# Impact of Social Media Websites Overuse on Mental Well Being of Medical Students

SUMBAL KHALID<sup>1</sup>, USMAN AMIN HOTIANA<sup>2</sup>, ZUNAIRA MUZZAMIL<sup>1</sup> <sup>1</sup>Department of Physiology, Rashid Latif Medical and Dental College, Lahore –Pakistan <sup>2</sup>Department of Psychiatry, Rashid Latif Medical and Dental College, Lahore -Pakistan Correspondence to Dr. Sumbal Khalid, Email: sumbal.khan@hotmail.com Tel:+92-323-4891213.

## ABSTRACT

**Background:** Social media over usage is becoming an addictive behaviour in medical students. This excessive use of social media websites is compromising the mental health of the medical students.

Aim: To find the relation of social media overuse on mental well being of medical students.

Study design: Cross-sectional study.

**Methodology:** Third, Fourth and fifth year MBBS students of Akhtar Saeed Medical and Dental college, Lahore were included in the current study. 230 Questionnaires were distributed among the students. The questionnaire was in two parts. In one part 10 questions were asked, related to five famous social media websites usage. The second part of the questionnaire contained Kessler psychological distress scale. Out of 230 students, 195 students filled the questionnaires. Data was evaluated by using SPSS version 20.

**Results:** Majority of the students (42 %) were turned out to be severely distressed. 37% students were doing well while 28% and 16% students had mild and moderate distress. All of the severely distressed students used facebook, instagram and watsapp. 98.43% students used snapchat and 82.81 % students used tiktok. Those with severe distress, were found to spend more than 1 hour per day on social media websites. **Conclusion**: It was concluded that there is a strong correlation of the time spent on social media with the mental well being of medical students. More time spent on social media had led to more mental distress in medical students.

Keywords: Social Media, Medical Students, Mental Health and Mental Distress.

### INTRODUCTION

Social media websites are latest digital technologies that provide an effective medium of communication<sup>1</sup>. They are ample source of sharing information, news, entertainment and ideas all across the globe. Various popular social media websites, among youngsters, include snapchat, facebook, instagram, tiktok and watsapp<sup>2-5</sup>.

The current social media users all over the world are more than three billion people<sup>6</sup>. The major proportion of people (71%) in social media users includes youngsters<sup>7</sup>. Due to easy availability of the internet and easy accessibility to gadgets, the social media use has tremendously increased in the past decade<sup>8</sup>. According to Internet Service Providers Association of Pakistan (ISPAK), there are 25 million users of internet in Pakistan<sup>9</sup>. This excessive use of social media addiction has been related to alcohol or drug addiction in the previous studies<sup>10</sup>.

Social media addiction refers to uncontrolled and impulsive desire to check the social media, so much that it starts creating physical and mental distress<sup>11</sup>. Previous researches show that medical students also spend a large deal of their time on social media<sup>12</sup>.

The medical students face a lot of academic stress. It is very challenging for medical students to keep the balance of their social, personal and academic lives.<sup>13</sup> Although social media websites provide entertainment but still it has been found in the previous studies that social media is associated with anxiety and depression issues in medical students<sup>14,15</sup>. This negative impact of social media on mental health of medical students has been related to the increased screen time of the medical students on social media websites<sup>16-18</sup>.

So in the current study, the time spent on different social media websites was noted. The psychological distress among medical students was noted by Kessler psychological distress scale. The time spent on social media was then compared with the psychological distress observed in the students.

The objective of the study was to find the relation of social media overuse on mental well being of medical students.

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# METHODOLOGY

The current study was conducted at Farooq Hospital Westwood, Lahore after permission from Ethical Review Committee. The study was conducted on third, fourth and fifth year MBBS students. Both males and females were included in the study. The age range of the students was between 17 and 25 years. Students of other speciality, such as those of nursing, physiotherapy and BDS were excluded from the study. 230 questionnaires were distributed among the students, under the supervision of facilitators. Each questionnaire had two parts. One part contained 10 questions related to five social media websites such as snapchat, facebook, instagram, watsapp and tiktok. Time spent on each day, on these websites, was noted. The second part of questionnaire contained Kessler psychological distress scale. It contained 10 questions. The score of these 10 questions was to be summed up. 195 students filled the questionnaires.

**Statistical analysis**: The data collected was analysed by SPSS version 20. The scores that were obtained from Kessler psychological distress scale were compared with the time spent on social media websites.

### RESULTS

Kessler psychological distress score revealed that 37 % students had the score between 1 and 19, which means that they were doing well. Students with mild psychological disorder, with score between 20-24, were 28% of the total number of students. While 16% students had the score between 25 and 29, which indicated that they had moderate amount of psychological distress. But majority of the students, about 42%, had the score between 30 and 50, which showed that they were having severe psychological distress had severe psychological distress as shown in figure-1.

The data collected on social media usage by severely distressed students revealed that all of the students (100%) used facebook, Instagram and watsapp. About 98.43% of those students spent time on snapchat. Almost 82.81% students spent time on tiktok as shown in table-1.

When the time spent on social media websites was determined among those severely distressed students, it appeared that 40% students spent less than 1 hour per day on social media

while 30% students spent 4 or more than 4 hours per day on the social media. The students spending average time (2.5 hours per day) made up 30% of the total students as shown in figure-2. This showed that most of the students with severe psychological distress, spent more than 1 hour on social media per day.

Figure-1: Distribution of Psychological Distress Score

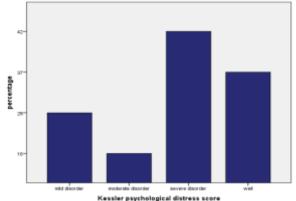
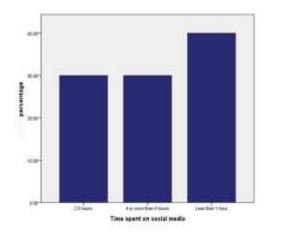


Table-1: Students Using Different Social Media Websites

Social Websites	Percentage (%) Usage
Facebook	100
Instagram	100
Watsapp	100
Snapchat	98.45
Tiktok	82.81

Figure-2: Time spent on social media by severely distressed students



#### DISCUSSION

The results of the current study revealed that most of the students were suffering from severe psychological distress. When results of severely distressed students were compared with the usage of social media and with the time spent on social media, it was revealed that all of the students used facebook, instagram and watsapp. While 98.43% and 82.81% students spent time on snapchat and tiktok respectively. Most of the severely distressed students spent more than 1 hour on social media websites per day. While 30% students spent 4 or more than 4 hours per day on social websites. This comparison reveals that strong correlation exists between the time spent on social media and the mental health of the medical students. The students with the lowest Kessler psychological distress score, were found to spend less time on social media websites per day.

These results are consistent with the study conducted in India, on medical students, in  $2019^{13}$ . In that study, it was found that the medical students with poor mental health (mental well being score <90.8) used to spend moderate amount of time on social media i.e., between 1 to 4 hours per day.

Another similar study was conducted on medical students in Iran<sup>18</sup>. The results of that study indicated that the 45.5 % students were addicted to social media. And these students were having poor mental health. They found that addiction of social media in those students led to cutting off from the social life which ultimately led to loneliness and depression in those students.

Many of the previous studies show strong correlation between internet addiction and poor mental health in medical students<sup>19-22</sup>. Many factors are found to be responsible for the poor mental health in social media over users, such as negative comparisons, cyber bullying and view of triggering content etc

A study conducted on facebook excessive users in Utah, showed that those undergraduate students who used facebook excessively had perception that all the people on facebook were very happy in their lives. And they also believed that their life was not fair.<sup>22</sup> In another study on adolescents, low life satisfaction was observed in adolescents who were excessively using facebook because of negative comparisons with others lives<sup>23</sup>. This negative comparisons and low life satisfaction led them to delete their profile pictures or even their entire accounts.<sup>24</sup>

In order to increase their self esteem, many adolescents are found in over sharing and over self disclosure. People in the audience, sometimes, take this over sharing as wrong and they label the over sharer with negative personality. This leads to negative attention and less online approval. Failure to receive positive reward from the over sharing, leads to further low self esteem.

Cyber bullying is also a common practice, observed on social media. Adolescents have explained viewing of many triggering photos and contents, which has left negative impact on their emotions<sup>24</sup>. Many students revealed that this unexpected site to triggering content reminded them of some their avoidable person or situation. So, in order to avoid the negative impact and to receive the positive outcome of social media, purposeful use of social media websites usage should be encouraged among medical students.

**Limitations:** Long term follow up could not be completed. Students unwilling to participate due to Covid-19 Pandemic. Limited financial resources.

#### CONCLUSION

It was concluded that strong correlation exists between the time spent on social media and the mental health of the medical students. The students who spent more time on social media websites were found to have poor mental health.

Author's contribution: SK: Conceptualized the study, analyzed the data, and formulated the initial draft, UAH: Contributed to the proof reading, ZM: Collected and analyzed data. Conflict of interest: None

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#### REFERENCES

- Suwayri SM. The impact of social media volume and addiction on medical student sleep quality and academic performance: a crosssectional observational study. Imam Journal of Applied Sciences. 2016 Jul 1;1(2):80.
- Alsalem F. Why do they post? Motivations and uses of snapchat, Instagram and twitter among Kuwait college students. Media Watch. 2019;10(3):550-67.
- Balouch MA, Anwar S, Ansari MI, Rasheed T, Ansari MS, Balouch N. Impact of online social networking on mental health among medical students of LUMHS Jamshoro, Sindh, Pakistan. Rawal Medical Journal. 2019 Jul 8;44(3):613-617.
- 4. AlFaris E, Irfan F, Ponnamperuma G, Jamal A, Van der Vleuten C, Al Maflehi N, Al-Qeas S, Alenezi A, Alrowaished M, Alsalman R, Ahmed

AM. The pattern of social media use and its association with academic performance among medical students. Medical teacher. 2018 Jul 6;40(sup1):S77-82.

- S, Kannan K, Alli P, Tamilaevi V. Study on prevalence of whatsapp addiction among medical students in a private medical college, pondicherry. Indian Journal of Public Health Research and Development. 2018 Jul;9(7):113-6.
- A, Iqbal F, Rao MA. Frequency and risk factors of internet addiction in medical students: a cross-sectional study. Journal of the Pakistan Medical Association. 2021 Dec 29;71(8):2111-.
- Masthi NR, Pruthvi S, Phaneendra MS. A comparative study on social media usage and health status among students studying in preuniversity colleges of urban Bengaluru. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2018 Jul;43(3):180.
- Ali R, Mohammed N, Aly H. Internet addiction among medical students of Sohag University, Egypt. Journal of Egyptian Public Health Association. 2017 Jun 1;92(2):86-95.
- Haroon MZ, Zeb Z, Javed Z, Awan Z, Aftab Z, Talat W. Internet addiction in medical students. J Ayub Med Coll Abbottabad. 2018 Oct 1;30(4 Suppl 1):S659-63.
- Srijampana VV, Endreddy AR, Prabhath K, Rajana B. Prevalence and patterns of internet addiction among medical students. Medical Journal of Dr. DY Patil University. 2014 Nov 1;7(6):709.
- VEI-Khoury J, Haidar R, Kanj RR, Ali LB, Majari G. Characteristics of social media 'detoxification'in university students. Libyan Journal of Medicine. 2021 Oct 7;16(1).
- K, Naskar S, Victor R. A cross-sectional study on the prevalence, risk factors, and ill effects of internet addiction among medical students in Northeastern India. The primary care companion for CNS disorders. 2016 Mar 31;18(2):27389
- Bhaskara NV, Nandanur BS, Chakraborty A, Ghosh S. The effect of social media usage on the mental well-being of medical college students in Bangalore, Karnataka. Journal of Family Medicine and Primary Care. 2020 Nov;9(11):5731.
- 14. Lin LY, Sidani JE, Shensa A, Radovic A, Miller E, Colditz JB, Hoffman BL, Giles LM, Primack BA. Association between social media use and

depression among US young adults. Depression and anxiety. 2016 Apr;33(4):323-31.

- O'reilly M, Dogra N, Whiteman N, Hughes J, Eruyar S, Reilly P. Is social media bad for mental health and wellbeing? Exploring the perspectives of adolescents. Clinical child psychology and psychiatry. 2018 Oct;23(4):601-13.
- Twenge JM, Campbell WK. Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. Preventive medicine reports. 2018 Dec 1;12:271-83.
- Stiglic N, Viner RM. Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews. BMJ open. 2019 Jan 1;9(1):e023191.
- Hardy LL, Denney-Wilson E, Thrift AP, Okely AD, Baur LA. Screen time and metabolic risk factors among adolescents. Archives of pediatrics & adolescent medicine. 2010 Jul 5;164(7):643-9.
- Farhadinia M, Jalilvand M, Foroughi S, Rezaii S. Study of Relatioship between the Internet Addication and General Health of Students of Lorestan University of Medical Sciences in 2013. Yafte. 2015;17(4).
- Sepehrian F, Jokar L. Surveying internet addiction prevalence rate among Orumiyeh Universities' students and its predicting factors. Teaching and Learning Research. 2011 Feb 20;8(2):51-60.
- Fonia B, Godiyal S, Uniyal MM. Internet addiction and mental health of higher secondary level students. Int J Educ Psychol Res. 2016;5:42-.
- Chou HT, Edge N. "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. Cyberpsychology, behavior, and social networking. 2012 Feb 1;15(2):117-21.
- Frison E, Eggermont S. "Harder, better, faster, stronger": negative comparison on Facebook and Adolescents' life satisfaction are reciprocally related. Cyberpsychology, Behavior, and Social Networking. 2016 Mar 1;19(3):158-64.
- Radovic A, Gmelin T, Stein BD, Miller E. Depressed adolescents' positive and negative use of social media. Journal of adolescence. 2017 Feb 1;55:5-15.b