

Impact and Perception of Social Networking Sites on Academic Performance of Medical Students

Hari Prasad Upadhyay,¹ Prativa Sedain²

¹Department of Community Medicine, College of Medical Sciences-Teaching Hospital, Bharatpur, Chitwan, Nepal,

²Department of ENT, B.P. Koirala Memorial Cancer Hospital, Bharatpur, Chitwan, Nepal.

ABSTRACT

Background: A social networking site is an online platform that allows users to create a public profile and interact with other users on the website. The emergence of Social Networking Sites has broadened the base of contact, interaction and communication among people living round the globe via internet. Millions of students are logging in to these social networking sites, everyday. That's why many students have been blaming various social networking sites for their steady decrease in grade point averages and has affected their study time, poor grammar and wrong spellings when socializing on social media as well as diverting their attention from their studies. The objective of this research is to find the impact and perception of social networking sites on academic performance of medical students. **Methods:** A descriptive cross-sectional study design conducted among 230 Medical students of MBBS, BPH, Pharmacy and BN Nursing's students. A well-structured questionnaire was prepared and which were distributed among students using probability sampling technique (random number table). **Results:** The response of 230 students was collected by using well structure questionnaire. The mean±SD of students age was 21.87±2.16 years. Majority of the students were in the age group 20-25 years. Majority of them were female by gender and Hindu by religion. They most commonly used social networking site was face book/messenger (48.7%) followed by YouTube (41.3%). The main aim of using these sites is to update with their family, friends and for entertainment. Nearly 60% students told that there are negative effects of using social networking sites. And only 15.6% students used these sites only for academic purpose. **Conclusions:** This study revealed that majority of the students used mobile phone as a device and Wi-Fi in their place of residence. The overall perception of students towards social networking sites is positive. Excessive use of these sites decreases their academic performance which conclude that there is Negative relationship between the use of social networking sites and academic performance which in turn negatively affect their academic results.

Keywords: academic performance; face book; medical students, social networking sites; youtube.

INTRODUCTION

A social networking site is an online platform that allows users to create a public profile and interact with other users on the website. Social Media is a form of 'many-to-many communications' where people connect and communicate dynamically within a flexibly formed scope by inputting and receiving information to and from the Internet.¹ It is a platform on the internet where young and old generations meet to communicate, share ideas and develop friendship by use of Face book, Skype, Blogs, MySpace, LinkedIn, Yahoo Messenger, Whatsapps and Twitter.² The emergence of Social Networking Sites has broadened the base of contact, interaction and communication among people living round the global via internet. Social Networking Sites have become a fast penetrating way for people all over the world to connect and interact.³ The use

of social media among students has reached high levels and has affected their study time, poor grammar and wrong spellings when socializing on social media as well as diverting their attention from their studies.⁴ Students spend much of their study time on social networks than in their academic undertakings and it has affected their Grade Point.⁴ Its usage among students of tertiary institutions has made it an online platform for social interactions, and as well as academic interaction.³ Millions of students are logging in to these social networking sites, everyday that's why many students have been blaming various social networking sites for their study decrease in grade point averages and has affected their study time, poor grammar and wrong spellings.⁴ It causes the

Correspondence: Mr. Hari Prasad Upadhyay, Department of Community Medicine, College of Medical Sciences-Teaching Hospital, Bharatpur, Chitwan Nepal. Email: hpchalise@gmail.com. Phone: +977-9855058464. DOI: 10.3126/jcmsn.v15i2.23838. **Article received:** 2019-04-26. **Article accepted:** 2019-6-19.

gradual drop in the grades of the students directly. The situation is that if a student gives too much time to SNS, there is an ultimately decrease in academic performance. The review showed that students who used Facebook had a “significantly” lower performance in their studies than those who did not use the site. Majority of students who use Facebook every day are underachieving in their academics as compared with those who shun the site. Researchers have discovered students who spend more time for accumulating friends, gossiping and poking others on the site may devote as little as one hour a week to their academic work is affected. Facebook directly causes lower results in academics, merely that there’s some relationship between the two factors academic performance and social networking sites.⁵ There is negative relationship between the use of various media, including mobile phones, and self-reported GPA among first year university students in the United States.⁷ However, many researchers also found a positive association between use of internet and social networks and academic performance of the student users. Students, using internet frequently, scored higher on reading skills test and had higher grades as well.⁸ Social networking websites distract students from their study. Some research concluded in this field showed that social networking websites have both positive as well as negative impact on the education of youth, depending on one’s interest of use. Social network media is beneficial to students as it open up communication between students and teachers.⁸ The main of this research is to find the impact and perception of social networking sites on academic performance of medical students in Nepal. The significance of this study is to provide impact of social networking site so; the finding of this research provides evidences that would solidify the support on controlling the usage of social networking sites, thus reducing the risk of assimilating such addicting activities.

METHODS

A descriptive cross-sectional study was conducted among 230 students (first and second year) of MBBS, BPH, Pharmacy & BN Nursing’s students of College of Medical Sciences and Shree Medical & Technical College. Prior to the main study to check the reliability and validity of questionnaire pilot study were done among 23 (10% of total sample size) students. Then using SPSS-20 Cronbach’s *alpha* was calculated, it value was 0.793. Also, consulting other research expert questionnaire was finalized. Then this well-structured questionnaire was distributed among

students using Probability Sampling technique (random number table). In Nepal 52% of young adult are involved in social networking sites.⁹ By considered this as prevalence, taking 5% level of significance (The z-score value at 95% Confidence interval is 1.96), with 5% margin of error. Sample size was determined by using the formula $(n) = Z^2pq/e^2 = (1.96*1.96*0.52*0.48)/(0.05*0.05) = 196$. The minimum sample size for this study was 196 but this study was conducted among 230 students of different streams. Ethical approval was taken from Institutional Review Committee of College of Medical Sciences. At the time of data collection verbal consent with signature was taken and then data was collected from March 2019 to April 2019. Those students who are not involved in any type of social media were excluded from the study. Collected data was check for completeness and then coded with numbering and then entered in EpiData 3.1. Data analysis was done using SPSS-16 software. This is a descriptive study so categorical variables were present in the form of appropriate tables, using frequency (with percentage) and for continuous variables mean and SD were calculate after checking normality of data.

RESULTS

The response of 230 students was collected in that duration. The Mean±SD of age was 21.87±2.16 years. Majority(65.2%) of the students were in the age group 20-25 years. In relation to gender 59% were female and 41% were male. Majority (93%) of the students was Hindu by religion and Nepali (72.2%) by Nationality (Table1).

Table 1. Sociodemographic characteristics of the respondents. (n=230)		
Characteristics	Frequency	Percentage
Age		
15-20	70	30.4
20-25	150	65.2
25-30	10	4.3
Mean±SD	21.87±2.16	
Sex		
Male	94	40.9
Female	136	59.1
Religion		
Hindu	214	93.0
Buddhist	5	2.2
Christian	5	2.2
Islam	5	2.2
Others	1	0.4
Nationality		
Nepali	166	72.2
Indian	64	27.8

All most all students (97%) had Wi-Fi in their place of residence (room/home). The most commonly used social networking site was Face book/messenger (48.7%) followed by YouTube (41.3%). Regarding the duration of using these social networking sites, majority of them were using more than two years and most frequently used time was at night (55.2%) (Table 2).

Table 2. Information related to Social media. (n=230)

Characteristics	Number of students	Percentage
Wi-Fi in your room/House		
Yes	223	97
No	7	3
Mostly used social Networking sites		
Face book/Messenger	112	48.7
Twitter	12	5.2
Intagram	60	26.1
WhatsApp	45	19.6
Google/e-mail	57	24.8
LinkedIn	5	2.2
Viber	28	12.2
YouTube	95	41.3
Ohers	28	12.2
Duration of using these social networking sites		
Last 2 years	36	15.7
2-4 years	76	33
4-6 years	42	18.3
More than 6 years	76	33
How long per day you access social networking sites		
Less than 1 hour	22	9.6
1 to 2 hour	92	40
More than 2 hour	116	50.4
Mostly used time of social networking site		
Morning	5	2.2
Afternoon	17	7.4
Evening	81	35.2
Night	127	55.2

All most all students (93.5%) used mobile phone as a device for social networking sites. The main aim of using these sites was for updating with their family (33%) and for entertainment (33%). Majority of the students are not suffered from victim of these cyber crimes and they added 0 to 5 new friends per month due to involved in these sites (Table 3). One third (78.7%) of the students told, social networking sites helps to build relationship on the personal and professional front. More than half (67.8%) of the students told they have no any stronger contact on social networking sites. Half (50.9%) of the students are adversely affected in their professional life due to these social networking sites. Most of the students (83%) told

Table 3. Other Information related to social media. (n=230)

Characteristics	Number of students	Percentage
Mostly used device in social networking site		
Mobile	215	93.5
Tablet	4	1.7
Computer	11	4.8
Type of information to get from social networking site		
Update with family/friends	76	33
General knowledge	37	16.1
Entertainment	76	33
Study purpose	41	17.8
Victim of these cyber-crimes		
Hacking	17	7.4
Fake profile	22	9.6
Photo being mis-used	2	0.9
None of the above	189	82.2
No of friends in social networking sites per month		
0 to 5	186	80.9
5 to 10	25	10.9
10 and above	19	8.3

that social networking sites are really good for the better academic improvement. Nearly 60% students told that there are negative effects of using social networking sites. Also, 17.23% students told that their academic performance is decrease due to used of these social networking sites. Results showed that only few (15.6%) students used these sites only for studying purpose. The result is shown in the following (Table 4). Most of all students (96%) are strongly agree about the use social networking sites are used to learn the various terminologies. Half of the students are motivated to learn and search academic materials due to inspired from teacher uses social networks sites. Nearly half of the students are agree that, social networking sites can be used to learn the various medical related terminologies. One third (30.9%) students are strongly agreed that social networking sites are used to generate new ideas to learn various things. Half of the students are agree that Searching various videos (like anatomical) in SNS motivated them to increased their creativity in learning. Nearly half of the students are agree about social networking sites are interesting to use. More than one third of the students are neutral about to produce new things and share the idea through social networking sites. Nearly half of the students are agree about social networking sites are good source of information about medical terminology. One fourth of the students are strongly agree about

Table 4. Impact related to social media. (n=230)

Characteristics	Number of students	Percentage
Social networking used to build relationship on the personal and professional area		
Yes	181	78.7
No	49	21.3
You have any peoples whom you communicate only in these sites		
Yes	74	32.2
No	156	67.8
Is social networking sites adversely affected your professional working life		
Yes	117	50.9
No	113	49.1
Social networking sites are really good for betterment of academic profession		
Yes	191	83
No	39	17
Is Social networking sites disturb on your study		
Yes	136	59.1
No	94	40.9
Due to used of these Social networking sites, is your academic performance is decreased		
Yes	40	17.23
No	190	82.6
Do you use social networking sites only for studying purpose		
Yes	36	15.6
No	194	84.5

social networking sites improve writing skills. Nearly half of students agree SNS are good platform to share new message to other peoples related to health (like sharing health related awareness in Face book). Also, half of the students are agree that writing medical terminology through social networks improve reading and writing English skills. More than half of the students are agree about medical problems can read, viewing and searching solution through social networking sites. Also half of the students are agreed that complex medical problem can solve and understand through social networking sites. Nearly one third of the students are strongly agree about social networking site enhance medical discussion skills and investigation (Table 5).

DISCUSSION

The Mean±SD of age of 230 medical students was 21.87±2.16 years. Majority of the students were in the age group 20-25, female (59%) by gender and Hindu by religion. This finding is similar with the study conducted by Asif-Ur-Rahman, which showed that majority of the study participant were females (54.9%) and were in 18-22 years age

Table 5. Perception of students towards social networking sites on academic performance. (n=230)

Statement	Strongly agree	Agree	Neutral	Dis-agree	Strongly Disagree
I use social networking site to study the various terminology	96(41.7)	107(46.5)	19(8.3)	4(1.7)	4(1.7)
I feel well motivated to learn medicine/others inspired from teachers uses social networking sites	55(23.9)	119(51.7)	49(21.3)	5(2.2)	2(0.9)
Learning Medical Terminologies need collaboration via social networking	88(38.3)	99(43)	29(12.9)	10(4.3)	4(1.7)
I feel creative in generating ideas by using social networking	71(30.9)	101(43.9)	43(18.7)	11(4.8)	4(1.7)
Searching various videos (like anatomical) in SNS motivated me to increased my creativity in learning	55(23.9)	116(50.4)	49(21.3)	5(2.2)	5(2.2)
Social networks are interesting to use and communicate to others	90(39.1)	106(46.1)	33(14.3)		1(0.4)
I produce and share my experiences through social networking sites	30(13)	95(41.3)	76(33)	24(10.4)	5(2.2)
Social networks provide enough information about medical related material and terminology	70(30.4)	113(49.1)	35(15.2)	6(2.6)	6(2.6)
Writing English on social networks improves my writing skills	57(24.8)	81(35.2)	63(27.4)	19(8.3)	10(4.3)
Social networking sites are good platform to share new message to other peoples related to health & others	45(19.6)	118(51.3)	46(20)	14(6.1)	7(3)
Studying Medical terminologies through social networks improve my English writing skills	45(19.6)	118(51.3)	46(20)	14(6.1)	7(3)
I can read about medical problems on social networking sites	67(29.1)	132(57.4)	23(10)	5(2.2)	3(1.3)
Social networks help me understanding how to solve some complex medical problem	58(25.2)	119(51.7)	37(16.1)	2(0.90)	
Social networks enhance discussion skills with others	48(20)	120(52.2)	49(21.3)	11(4.8)	2(0.9)
Social networks improve medical investigation about medical terminology	61(26.5)	113(49.1)	40(17.4)	9(3.9)	7(3)

group.¹ Our research showed that 48.7% students used Facebook/Messenger, 5.2% students used Twitter, 26.1% students used Intagram, 19.5% students used WhatsApp, 24.8% students Google/e-mail, 2.2% students used LinkedIn, 12.2% students used Viber and 41.3% students used YouTube. Which showed that most commonly used social networking site are Facebook/messenger and YouTube while study conducted by Shyan Kirat Rai showed that 60% students used Facebook/messenger, 21% students used YouTube, 7% students used Twitter and LinkedIn and 5% students used for Blogs.⁹ Similarly, study conducted by Owusu-Acheaw & Larson showed that 66.4% students used Facebook, 19.9% used WhatsApp, 6.2% used Twitter which conclude that that Face book is the most favorite social media site.⁶ While the study conducted by Asif-Ur-Rahman showed that 97.9% used Facebook, 84.1% used Skype, 80.5% used Viber 80.5%, 75.6% used WhatsApp, 61% used Google+ 61%, 46.3% used Youtube, 31.70% used Twitter 31.70%, 25.60% used Yahoo while Windows Live, My Space and Hi5 were not that much commonplace to students¹. Our study showed that majority of the students used these sites more than two year, half of the students using more than two hour per day and most frequently used time was at night while the study conducted by Owusu-Acheaw & Larson showed that 66.3% used 30 minutes to 1 hour, 32.2% spent between two to three hours and 1.5% said they spent between four to five hours a day on the social media sites.⁶ While the study conducted by Asif-Ur-Rahman showed that 7.3% spent close to five hour and above per day in social networking sites, 36.5 % of them spent one to two hours in social networking activities and 3.7 % spent 0 - 30 minute and others 30.5 % spent 3-5 hour.¹ Our study showed that 33% used these sites to update with family/friends, 16.1% used these sites for General knowledge, 33% used for Entertainment and only 17.8% used these sites used for study purpose while the other study showed that the majority of the respondents 76.8% use social networking sites for reaching out to friends/family, 52.4% used for collecting or sharing information about life, 54.9% used for sharing information about academic works, 23.2% used for meeting new friends, 19.5% used for hanging out.¹ Also this research finding showed that undergraduates in the seven universities use social networking sites for reaching out to friends/family and for information about academic activities.¹ Similarly, another study showed that 86.8% use the social media to chat with friends, 6.8% use it to download music and video and 6.4%

use it for academic work.⁶ Another study showed that 27% respondents agree that social media is used for informative purpose which is followed by 25% for sharing contents, 22% for socialization, 12% for publicity, 11% for entertainment and 3% for easy to kill time.⁹ Our study showed that more than half of the students told they have no any stronger contact on social networking sites and half of the students told that social networking sites adversely affect their professional life and most of the students told social networking sites are really good for the better profession. While other study showed that 18.6% gave negative responds.⁶ Similarly, 65.9% of undergraduate students from seven universities agreed that social networking sites have positive effect on their studies and only 9.8 of the students reported facing negative effect.¹ Our study showed that majority of the students agree towards used social networking sites to learn the various medical terminologies while one third students are strongly agreed creative in generating ideas is more through social networking sites. One fourth of the students are strongly agree about social networking sites improve writing skills. More than half of the students are agree about medical problems can read, see and solved through social networks. Also half of the students are agreeing about problem and understanding can be solving through social networking sites. Nearly one third of the students are strongly agreed that social networking site enhance skills and medical investigation. While other study showed that only 42.7% were benefited by their educational institutions using social networking facilities and 50% students were still undecided while 7.3% students found social networking sites not helpful in their educational establishment.¹

CONCLUSIONS

The study revealed that majority of the students has Wi-Fi in their placed of residence and used mobile phones as a device for the use of social networking sites. The most commonly used social networking sites are Facebook/messenger and YouTub. The purposes of using these sites are for updating with family, friends and for entertainments. They spend 1 minute to five hours every day on social networking sites, so that their academic performance is decreased. Excessive use of these sites decreases their academic performance which conclude that there is Negative relationship between the use of social networking sites and academic performance which in turn negatively affect their academic results. Only few percentages of students used these sites only for academic

purposed. The overall perception of students towards social networking sites is positive.

ACKNOWLEDGEMENTS

We are thankful to all the students (first and second year) of MBBS, BPH, Pharmacy & BN Nursing's students of College of Medical Sciences and Shree Medical & Technical College for their valuable support and time during data collection.

Limitations

This study has enrolled only in two College among medical students future researcher can conduct this study among various college and among all students (Medical and non Medical of all levels).

Conflict of Interest: None

Financial disclosure: Self

REFERENCES

1. Asif-Ur-Rahman S, Junayed M, Masoom MR. Students' perception of the effects of online social networking: an empirical assessment. *International Letters of Social and Humanistic Sciences*. 2015;65:152-61.
2. Asur S, Huberman BA, editors. Predicting the future with social media. *Proceedings of the 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology-Volume 01*; 2010: IEEE Computer Society.
3. Gok T. The effects of social networking sites on students' studying and habits. *International Journal of Research in Education and Science*. 2016;2(1):85-93.
4. Ndaku AJ. Impact of social media on students academic Performance (A study of Students of University of Abuja). An Unpublished Research Project, Department of Mass communication management and social sciences caritas university, Amorji-Nike, Enugu. 2013.
5. Annetta LA, Minogue J, Holmes SY, Cheng M-T. Investigating the impact of video games on high school students' engagement and learning about genetics. *Computers & Education*. 2009;53(1):74-85.
6. Owusu-Acheaw M, Larson AG. Use of Social Media and Its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana. *Journal of Education and Practice*. 2015;6(6):94-101.
7. Jacobsen WC, Forste R. The wired generation: Academic and social outcomes of electronic media use among university students. *Cyberpsychology, Behavior, and Social Networking*. 2011;14(5):275-80.
8. Wang J-L, Jackson LA, Gaskin J, Wang H-Z. The effects of social networking site (SNS) use on college students' friendship and well-being. *Computers in Human Behavior*. 2014;37:229-36.
9. Rai SK, Moktan S. Use of social media in the central administrative wing of the government of Nepal. 2014.

Citation: Upadhyay HP, Sedain P. Impact and Perception of Social Networking Sites on Academic Performance of Medical Students. *JCMS Nepal*. 2019; 15(2):119-24.