Research Article

The Relationship between Social Media Addiction and Depression among Medical Students of Peshawar

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Abstract

Background: Depression is one of the major fitness issues in modern society. WHO has researched that melancholy is the maximum common reason of disability nowadays. It is a common and severe mental disorder that affects someone's each day ordinary activities and capabilities consisting of questioning, feeling, sound asleep, eating, working and analyzing. In our research, we want to show the connection between social media use and depression in medical students. Research studies have shown that excessive use of social media affects students' mental health. Social media use can increase depression among users.

Objective: To determine if a relationship exists between social media and depression among medical students in Peshawar

Methodology: A cross-sectional study was carried out among the students of private medical colleges of Hayatabad Peshawar. An online questionnaire was designed using Google forms and was sent to the participants via WhatsApp. The questionnaire was filled out by 282 participants. Data analysis was done using SPSS version 20 and MS EXCEL was used to make graphs and figures.

Results: The age of participants was between 18 and 27 years. 56.7% were using social media for personal needs and interest, 10.6% were using it for educational purposes and only 2.5% were used for professional purposes. According to the scale have an addiction and 275 (97.5%), 40.1% were using social media more than 10 times a day, 36.9% use 2 to 5 times a day and 5.7% were using just 7.5% out of 282 participants. Out of 282 individuals, 193 (68.4%) were at risk of clinical depression; 89 (31.6%) had no clinical depression.

Conclusion: According to this study, social media does not necessarily cause depression. It was decided that various factors such a demanding life, unemployment, family conflicts, and poor socioeconomic level might be the reason of depression.

Keywords: social media, addiction, depression, medical student

Introduction

Depression is one of the major fitness issues in modern society. WHO has researched that melancholy is the maximum common reason of disability nowadays. More than 264 million people worldwide suffer from it [1]. Depression becomes a very dangerous and serious health problem especially when intense depressive feelings and symptoms are exhibited for a long period of time [2]. It's far a common and extreme mental disorder that affects someone's each day ordinary activities and capabilities consisting of questioning, feeling, sound asleep, eating, working and analyzing. Depression is defined as a syndrome that includes symptoms of delay and blurriness in speech and movement; worthlessness, pettiness, weakness and aloofness; pessimistic emotions, thoughts and mental states [3,4].

Social media is interactive medium wherein customers obtain and send messages, publish remarks, call every different, ship and take delivery of pal requests, add pics and films, update repute, and interact via video call [5,6]. The effect of social media on a person's lifestyles is growing daily. College students inside the cutting-edge global are busy in the use of social media for numerous functions. Research studies have shown that immoderate use of social media negatively affects college students'

intellectual fitness [7].

There are distinct types of social media. Among these sites, some are for more specific users while others are for more general users [8]. When consider that their inception, social networks like Facebook, Twitter, Instagram and Snap chat have turn out to be more and more popular amongst net users, particularly among young students [9].

Social media isn't inherently top or bad like different styles of media. It's the kind and frequency of use that makes it properly or awful. A take a look at performed at the university of Glasgow found that younger individuals who were actively and emotionally involved of their digital lives suggested poorer sleep, higher stages of tension and despair which means using social media can boom depression and tension in users [10]. Regular use of social media is associated with a decrease in happiness, because of this an increase in depression, and this growth in melancholy is related to social media use [11].

Social media is a new phenomenon and to this point little or no studies has been executed on its effect on intellectual health problems around the sector, especially in this a part of the arena wherein social media usage could be very not unusual and growing through the day.

In our studies we need to expose the connection of social media use and melancholy in clinical students in Peshawar. That is very commonplace hassle of contemporary global as social media use is growing, there are horrific effects of the use of it so intellectual troubles are elevating and despair is the maximum not unusual [12]. Student's learning is frequently hindered because melancholy can weaken operating reminiscence, making it hard to take into account new understanding [13]. In mild of the outcomes of different studies, it's far critical to look at the association among social networking and melancholy in medical students. So, the main cause of our research is to determine if there is a hyperlink among social media and despair among scientific students in Peshawar.

Materials and Methods

The cross-sectional study was conducted in public medical colleges of Peshawar. The duration of the study was 4 months from May 2022 to September 2022. The sample size comprised 282 MBBS students from the above-mentioned colleges. The response rate was 100% and the population proportion sample size UK calculator' was used for a 95% confidence interval to calculate the same. Non-probability, convenience-type sampling technique was adopted. All students from each year of MBBS from public medical colleges were included in the research study. Students who did not consent and those who after receiving 3 reminders did not fill out the form were excluded from the study. Incomplete responses were excluded from this study.

All MBBS students from public medical colleges in Peshawar were included in the study. The inclusion criteria encompassed students from all years of MBBS who consented to participate in the research. Exclusion criteria included students who did not provide consent, those who did not complete the survey after receiving three reminders, and those with incomplete responses.

A questionnaire-based online survey was used for collecting data through Google forms in which the use of medical students of Peshawar, social media, and their relationship with depression was measured. Data were collected on a questionnaire that consisted of 4 parts. 1st part consisted of basic demographic information i.e., age. 2nd part consists of questions about social media use. 3rd part consists of questions about social media addiction which was measured using the SMA scale. 4th part consists of questions about depression which was measured by the Center for Epidemiologic Studies Depression Scale CESD scale. A pilot study was done. The questionnaire was then sent online to the participants, chosen as a sample, through a WhatsApp group of different colleges.282 responses were received and all were fully completed. Participation was on a voluntary basis and participants were given the freedom to withdraw from the study during any part of the process.

Social media addiction was measured using the Social Media addiction Scale (SMA-S). It consists of 20 gadgets and all of these gadgets had been responded on a 5-point Likert scale (zero no longer applicable, five = constantly). in this check, the minimum score is 30 and the most score is 100; addiction level rating is 0-30, normal; 31-49, moderate: 5-79, mild; and 80-100 factors is the excessive dependancy degree. Scientists stated that SMA-S is a reliable device for measuring dependancy, particularly amongst college college students.

Depression was measured using the Center for Epidemiological Studies (CES-D) Depression Scale. This scale is a typically used, freely available, and famous self-evaluation scale for depressive signs and symptoms. Higher values indicate the presence of depressive signs and symptoms. Every item become scored on a symptom frequency scale from zero to a few, on this scale the maximum rating is 60 even as the minimal score is 15 or much less. The CES-D scale indicates the variety of values: 22-60, greater intense depression; 15-21, mild or slight melancholy; and 15 or less factors, the despair does not exist.

We converted the responses to an excel spreadsheet and then imported it to SPSS to get analyzed. Data were analyzed by using IBM SPSS version 20 which was used for descriptive statistics to find percentages and frequencies of categorical variables. For continuous variables mean and standard deviation were calculated. MS Excel Version 2010 was used to make graphs and figures.

The questionnaire was approved by the research cell of Khyber Girls Medical College. Consent was taken from all the respondents at the start of the survey. They were permitted to exit anytime they wished and no personally identifying information was collected.

Results

Around 1000 medical and dental undergraduate students were accessed to participate in the study. An online questionnaire was designed and sent to the participants via WhatSapp. All 282 participants filled out the questionnaire and hence were included in the study. 718 participants were excluded for not filling in the questionnaire.

It was found that all the participants included in the study were using social media for different purposes and durations. Among those, the most avid social media users were between the ages of 20-24 (Figure 1).
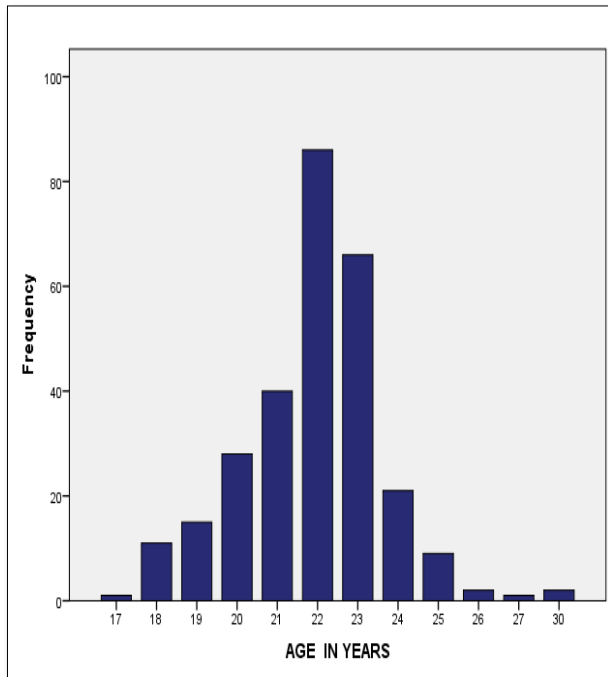
Figure 2: Reason for social medial use.

Figure 1: Frequency of participants using social media according to age.

Out of them, 56.7% were using social media for personal needs (Figure 2). Another important finding was that users of social media have multiple accounts on different sites. According to our results, about 24.7% were using 3 accounts,18.8% have 5 accounts on different sites, 17.4%havee more than 6 accounts, and only 1.1% of participants have no account. The frequency of social media usage was estimated to be very high as 40.1% were using social media more than 10 times per day, followed by 36.9% who used the media for 2to 5 times a day and 5.7% were using it once a day or not every day (Figure 3).
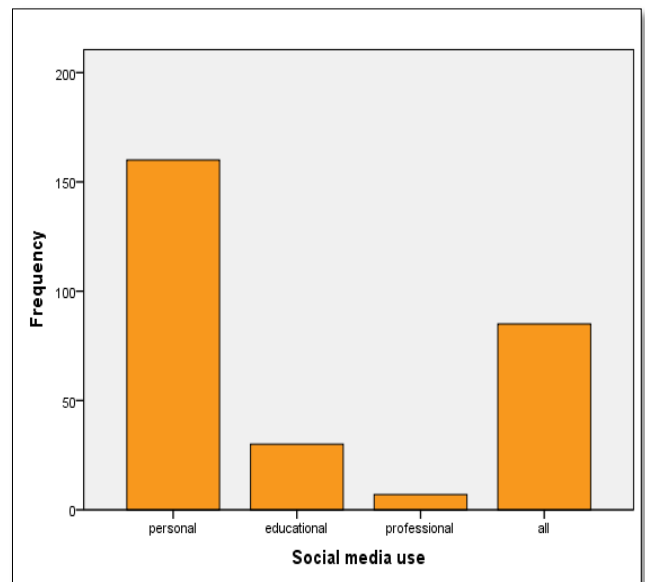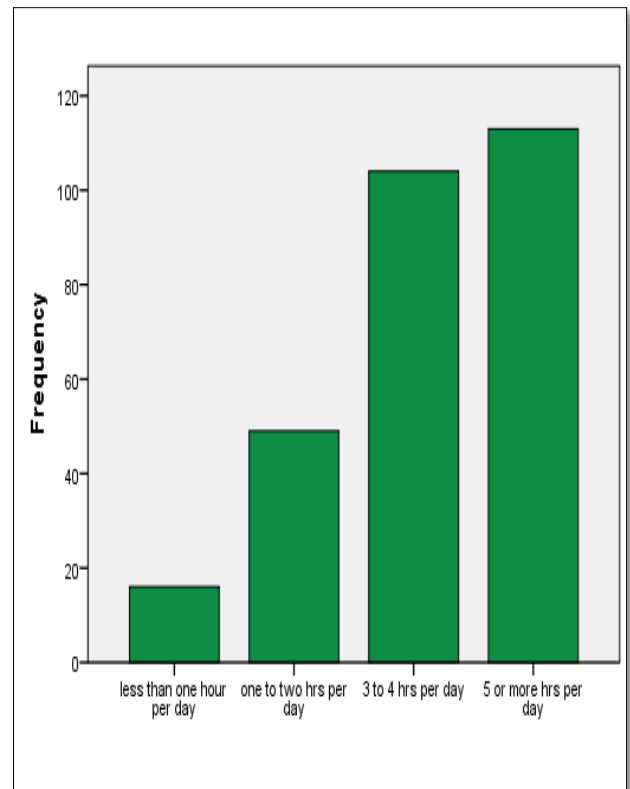
Figure 3: Frequency with which social media was used per day

The SMA scale (Social media addiction scale) was used to estimate addiction. It was found that only 7(2.5%) out of 282 participants, according to the scale are addicted and 275(97.5%) have no addiction although they use social media frequently but are not addicted (Figure 4).
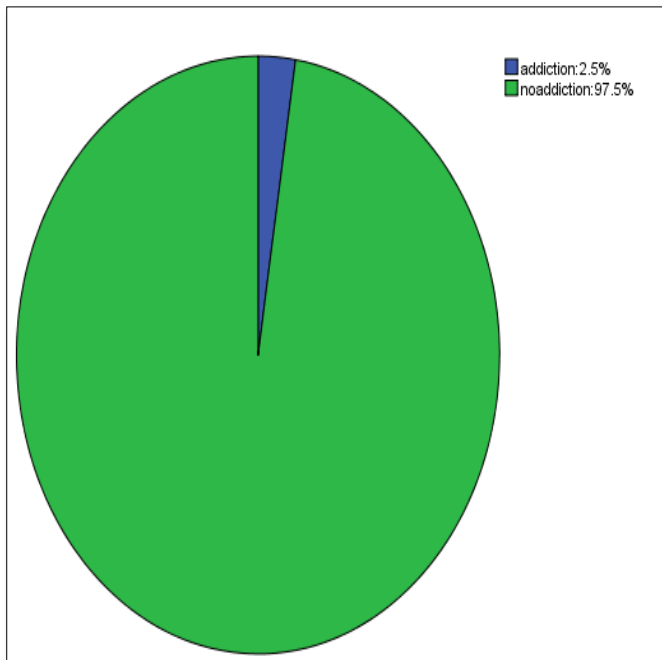
Figure 4: Percentage of addiction according to SMA scale

Depression was assessed using CES-Scale 0-60 (Centre for epidemiological studies depression scale). According to our findings, 193(68.4%) participants out of 282 were at risk of developing clinical depression and 89(31.6%) had no clinical depression (Figure 5).
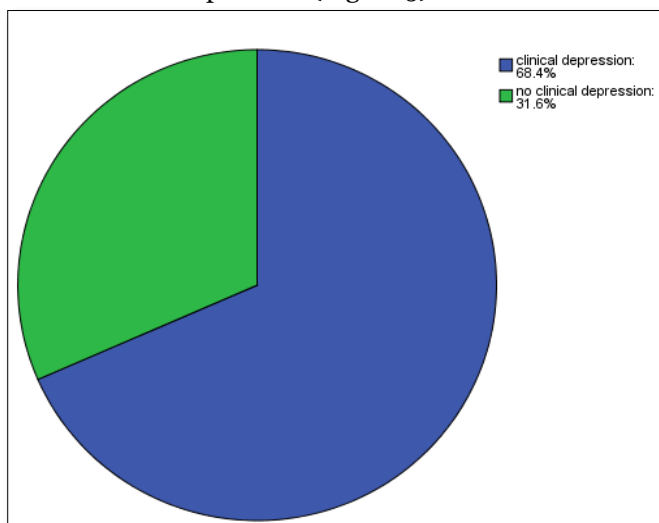

Figure 5: Percentage of clinical depression using (CES-D)

As r=0.523 there is a moderate positive correlation between social media addiction and depression. The correlation coefficient was found (r = 0.426) which indicates a positive correlation between the two variables. As r=0.523 moderate positive correlation was found between social media addiction and depression. Alternatively, as the level of social media addiction increases, the level of depression increases. The p-value was found less than 0.05 and it suggests that the correlation is statistically significant (at the 5% level).

Discussion

Examining the possible association between the addictive use of social media platforms and depression has been the major focus of this research. The results showed that constant use of social media, in other words, addiction to social networking sites did not have a favorable link to depression and melancholy, as it was predicted. In our sample, there were 282 participants out of which only 2.5% (7 participants) have the addictive use of social media platforms but 68.4% (193 participants) have been at risk of clinical depression. This correlation shows that the constant use of social networking platforms is not directly linked to the cause of depression. The cause of depression can be linked with multiple other factors in life, that include stressful environments and personal issues. The results show a clear indication that social media does not necessarily cause depression.

Meanwhile, numerous researchers have looked at the connections between depression and various forms of internet usage, including everyday use, compulsive usage, and addiction. According to Banjanin et al. 2015; Tan et al. 2016 that social media users that are adolescents and people in their adulthood who feel most comfortable being on the internet and enjoy using social media platforms all the time have a much greater prevalence of perceived melancholy compared to people who relatively do not spend a lot of time on internet or scrolling through their social media accounts. This implies that information on social media sites, especially negative news, is often exposed to socially active people, those who have the habit of frequently checking their social media accounts multiple times per day [14]. Oftentimes near the top of listings of changing trends on social networking sites are stories about catastrophic events, terrorism, political upheaval, as well as tragic events. According to Lin et al. 2016, interacting with virtual friends is not as emotionally satisfying as interacting with them in reality. Adolescents and adults who use social networking sites more often report feeling more alone, according to research. Perhaps children who already experience isolation utilize social media excessively [15]. However, it's possible that the use of social networking sites provokes children to feel alone. In our study, depression is a major problem, which means that most of the participants are depressed, distressed, and sad. While social media use is not at a level high enough to cause addiction, in accordance with the above studies it is possible that social media use causes depression or depression making the person use social media frequently. It can be said that to escape their troubles, depressed individuals could utilize social media in the same way as everyone else.

The majority of this research, along with the most recent one, shows a link between addictive use of social media and depression, although the connection doesn't really imply causality in all cases. In other respects, rather than being a direct cause of distress, the compulsive usage of social media might be seen as one of its indicators [16]. Scientists who are primarily concerned with the depressing effects of social media usage might miss significant risk variables that predispose particular people to frequent use of social networking sites [17]. The

cumulative data implies that the association between the utilization of social networking platforms and depression episodes may be overstated, and also that the multiple indicators aside from social media usage that plays a huge part in causing depression might go noticed [18]. For that reason, it is highly possible that the negative connection between depression and increased social networking site usage has been ignored by the researchers. In our current research, all participants were medical students, who in addition to social media use which is linked with depression, have other worries and burdens like study tension, tough medical teaching, and examining tension, which is also added to cause depression. It is possible that social media use is one of the factors which leads to depression [19]. Other factors such as a complicated environment, poverty, relationship issues, and poor socioeconomic level, might even contribute to melancholy and depression of many causes [20].

Our current research does not support the correlation between excessive utilization of social networking platforms and depression. In fact, it's plausible that those inclined toward sadness seem more interested in visiting these websites [21]. Perceived from the results, it cannot be said that depression is directly linked to the excessive use of social networking platforms. Social media usage thus acts as a bridge connecting the addictive use of social networking platforms and depression [22].

Limitations
The inclusion and exclusion criteria. Interviewer bias: The questions that were not properly answered. Prevarication bias: The subjects intentionally gave wrong answers to the questionnaire.

Conclusion
This study shows that most of participants use social media for different purposes and use different sites but very small number of these according to our finding has addiction. Furthermore, our study indicates that most of our participants are at risk of clinical depression, by using CES-D scale of depression. According to our study, social media does not necessarily cause depression. There is moderate positive correlation between social media addiction and depression.

Conflict of interest
The authors state no conflict of interest.

Author Contributions
All authors have reviewed the final version to be published and agreed to be accountable for all aspects of the work.
Concept and design: HM; **Methodology and Data Collection:** ZA, TA; HM **Analysis and Interpretation of data for the work:** SS, NK, BZ; **Drafting of the manuscript:** HM, MD; **Critical review of the manuscript for important intellectual content:** SS, NK, BZ ,HM.

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