



Original Article

Social Media Usage and it's Relationship with Depression among Nursing Students of a Private University

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ABSTRACT

Social media is a group of electronic and digital appliances which has its basis on internet and allow sharing, transforming and exchanging ideas, information, educational material and content. In the 21st century, internet usage has been increased significantly. Our life has been entirely changed by the internet and social media. Social media cause different health related issues and academic decline among students. **Objective:** To observe the relationship between social media use and depression among nursing students. **Methods:** Cross-sectional analytical study was performed on 120 nursing students. Ethical permission was obtained from Ethical Review Committee, Sohail University, Karachi. Descriptive statistics was performed on demographic variables. Pearson Correlation test was performed to check the relationship between social media use and depression. **Results:** Beyond 120 participants, males were in majority (57.5%). Mostly (58.3%) participants were in their 1st and 2nd year, 20.8% were married and 69.2% were living with their friends. Largely (77.5%) belong to Generic BSN program and 55.0% partakers were using social media from 0-4 hours per day. Mostly (44.2%) participant have moderate to extreme level of depression. We found positive correlation of social media use with depression. **Conclusions:** The findings of this study suggest significant correlation between depression and social media use. Spending more time on using social media can lead to depression. Therefore, policy makers should pay attention in planning to minimize the harmful effects of social media usage among students.

INTRODUCTION

In the twenty-first century, Internet usage has been increasing significantly. The universe has moved from traditional methods to the new age of internet applications and social media [1]. Social media is a group of electronic and digital appliances which has its basis on internet and allow the sharing, transforming and exchanging the ideas, information, educational material and content. The health care system has been using internet and different applications for gathering data from a huge number of sick persons and identifies diagnostic trends based, treatment regimens to figure out the disease progress among them [2]. Internet overuse has undesirable and adverse consequences on the academic performance of medical and nursing students' and also it is linked to drug misuse

[3]. As social media has become a basic and vital part of everyone's life [4]. Numerous social media applications such as Ticktok, Twitter, Facebook, Instagram WhatsApp, Snapchat, YouTube, and Google are widely used all over the world. Despite the advantages, researchers also revealed unsuitable and wrong online activities among youngsters and students of all disciplines specially health professionals. Currently, social media is not only playing a significant role in the lives of youngsters and adolescents but it also causes different health related issues among them. The nursing professionals are elemental in maintaining health, promoting healthy routines, and creating awareness [5]. In this regard, it's crucial to ascertain the healthy lifestyle habits of nursing students

who will eventually work as healthcare professionals as well as their usage of social media, which is on the rise and has a substantial negative impact on people's health. Education programs must be developed to encourage healthy lifestyle behaviors among nursing students and to discourage the use of social media [6]. Misuse or overuse of social media is recognized as a mental disorder. There are disagreements over its official diagnosis. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)s, "Social media use disorder" has been proposed by the American Psychiatric Association recently. Numerous research studies revealed an association between depressive symptoms and regular use of social media [7]. Several studies retrieved that individuals who are dependent on internet and social media applications face difficulty in establishing personal relations and paying attention on their studies and as a result they have a higher tendency to develop depression and attempt suicide [8]. Social media and networking is a novel experience and this new phenomenon is linked with negative outcomes on psychological health as stated in several studies. [9]. The increasing inclination of using social media applications and its relationship with different mental ailments has been retrieved in several studies but on both of these issues, the nursing students have been overlooked. Therefore, the purpose of this study was to identify the association between the use of social media and depression among nursing students.

METHODS

Analytical cross-sectional study design with convenient sampling technique was used for data collection from 120 students of Jinnah College of Nursing, Sohail University Karachi. The undergraduate students who were studying in Generic BSN and Post RN BSN and belongs to Jinnah College of Nursing, Sohail University were willing to participate were included. Unwilling students, Post graduate and students of other disciplines and other than Sohail University were excluded. The duration who were agreed of study was August 2022 to December 2022. The sample size was calculated via Open-epi by using 41% of depression prevalence and keeping 95% confidence interval and 5% margin of error [8]. An ethical approval was obtained from ethical review committee, Sohail University, Karachi (Protocol #: 000237/22). Permission of data collection was taken from the Principal of Jinnah College of Nursing. Data were gathered via self-developed demographic form including questions regarding daily social media usage (in hours) and Beck's Depression Inventory scale. Beck Depression Inventory is a 21-item, self-report rating inventory which measures the attitudes, characteristics and symptoms of depression. It consists of 21 items about the subjective feelings of an individual in the last week. Each question has a set of 04 possible choices,

ranging in intensity. Its 0-9 scoring indicates minimal symptoms, 10-18 designates mild depression, 19-29 specifies moderate and 30-63 denotes severe depression. Its reliability ranged from 0.75 to 0.92 and the validity ranged from 0.77 to 0.93 [9]. The social media usage was assessed by putting self-developed questions regarding hours of use during 24 hours in demographic form. SPSS version 24.0 was used for statistical analysis. To check frequencies; descriptive statistics was performed on demographic variables. Moreover a Pearson Correlation test was also performed to find out the relationship between social media use and depression.

RESULTS

Table 1 demonstrates the demographic characteristics of the study participants. In current study, 120 nursing students were actively participated and out of 120 participants, 93 (77.5%) were belongs to Generic BSN program and only 27 (22.5%) were students of Post-RN. In these 120 respondents, the males were in majority (57.5%) and 57.9% participants were between 18-22 years of age. Mostly (58.3%) participants were in their 1st and 2nd year of study, 20.8% were married and 69.2% were living with their friends shown in table 1.

Table 1: Demographic Characteristics (n=120)

Demographics		Frequency (%)
Gender	Male	69 (57.5%)
	Female	51 (42.5%)
Age Group	18-22 years	69 (57.5%)
	23-27 years	40 (33.3%)
	Above 27 years	11 (9.2%)
Year of Study	1 st and 2 nd year	70 (58.3%)
	3 rd and 4 th year	50 (41.7%)
Marital Status	Married	25 (20.8%)
	Unmarried	95 (79.2%)
Nature of living	With Family/Friend	83 (69.2%)
	Alone	27 (30.8%)
Study Program	G-BSN	93 (77.5%)
	Post RN	27 (22.5%)

Table 2 presents the social media usage in hours and the depression level among nursing students. Majority of the nursing students (55.0%) were using social media from 0-4 hours, 27.5 were spending their 5 to 8 hours in using social media applications whereas only 17.5% were using social media more than 8 hours per day. Mostly (44.2%) participants have moderate to extreme level of depression, 11.7% have mild mood disturbances, 4.5% were lying on borderline depression and only 40% were considered normal according to the Beck Depression Inventory.

Table 2: Social Media Usage Time and Depression Level(n=120)

Variables	Frequency (%)
Social Media Usage Time	
0-4 hours	66 (55.0%)
5-8 hours	33 (27.5%)
Above 8 hours	21 (17.5%)
Total	120 (100%)
Level of Depression	
Normal	48 (40.0%)
Mild mood disturbance	14 (11.7%)
Borderline clinical depression	05 (4.2%)
Moderate depression	22 (18.3%)
Severe depression	23 (19.2%)
Extreme depression	08 (6.7%)
Total	120 (100%)

Table 3 displays the correlation of social media use and depression. We found that the Spearman's rank order correlation is significant (120)=0.001, $p < 0.05$. We retrieved that if time of social media increases 1 hour then the level of depression will also increase up to 0.311 which is positive and significant but weak correlation.

Table 3: Correlation between Social Media Use and Depression (n=120)

Spearman's Correlations		Social media use	Depression	
Spearman's rho	Social media addiction	Correlation Coefficient	1.000	.311**
		Sig. (2-tailed)	.	.001
		N	120	120
	Depression	Correlation Coefficient	.311**	1.000
		Sig. (2-tailed)	.001	.
		N		120

** . Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

This study was aimed to observe the association between social media use and depression among nursing students. Mostly nursing students were using social media from 0-4 hours and a few than one fourth were spending more than 8 hours per day on social media. Nearly fifty percent of the participants had moderate to extreme depression. Similarly students were using social media from 0 to 4 hours observed by previous studies [8 - 14]. Some of the past studies found their study participants spending more than 4 hours on social media platforms [6, 9, 15-17]. The authors assumed that students get help in their learning and communication from peers, mentors and teachers and also get entertainment from social media applications and it could be reason for the abuse of social media. We found moderate to severe depression among majority of the students. Correspondingly the participants of some prior studies' had moderate to severe depression [3, 8, 14, 17]. In contrast, few past studies found mild depression among study participants [12, 18], and one study retrieved

moderate depression [11]. Social media dependence, misuse, academic competition, study stress could be the causative factors. The primary aim of current study was to observe the relationship between social media usage and depression and as per our expectations, the results revealed significant correlation between social media addiction and depression. Few previously published studies has similar results as they also found social media and depression significantly associated [1, 3, 4, 6, 8]. It was also elaborated in detail by Akalin [6] that students who were using social media for more time per day, were with poor academic performance and deprived health perception. A previous study conducted by Jelenchick et al., in 2013 explained that spending more hours in using different applications of social media and internet browsing can increase students' level of depression on Beck's scale of depression [19]. Despite of social media use different factors as loneliness, interpersonal distrust, and neuroticism may cause depression as stated by Rich & Scovel [20]. Some other researchers argue that the rising popularity of different applications of social media can be another possible cause of increase mental health problems such as anxiety and depression. [21]. A recent study verified that Facebook and other social media applications were not correlated with depressive symptoms. The scholars measured Facebook and other social media apps usage, the symptoms of depression and the personality traits such as emotional unstableness and extroversion among adolescents. They concluded that there was not any direct and significant relationship. They also shared that regular social media applications and Facebook users, had lower level of depression [22]. Another previous research study argued that there is a need to go beyond usage-effect approaches and hypothesizing, measuring and labeling social media use and its relationship with physical and mental health [23]. A study by O'Reilly M et al., revealed that youngsters commonly use social media and internet to get information regarding physical and mental health and this social media acts to show possibility to promote positive physical and mental health. Despite different risks, challenges and problems related to social media usage, social media offers a beneficial and constructive way to educate and reaching teenagers to promote their physical and mental health and psychological wellbeing [24].

CONCLUSIONS

This study concludes that our mostly participants spending more time on social media and nearly half of the partakers had moderate to extreme depression. The correlation between depression and social media use was found significant. Furthermore, spending more time on internet and using social media lead to depressive symptoms among nursing students who are gradually

dealing with social media applications nowadays.

Authors Contribution

Conceptualization: KH, R

Methodology: KH, R

Formal analysis: KH, TA

Writing-review and editing: KH, TA

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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