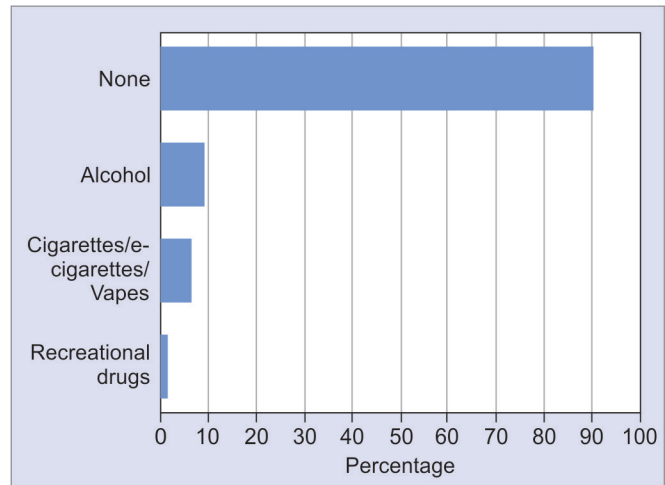


Fig. 3: Impact of social media on various types of addiction

strikingly, in other studies, social media was used as an educational tool.⁸ The need of the hour is to make students aware about the usage of social media for educational purpose as it improves their cognitive thinking and problem-based learning.¹⁴ It was found in our study that students still prefer live lectures as compared with recorded lectures on YouTube because of compulsory attendance during the lecture for taking up the exams.

In our study, the maximum respondents had proper and adequate sleep; however, a number of respondents had sleep disturbances as seen in other study conducted by Ying and Peng.¹⁵

Although social media has many advantages, but the reliability, validity, and accuracy of the content shared on social media is unreferenced. It has been seen that social media significantly effects the behavior, attitudes of the teenagers with respect to substance abuse, and addiction, but in our study, it was not found, as our population survey comprised medical graduates who are well aware of the harmful effects of substance abuse.

Limitations

Major limitation in our study was that only two institutes were enrolled for the participation and extensive studies can be planned further including all medical colleges of the state so that a larger set of population can be evaluated for the impact of social media on mental health and academic and social responsibilities. Furthermore, additional questions can be formulated with respect to in-depth assessment of various variables as well as comparison among subgroups.

CONCLUSION

With the tremendous advancement of social media and various networking application, the world has shrunken from small to smaller with better communication and access to enormous knowledge.

Our study has shown that the MBBS students were quite familiar with various applications but very few are using it for purpose of study. In summary, social media has the potential to be a valuable tool for MBBS students, offering access to medical knowledge, networking opportunities, and educational resources. However, it also presents challenges, such as distractions, potential negative impacts on mental health, and ethical considerations. Students

should exercise caution, use social media judiciously, and strike a balance between online engagement and their academic and professional responsibilities.

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