

Investigating social media statistics of usage and its determinant factors in students of Kurdistan University of Medical Sciences in 2018: A cross-sectional study.

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Abstract

Background and Aim: the present study was conducted to investigate social media statistics of usage and its determinant factors in students of Kurdistan University of Medical Sciences in 2018.

Materials and Methods: This study is a cross-sectional-analytical study. The total of 380 students of Kurdistan University of Medical Sciences were randomly selected by Probability Proportional to Size Sampling method, from the lists of the students in each faculty. The data collection tool was a researcher-made questionnaire, organized in four sections. Data analysis was done using descriptive and inferential statistics by SPSS software version 21.

Results: Based on the results of this study 373 (98.2%) of the sample students were on social media, which the most popular ones among them were Telegram (94.1%), Instagram (78.8%) and Whatsapp (61.9%), respectively. The average time spent on social media among students was reported to be 2.78 hours per day and is a significant difference between age groups in terms of attitudes toward using social media ($P = 0.031$).

Conclusion: the results of this study suggested that the majority of students use social media. Since improper use of social media can exert unfortunate effects on different aspects of life of students, and negatively influence their education.

Introduction

Internet is a multipurpose tool used for engaging in social communication, recovery of large amounts of information and doing leisure activities (1). Social media as a subcategory of internet, with different levels of access, is created for the purpose of interpersonal communication (2).

Statistics suggest that, the number of social media users has doubled from 2008 to 2010 (3). Facebook, Telegram and Instagram are among the most popular social media platforms (4). According to recent studies, Telegram is the most popular platform in Iran (5). In Korea 99.9% of adolescents use Internet in their daily life (6). The internet usage among U.S. adolescents has increased from 89.4% in 2014 to 97.5% in 2016 (7). Following the same pattern, the adolescent Internet usage rate in Iran has increased from 3.8% in 2000 to more than 68.5% in 2016 (8).

Excessive use of social media can lead to several undesirable effects, including: anxiety, stress and adverse effects on school performance (9). Internet addiction can also be associated with psychological problems such as depression and drug abuse, suicide and nomophobia (10, 11). Reasons for such interest in using Internet is due to its easy access, widespread use, low cost, multimedia sharing feature and lack of need for special skills (12). According to several studies conducted in Iran, since students are often away from their families after admission to the University, in order to stay in touch with their friends and families, students tend to use social media which makes the effects of social media perfectly visible in this period (13). According to a study by Dastani et al. (2015) in Gonabad University of Medical Sciences, the main purpose of social media usage in students are communication with old friends, finding new friends and entertainment (14). According to a study by Pouralajel et al., The higher the use of the Internet, the lower the students' grades, and in addition, better students' grades, was associated with less social media use (10).

Considering the widespread use of social media and its associated complications, the present study aims to investigate the social media usage pattern in Kurdistan University of Medical Sciences in 2018.

Materials And Methods

Participants and Setting: The present study is a cross-sectional-analytical study, which was conducted on students of Kurdistan University of Medical Sciences in 2018. The sample was consisted of 380 students from faculties of medicine, dentistry, nursery and midwifery, paramedics and health sciences, which were randomly selected by Probability Proportional to Size Sampling method from the list of the students in each faculty.

Data Collection: The data collection tool was a questionnaire designed by researchers that was completed by each participant and then collected and analysed. The content validity of the questionnaire was evaluated through a panel of experts. Also Cronbach's alpha coefficient was used in order to obtain its reliability. To calculate the Cronbach's alpha coefficient, 30 questionnaires were completed by students who had the inclusion criteria. The value of alpha was 0.83. The questionnaire was organized in 4 sections. The first section included demographic information, the second section included questions regarding social media membership history, the third section included the quantitative and qualitative evaluations of social media usage and the last section for students who had account in social media that included questions regarding attitude assessment. The questionnaires were distributed and were provided to the participants after obtaining their consent.

Data Analysis: In this study relationship between time spent on social media and school of study was investigated between students of medicine, dentistry, nursery and midwifery, paramedical sciences and health sciences schools. Also for investigation relationship between the most important reasons for using social media and school of study and field of study sample was divided into medicine school students and other schools students. SPSS software version 21 was used to enter the data. Central tendency, dispersion indices and ratio were used to describe the variables using tables and graphs (frequency and percentage). One-way analysis of variance, chi square, T-test and goodness of fit test of chi-square was used for analytical analysis. A significance level of 5% was considered.

Ethical approval: This study was approved by the Ethics Committee and Research Council of Kurdistan University of Medical Sciences. The questionnaire was distributed between students after inform them about our study goals and take the students informed consent to participate in our study. Students could refuse to answer our questionnaire. All clause of Declaration of Helsinki were done. Data was accessible only to the researchers and individual respondents.

Results

380 students were studied in terms of social media status in this cross-sectional study. 168 (44.2%) of the students were male and 212 (55.8%) of them were female. Most of the participants were single (86.3%), and less than 25 years old (81.8%). 373 of the sample students (98.2%) were on social media and 7 of them (1.8%) did not have any social media accounts. The three most popular social media platforms were Telegram (94.1%), Instagram (78.8%) and Whatsapp (61.9%), respectively]Table 1[. Most (83.9%) of the students who were on social media stated that they have been on social media for more than 2 years.

Table 1. Frequency of membership in social media, personal account and total time spent on social media in participants.

Variable		Frequency (Percent)
Membership on social media	Yes	373 (98.2%)
	No	7 (1.8%)
The reason for not being on social media	Not familiar	4 (57.1%)
	Not interested	3 (42.9%)
on which social media platforms they have account	Telegram	351 (94.1%)
	<i>Instagram</i>	294 (78.8%)
	WhatsApp	231 (61.9%)
	Facebook	128 (33.7%)
	Viber	114 (30.6%)
	Imo	110 (29.5%)
	Line	84 (22.5%)
	YouTube	70 (18.8%)
	Twitter	61 (16.4%)
	Google	56 (15%)
	Tango	43 (11%)
Total time spent on social media per day	1 hour	73 (19.6%)
	2 hours	109 (29.3%)
	3 hours	88 (23.7%)
	4 hours	51 (13.7%)
	5 hours	31 (8.3%)
	More than 6 hours	20 (5.4%)

The duration of membership in social media in female students is longer than male students. Among those who were aware of social media platforms and had membership, 294 (77.8%) became familiar through friends, 18 (4.8%) through the press, 61 (16.3%) through websites, 18 (4.8%) through television, 55 (14.7%) through university's ambience and 48 (12.9%) through factors other than the ones mentioned. The average time spent on social media among the studied population is 2.78 (± 1.41) hours per day. There is a significant difference in time spent on social media among male and female students ($p = 0.041$), the average time spent online among

girls is higher than boys. In other cases, there is no significant difference between the time spent online considering the students' school of study (P = 0.053) and Grade (P = 0.588) [Table 2].

Table 2. The relationship between time spent on social media and sex, school of study and grade

Variable	Frequency (Percent)	Mean (Standard Deviation)	P value
Sex			
Male	161 (44.2%)	2.61 (1.28)	0.041
Female	211 (55.8%)	2.91 (1.49)	
Grade			
Associate and Bachelor	200 (52.6 %)	2.74 (1.43)	0.588
Masters	14 (3.7%)	2.50 (1.69)	
PhD	166 (43.7%)	2.85 (1.37)	
School of study			
Medicine	137 (36.1%)	2.69 (1.37)	0.053
Dentistry	41 (10.8%)	3.25 (1.43)	
Nursery and Midwifery	82 (21.6%)	2.70 (1.38)	
Paramedical sciences	70 (18.4%)	3 (1.55)	
Health sciences	50 (13.2%)	2.47 (1.26)	

A total of 229 students (61.4%) of those who were on social media have stated that they do not accept friendship requests from strangers, 112 (30%) sometimes accept and 32 (8.6%) accept strangers' requests. 348 (93.8%) of the students stated that their parents were aware of their membership in social media. 164 (44.1%) of the students stated that their face to face communication has decreased due to social media. Also 321 (86.5%) of the students agreed to the importance of social media. A significant relationship was observed between school of study and information acquisition, entertainment. [Table 3].

Table 3. Relationship between the most important reasons for using social media and school of study, field of study and gender variables

Variable		Information acquisition [Frequency (Percent)]	P-value	Entertainment [Frequency (Percent)]	P-value	Image and video sharing [Frequency (Percent)]	P-value
School of study	Medicine	103 (39.6)	0.051	76 (42.9)	P<0.001	48 (44.9)	0.07
	Other	157 (60.4)		101 (57.1)		107 (55.1)	
Field of study	Medicine	94 (36.2)	0.001	73 (41.2)	0.002	43 (40.2)	0.018
	other	166 (63.8)		104 (58.8)		64 (59.8)	
Sex	Female	109 (41.9)	0.218	72 (40.7)	0.180	47 (43.9)	0.497
	Male	151 (58.1)		105 (59.3)		60 (56.1)	

According to the results of one-way analysis of variance test, it can be concluded that there is no significant difference between the attitudes of students with different levels of education ($P = 0.413$). Also, there is no significant difference between different fields of study in terms of attitudes toward using social media ($P = 0.176$), but there is a significant difference between age groups in terms of attitudes toward using social media ($P = 0.031$). Of the 373 students who had accounts in the social media, 372 students responded to the attitude questionnaire, the evaluation of which 75% of students said that if they had free time, they would spend their time in social media, which was very different from those who disagreed with this attitude. 76.9% of students said visiting social media is part of their schedule. 72.8% of students believed that on social media, users are less likely to declare their personality and identity correctly and more likely to use nicknames and characters; Because they do not have the necessary confidence in this environment to tell the truth ($P < 0.001$)]Table 4 placed at the end of the document [.

Table 4. Students attitude about social media

de assessment	I totally agree And I agree N (%)	No idea N (%)	I totally disagree And I disagree N (%)	Goodness of fit test of chi-square	p-value
se social media to learn nce	331 (89%)	29 (7.8%)	12 (3.2%)	519.500	P<0.001
ial media have a good level ecurity	111 (29.8%)	126 (33.9%)	135 (36.3%)	2.371	0.306
or one day I do not check social media, I will get strated	199 (53.5%)	56 (15.1%)	117 (31.5%)	83.048	P<0.001
tead of having fun doors, I like to be on social lia	68 (18.3%)	63 (16.9%)	241 (64.8%)	165.694	P<0.001
en I have an issue in terms work, education, etc., I re it with my friends on ial media	203 (54.6%)	70 (18.8%)	99 (26.6%)	78.887	P<0.001
soon as I have spare time, I nd it on social media	281 (75.5%)	48 (12.9%)	43 (11.6%)	298.274	P<0.001
ny opinion social media can p raise people's awareness l knowledge	280 (75.3%)	66 (17.7%)	26 (7%)	300.839	P<0.001
iting social media is part of schedule	286 (76.9%)	40 (10.8%)	46 (12.4%)	317.613	P<0.001
ive no problem with my ily using social media	299 (80.4%)	49 (13.2%)	24 (6.5%)	372.984	P<0.001
creating connections in ial media, I consider esty a must	250 (67.2%)	91 (24.5%)	31 (8.3%)	206.565	P<0.001
a social media, I usually ggerate in introducing	42 (11.3%)	57 (15.3%)	273 (73.4%)	269.468	P<0.001

self					
reating social cohesion ong the people and elerating the organization useful political and social ivities is one of the positive ects of social media	173(46.5%)	160(43%)	39(10.5%)	88.081	P<0.001
social media, users are likely to declare their sonality and identity rectly and more likely to nicknames and characters; ause they do not have the essary confidence in this ironment to tell the truth	271(72.8%)	73(19.6%)	28(7.5%)	269.565	P<0.001
social media, like other dia, biased individuals and ups carry out anti-religious paganda and attack on gious beliefs with determined goals and in cial ways	190(51.2%)	129(34.8%)	52(14%)	77.342	P<0.001
joining any social work, a person becomes olved in a certain type of munication culture, and hout a doubt, the degree to ch a person is affected by environment will not be olute zero. So each social work promotes its desired ntity	248(66.8%)	97(26.1%)	26(7%)	207.887	P<0.001
ie to the impossibility of ntifying the true identity of	270(72.8%)	62(16.7%)	39(10.5%)	261.871	P<0.001

<p>members and also the possibility of controlling the content produced by users of social media, one of the most important negative consequences of these works will be the formation of a rapid spread of rumors and false news</p>					
<p>the more the connection of individuals and members in social media, the more likely is the companionship of interactions and the likeness of mindsets and the different and common movement will be</p>	179(48.2%)	149(40.2%)	43(11.6%)	82.566	P<0.001
<p>social media is an important source of revenue through advertising</p>	294(79.2%)	70(18.9%)	7(1.9%)	367.962	P<0.001
<p>one of the important abilities of social media is to provide an international platform for the promotion and dissemination of religious, political, human and moral issues</p>	20(5.4%)	104(28%)	247(66.6%)	213.030	P<0.001
<p>one of the causes of diminishing moral values and non-adherence to cultural norms is the facilitation of communication with the opposite sex through social media</p>	84(22.6%)	92(24.8%)	195(52.6%)	61.978	P<0.001

Discussion

In the present study, out of 380 students of different faculties of Kurdistan University of Medical Sciences who participated in the study, 373 (98.2%) were on social media. This finding is consistent with a study conducted in 2018 by Kolan et al. in Ghana, which reported that 100% of the students were aware of social media platforms, and also a study conducted by Mousavi et al. in 2019 on 715 medical students in Sari which reported the total awareness of social media platforms among students to be 99.44%. It is also consistent with several other studies with reports showing more than 85% popularity of social media in which a high prevalence of social media usage was reported (15-18). However, a study by Javadinia et al. In 2012 found that student membership on social media was 35%, which contradicted our study (13). A comparison of the results of our study with other studies shows that students' use of social media is now widespread. This finding can be inferred from a study with similar findings; Modara meta-analysis, which is consisted of 30 studies conducted from 2006 to 2015 in Iran with sample size of 130531 and it emphasizes the high prevalence of Internet use (19). Therefore the reason for the discrepancy between Javadinia's study and our study may be the growth in Internet use. The findings of this study also show that the majority of 373 people who were on social media, spent about 3 hours on social media each day. The most popular social media platforms according to our study was Telegram, Instagram and WhatsApp, respectively. girls spent more time on social media than boys, and the results showed that 72.8% of students do not fully trust the media to express the truth.

The results of the present study suggest that the students on average spent 3 hours of their time on social media each day which supports Shaaban, Hanifeh et al., Upadahayay and Guragain's findings (20-22). Arab News in 2014 surprisingly reported that people of Saudi Arabia waste their time spending 8 hours on Internet each day, However, Larson et al. (2015), reported that 66.3% of people spend 0.5 to 1 hour on social media per day and few of them (32.2%) spend more than one hour per day (23). It seems that the reason for this increase in use of social media is the advent of more easy-access smart devices, creating the need for people to use them for their daily and essential tasks, speeding up communication and entertainment, and also lack of facilities such as well-equipped gyms and recreational activities near the University campus and lack of interest in the field of study.

The results of the present study also showed that the most popular social media platforms among the students of Kurdistan University of Medical Sciences is Telegram, Instagram and WhatsApp, respectively. Ghorbani et al., in a study on Tabriz medical students, showed that the most popular social media platforms were Telegram and then Instagram, respectively (24). Mehdipour's study in 2018 on medical students in Zahedan showed that out of the average of 2 hours and 40 minutes that students spend on the Internet, Telegram plays the most prominent role (5). Babajani Wafsi also in her study stated that Telegram is the most popular social network in Iran (25).

These studies show that Telegram has a high capability for messaging and high educational potential in Iran. In a study conducted by Dashti et al., 79% of social media use was related to Facebook and Twitter, followed by Instagram (26) which seems to contradict our findings. The reason for the popularity of Telegram is its user interface (possibility of making calls, creating channels, groups, etc.) and that it contains more features compared to other platforms.

The results also showed that female students use social media more than male students, while studies by Upadhyay and Guragain, Dashti et al., As well as Anand et al., Showed that boys use social media more than girls (22, 26, 27) Also Adiele and Olatokun's study on adults showed that the severity of Internet addiction in men is 3 to 1 compared to women (28). The study of Ghamari et al., on medical students in Arak considers being male to be one of the risk factors for Internet addiction (29). However Alamgir Khan et al., considers the amount of social media usage to be equal in both sexes (30) And Ahmer and Tanzil's study on Karachi medical students estimated that girls use social media more than boys, which is consistent with our study (31). It seems that restrictions on social, cultural, sports and other activities for girls, as well as special cultural circumstances in some areas and climates are the most important factors encouraging girls to spend more time on social media. The results showed that 72.8% of students do not fully trust the media to express the truth, while Forqani and Mohajeri in a study conducted in 2018 on the level the students trust social media in Tehran, The level of trust was a bit more than medium (32).

Conclusion

The results of the present study showed that 98% of students are on social media, and the average time spent on social media was 2.78. Given that social media has become an integral part of human life and students spend a lot of time on it, it is worthwhile to create a culture of proper use of social media. Students' use of social media should be in line with scientific attitude and educational purpose. Families and academic officials need to use appropriate educational programs and proper management to provide a suitable environment for students to use social media properly.

Declarations

Ethics approval, accordance and consent to participate:

This study was approved by the local ethics committee of Kurdistan University of Medical Sciences and all participants were satisfied to participate in our study.

Consent for publication:

Not applicable

Availability of data and material:

The data that support the findings of this study are Available on request from the corresponding author Pourya Bahrami. The data are not publicly available due to privacy/ethical restrictions.

Competing interests:

All authors have no competing interests.

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