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Educational Uses of Social Media among Medical Students: A Case of King Edward Medical University, Lahore, Pakistan

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Educational Uses of Social Media among Medical Students: A Case of King Edward Medical University, Lahore, Pakistan

Abstract:

Social media is the most used information communication resource among students. Its educational uses must be identified to promote interactive learning to facilitate medical students in achieving their educational goals. A quantitative research method based on a survey research strategy has been followed to achieve the objectives of the research. The population of the study was medical students studying at King Edward Medical University, Lahore. Data were collected through a questionnaire and analyzed by using SPSS software. Findings showed that medical students had a very positive attitude towards the educational uses of social media. They use it to achieve their academic goals. Results showed that social media is a useful tool to facilitate online learning, individual learning, interactive learning and collaborative learning among students. Medical students studying at King Edward Medical University Lahore are using social media for online discussions, sharing video lecture and chat with educators. They have a positive attitude towards the educational uses of social media. By using social media, teachers can cope with the challenges of different learning styles. In medical institutions, librarians need to provide training on using different social media sites with the notion to provide Library 2.0 services.

Keywords: Medical students; Educational uses; Social media, King Edward Medical University; Lahore; Pakistan

Introduction/Background of the Study:

There is an exponential use of modern technology by students. They are using laptops, mobile phones, tabs and iPads to access online information via internet. They are accessing online databases, e-books, electronic journals, websites and various digital sources of information available

on the internet. Librarians can support students to provide online educational sources by offering web-based library services accessible through mobile phones, iPods and tablets. These new sources of information are offering challenges and opportunities for academic libraries to utilize new technology and attract the attention of online information users (Lippincott, 2010). Social media provides students with all the needed support to achieve educational goals. Now, they can read their material on smartphones and tablets. Social media is an important source for online delivery of information and interaction with fellows (Arnbjornsson, 2014).

Students are greatly utilizing social media to communicate with friends and share information. There is a need to explore educational uses of social media for students to support them in obtaining online education by offering new opportunities. Students spend much of their time on Facebook and other social media networking sites. Most of them use it to interact with their friends. They use Facebook to post pictures of different events, commenting on it, sharing information, looking at the profiles of other users and finding professional contacts and friends. Social networking sites offer new avenues to the young generation in an interactive learning environment (Pempek TA, Yermolayeva YA, Calvert SL. 2009). The use of social media by students will continue and grow over time. Higher education institutions should incorporate it into learning in a meaningful way. By utilizing this new technology, educational institutions will remain up-to-date about the online information needs of their students (Ternes, 2013). Social media which are being used by the students must be incorporated in teaching-learning activities because these offer interactive learning opportunities for students (Talug, 2012). Teachers must offer a new medium of learning to support online education among medical students by using social networking sites. Social network contacts are being used as an information source related to medication (Kjos and Schommer, 2011).

The use of social media offers opportunities to accelerate the process of medical education. Medical educators must develop social media-based curriculum models to integrate medical knowledge with sophisticated social media platforms. It is important to restructure the curriculum by using new technologies for collaborative learning among medical professionals (Hess and Shrum, 2011). Clinical nurses and nursing students are using social networking sites for seeking information. They are using online journals related to their field. They are utilizing electronic sources of information and demand internet-based training to access online information. Librarians must offer them training on utilizing electronic sources of information to enable them in searching the peer-reviewed and up-dated information available via an online medium (Dee and Stanley, 2005). Doctors can use social media to guide their patients by engaging people in public health and policy discussions through national and international professional networks. They should facilitate their patients to access the required information about their health through social media (General Medical Council Doctors' use of social media, 2013). Physicians are highly utilizing online networks and social media applications for personal use and professional purposes. The use of Facebook is very common among medical professionals. Physician's availability on social media has a positive impact on online patient communities. There are opportunities for health care professionals to use social media as a tool for improving patient care (Arnbjornsson, 2014). By using social media doctors can engage people in public health discussion to save them from different diseases. They can also develop their national and international networks. They can easily facilitate their patients about health and medication. They can give useful advice to improve their health (General Medical Council. Doctors' use of social media, 2013). Dolan pointed out that in the United State, medical professionals are utilizing social media sites such as Facebook and Twitter for professional activities. They are using smart-phones to utilize social media sites to communicate with doctors and customers.

They are contacting their co-professionals and colleagues through this medium. They are offering free consultations to their patients to guide them about their medical issues and treatment (Dolan, 2011).

The above review presents that social media is an important platform for online education and learning. It provides useful sources of communication and information. It facilitates learners in achieving educational goals. For example, Facebook offers a sound way to communicate with teachers, fellows, and professionals to enhance interactive and collaborative learning. Students can also share files, lectures and video tutorials among co-learners and fellows. They can use Wikis to develop their collaborative work. Blogs are also helpful for sharing commentaries and articles. Students can increase learning by download and upload video lectures on YouTube. They can develop a network of their professional contacts by using LinkedIn to seek worldwide guidance. They can get RSS feeds from different educational and professional websites to remain updated with modern techniques in their profession. They can contact their mentors at any time to seek their guidance in their educational activities.

This study is aimed to investigate the educational uses of social media among medical students at King Edward Medical University, Lahore, Pakistan.

Literature Review:

The given section provides a comprehensive review of related studies conducted to investigate different uses of social media by medical students.

Ajayi explored the information needs of medical students. Findings showed that the majority was using internet service searching for the required information. However, they considered the library as a valuable source for obtaining information. Results showed that they were not familiar

with online journals searching for the required information. It shows the need to make them aware of research journals available in the medical field. There should be library instruction programs for their awareness and to meet their information needs more efficiently (Ajayi, 2004). Kitching, Winbolt, Macphail, and Ibrahim (2015) emphasized that the social media platform is a valuable learning place for healthcare professionals. Students are widely utilizing this opportunity for their education and learning. It offers continuing professional development and education for online information users. The study identified that the Australian nursing home sector medical professionals are greatly utilizing social media for their professional education. Respondents emphasized that interactive approaches are better to increase learning instead of print sources. They indicated that social media provides contemporary information dissemination to a wider community of information users. They identified that time constraints and access to proper technology are the major barriers to utilizing social media. Foley, Maher, and Corrigan (2014) concluded that medical schools must introduce online learning for the students and introduce new ways of sharing information. There should be ethical guidelines for utilizing social media tools. The research emphasized that the use of social media to enhance learning and education should not be ignored by medical institutions. They must train their students in using popular social media sites such as Twitter, Youtube, and Facebook for educational purposes.

Kind et al. (2013) in their study provided some useful tips for medical educators to incorporate social media in teaching. The study suggested that medical educators may include social media tools and use them to support the educational activities of their students. They are required to develop social media guidelines for its positive use. They should develop individual guidelines and principles with which they are comfortable in applying them. The study suggested that information regarding patients must be kept in privacy. Educators should share credible information to enhance

public health. They need to demonstrate their responsible use of social media. The study concluded that there are various productive uses of social media to enhance education and professionalism.

Gray, Annabell, and Kennedy (2010) in their study described that majority of medical students had used Facebook (87%, n= 759). Most accessed it weekly and half of the respondents mentioned that they had used it daily. The respondents with a 25 % ratio had used it for educational purposes. The study concluded that it is challenging for medical students and their educators to use social media for educational purposes. The study noted that the majority of the respondents were utilizing social media for sharing information.

Casebeer et al. (2002) investigated the internet use pattern among medical physicians to get online education. Respondents reported that they use the internet in various ways to obtain the required information. Male medical professionals were more confident in utilizing the internet. Findings showed that an increasing number of physicians are utilizing the Internet for professional developments. They are enhancing their professional knowledge by using the internet. The study suggested that online courses for medical practitioners will be useful for increasing their knowledge in identifying specific diseases of the patients. Zawawi and Majid (2001) studied the use of information sources among biomedical scientists and found that these scientists most prefer journal articles and online information sources. They preferred indexing, abstracting and reference material for seeking information. All the respondents reported that they use e-mail service frequently for sharing information. They were also used to with OPACs and CD-ROM services. Fasaie and Adegbilero-Iwari (2016) studied the use of social media for academic practices by science students. Twitter and Youtube also provide an intellectual platform for young people to share information and knowledge. Findings revealed that science students are greatly utilizing Facebook, twitter and google+ for various academic purposes. Students can use social media for academic purposes to

exchange and interact with their peers for educational discussions and guidance. The study emphasized that libraries and librarians should use social media in line with the notion of Library 2.0 services by talking the library to the library users. Murugan and Allysomam (2011) explored the information needs and information-seeking behavior of Allopathic medical practitioners in Tiruppur District in Tamilnad India. The summary of the study showed that there was a significant association between the workplace of the respondents and the use of audio, video sources of information. The study concluded that there is a need for developing more awareness among medical practitioners about digital sources of information. It was suggested that the government of India should offer training programs to increase the digital literacy skills of medical practitioners in utilizing digital sources of information. Anaraki and Babalhavaeji (2011) investigated the awareness and ability of medical students in utilizing e-resources of integrated digital library portal in Iran. Results showed that respondents were not trained in using e-resources. The majority of the respondents from different universities admitted that the integrated digital information resources have affected their academic performance. The most common problems they faced in accessing electronic information were slow speed of internet, huge information available in electronic form and lack of awareness about the use of different electronic information resources. Balean and Truong (2011) conclude that there must be a security measure to ensure the privacy of the information on social media sites. Privacy settings should offer customization and be checked regularly. Students must critically check information about themselves which is available to the general public. The study recommended that medical schools should assist students to overcome the issues in utilizing social medial as a channel for learning and education.

Review of related literature shows that social media is being used by students for sharing information with friends, teachers, colleagues, and relatives. This new source of communication has

obtained much popularity among the younger generation. It is important to explore the educational uses of social media to offer new interactive ways of collaborative learning for students. Students from various disciplines are greatly utilizing social media for communication purposes. The review of the literature shows that little attention has been given to investigate the educational uses of social media among medical students.

Research Objectives:

1. To investigate the attitude of medical students towards social media usage.
2. To identify the educational uses of social media among medical students.
3. To find out the significance association and significance differences in the opinion of male and female respondents about general uses and educational uses of social media.
4. To inquire about the problems faced by medical students in using social media.

Research Methodology:

A quantitative research method based on survey research strategy has been followed to conduct this research. A comprehensive review of related studies was conducted to explore various uses of social media among students. To search the relevant literature, different online databases including Emerald, ScienceDirect, PubMed were explored by using different keywords i.e. educational uses of social media, uses of social media, online learning, interactive learning, medical education, medical students, etc. were used. Google search engine was fully explored by using different keywords and advance searching techniques. Based on the literature review, a draft questionnaire was developed. It was pre-tested on a small group of 30 medical students to get their opinion about the questions statements to remove and modify the ambiguous statements and terminologies. After pre-testing, it was further modified and finalized to distribute among the population of the study which was consists of medical students studying at King Edward Medical

University, Lahore. With the help of a questionnaire, a survey of medical students studying in the final year was conducted. Data were collected from a purposive sample of 200 medical students. Chi-square test and t-test were applied to measure the significant association and significant differences in the opinion of male and female respondents regarding educational and general uses of social media. SPSS software was used to analyze data.

Data Analysis

Gender of the Respondents

Data analysis regarding respondents' gender showed that most of the respondents were male (n= 103, 49.5 %) while female respondents were 97 (46.6%). It shows almost the balanced participation of the respondents in the study based on their gender.

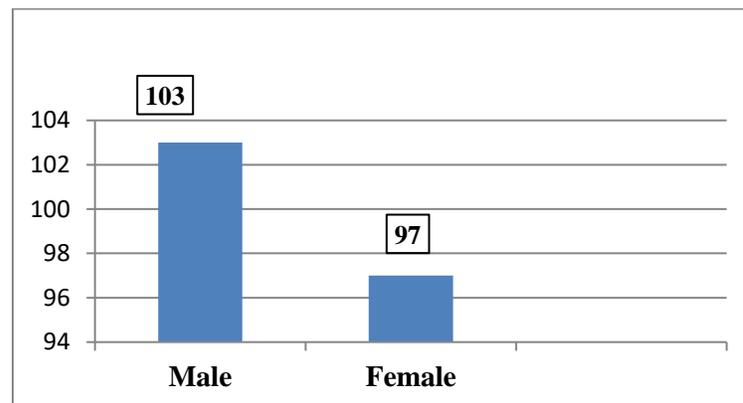


Figure 1

Age of the Respondents

Analysis of data showed that the majority of the respondents were 26 to 30 years old (n= 118, 56.7%). The second big segment was aged between 21-25 years (n= 70, 33.7%). There were only 11 respondents who were 31 to 35 years old.

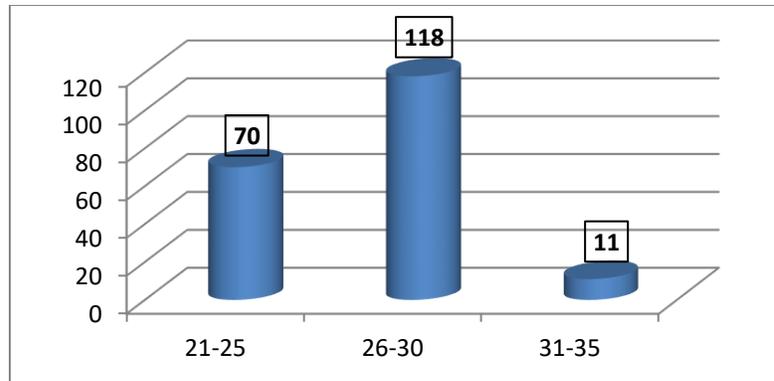


Figure 2

Modes of Accessing Social Media

Respondents were asked about the modes they used to access social media. Results displayed that majority was accessing it at home and via mobile phone (n= 86, 41.3 %, n= 77, 37.0%). It is obvious from the results that they are accessing social media at home and they have also subscribed to internet connections on their cell phones. It is also clear from the results that only a few respondents were accessing it through the net café. The easier access to the internet via mobile phones and at home has decreased the use of net café among internet users because different mobile companies are offering cheaper rates to subscribe internet on mobile phones and due to this now internet users prefer to use the internet on their cell phones.

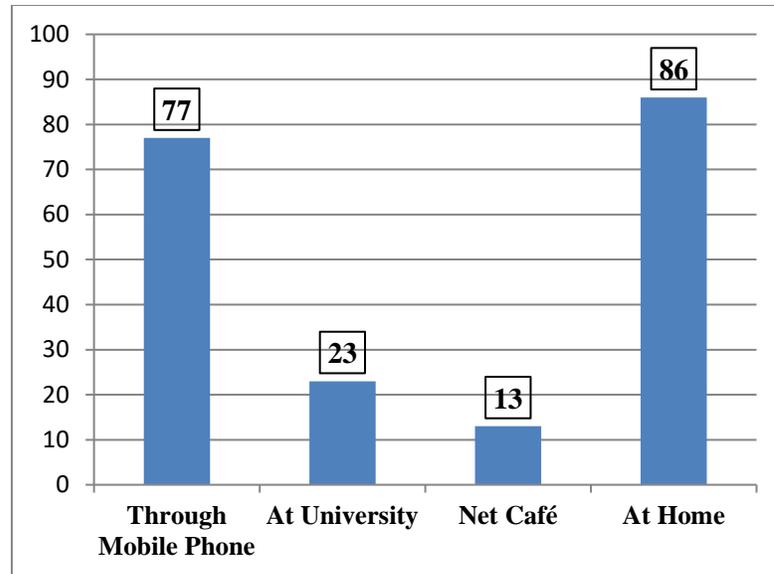


Figure 3

Frequency of Using Social Media

Results revealed that a big majority mentioned the use of social media daily (n= 83, 39.9%). They were also using it several times a day (n= 50, 24.0%). It showed the extensive use of social media among medical students studying at KE Medical University, Lahore. Most of the respondents (n= 90, 43.3%) indicated that they spend one hour a day using different social media networking sites. Others mentioned that they spend 2-3 hours a day (n= 63, 30.3%) in using this source of information. The given figure shows that majority is using social media platform on a daily basis. It shows that there is a great use of social media sites among medical students and it can be used for educational activities.

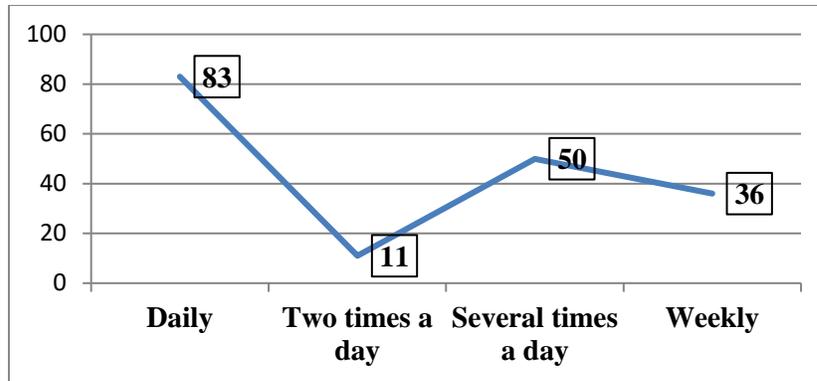


Figure 4

Types of Social Media Used by Medical Students

According to results, Facebook was the most used social media among medical students (n 162, (77.9%). The second most used social media site was Youtube (n= 46, 22.1%). The given figure presents the use of different social media networking sites by the respondents. The review of the literature also shows that various studies conducted by different authors reported Facebook as the most used social media channel among users. Facebook offers different tools and applications for users to send messages, chat with friends, start a discussion on any topic, send files, share links and posts and get comments by friends and fellows. It also offers to share video and audio files. Due to these opportunities, it is the most used social media site among medical students. That's why they are greatly utilizing this communication channel.

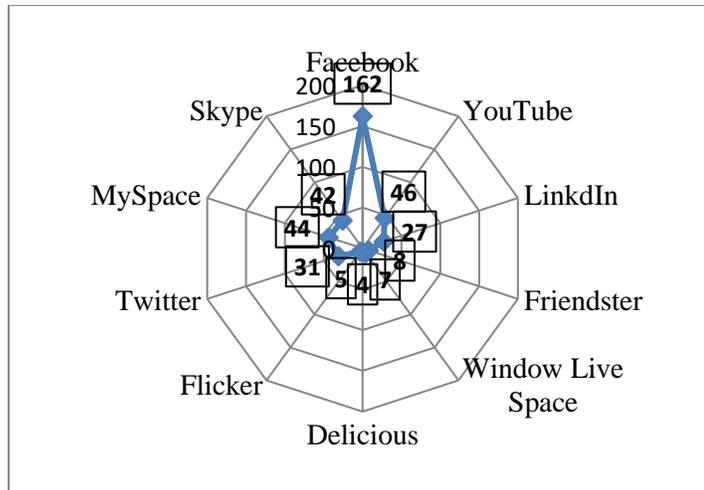


Figure 5

An Attitude of the Respondents towards Social Media

Respondent's attitude towards social media usage was measured by providing different positive and negative statements. It is plausible to note that they showed a very positive attitude towards various educational uses of social media. The majority agreed that social media is helpful in their study (mean= 4.10), it is a great way to share knowledge and information with fellows (mean= 4.19), it should be used for academic purpose (mean= 3.93), teachers should use social media for classwork activity (mean= 3.95) and it is helpful to discuss course-related topics (mean= 3.80). They did not give any opinion about different negative statements. However, they agreed that its negative use is destroying the young generation. It shows the need to encourage and motivate the students for positive uses of this online communication channel. Results presented that social media is helpful for students in their educational activities. It is a useful tool to offer interactive and collaborative learning. The educators should utilize this tool in teaching by assigning educational activities including group discussion, interactive learning and collaborative learning to the students because the young generation is more interested in utilizing online channels to get required information instead of

print learning. They can assign collaborative work on Wikis, reading articles and journals on Blogs, starting discussions on Facebook and watching video lectures via Youtube.

Table 1
The attitude of the Respondents towards Social Media Usage

Positive Statements	Mean	St. Deviation	Variance
Social media is helpful in our study	4.10	.896	.803
It is a great way to share knowledge and information with fellows	4.19	.717	.515
It should be used for academic purpose	3.93	.890	.792
Teachers should use social media for classwork activity	3.95	.850	.723
It is helpful to discuss course-related topics	3.80	1.127	1.269
Negative Statements			
Use of social media is merely a waste of time	3.08	1.127	1.269
It has a bad impact on our study	3.31	1.178	1.388
It is destroying the young generation	3.51	1.149	1.319
Use of social media should be banned in educational institutions	3.10	1.380	1.906

Note: 5= Strongly agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly disagree

General Purposes of Social Media Usage

Respondents were asked to mention the general purposes of using social media. Results highlighted that they frequently used social media to communicate with friends (mean= 4.20), sharing information (mean= 3.83), to get information about current events (mean= 4.09) and chatting with friends and class fellows (mean= 3.66). They generally use it for communication with friends, sharing information, getting information about current events, chat purpose and to send different posts, to bookmark any website or link and to kill free time. The given table presents the general uses of social media by medical students.

Table 2
General Uses of Social Media by the Respondents

General Uses	Mean	St. Deviation	Variance
For communication with friends	4.20	.853	.728
Sharing information	3.83	1.004	1.007
To get information about current events	4.09	1.068	1.142
To chat with someone	3.66	1.048	1.098
To find and make new friends	3.41	1.214	1.474
Inserting a post and commenting	3.71	1.016	1.032
To post a blog	3.16	1.054	1.111
Social bookmarking	3.24	1.096	1.202
To kill time	3.21	1.258	1.583

Note: 5= Strongly agree, 4= Agree, 3= Neutral, 2= Disagree,
1= Strongly disagree

Educational Uses of Social Media

Analysis of the results regarding educational uses of social media by medical students showed that they are greatly using this useful channel of information for educational purposes. They mentioned that they use it to communicate with teachers (mean= 3.85), to discuss course-related topics with class fellows (mean= 4.12), to share research findings (mean= 3.87), to find a job (mean= 3.77), to share lectures & notes (mean= 3.86), to discuss classwork activities (mean= 3.66) and to share news about university events (mean= 3.69). It is obvious from this result that social media is a fine tool for students to support them in their educational activities. Its educational uses should be encouraged to promote online learning among medical students who prefer to use digital sources of information. They should be assigned educational activities via social media to promote its educational uses. The given table shows various academic uses of social media for students.

Table 3
Educational Uses of Social Media by the Respondents

Educational Uses	Mean	St. Deviation	Variance
To communicate with teachers for guidance in the study	3.85	1.076	1.157
To discuss course-related topics with class fellows	4.12	3.016	9.098
To share research findings	3.87	.989	.977
To find a job	3.77	.926	.857
To share lectures & notes	3.86	.911	.830
To discuss classwork activities	3.66	1.013	1.026
To make professional contacts	3.49	1.090	1.188
To share news about university events	3.69	1.036	1.073
To edit Wikipedia article	3.22	1.170	1.368
To receive research alerts	3.43	1.140	1.299

Note: 5= Strongly agree, 4= Agree, 3= Neutral, 2= Disagree, 1= Strongly disagree

Results of Chi-square Test to Measure the Association in the Opinion of Male and Female Respondents about Educational Uses of Social Media

A Chi-square test was applied to measure the significant association in the opinion of male and female respondents about the educational uses of social media. Results showed that there is statistically no significant association in the opinion of male and female respondents about general uses and educational uses of social media. They were in favor of using this source for both purposes.

Table 4
Summary of Chi-square test to Measure the Association in the Opinion of Male & Female Respondents about General Uses and Educational Uses of Social Media

Group of Respondents	General Uses	Educational Uses	Total	df	Chi-square Value & Significant
Male	57	45	102	02	$\chi^2= 1.209$
Female	51	45	96		Sig=.546

Note: significant alpha level is 0.05

Results of Independent Sample T-test regarding Educational Uses of Social Media among Two Groups of Respondents (Male & Female)

Independent sample t-test was applied to analyze the significant differences in the opinion of male and female respondents about general uses and educational uses of social media. The given table shows that there was statistically no significant difference in the opinion of male and female respondents about general uses and educational uses of social media. Both groups of respondents agreed to use social media for educational purposes as well as general purposes. This result invites the attention of educators and policymakers to promote its academic uses among students. They should design different course work activities via social media for their students to promote collaborative learning.

Table 5
Summary of T-test to Measure the Significant Differences between Respondent’s Opinion about General Uses and Educational Uses of Social Media

Statements	Respondent’s Group	Mean	Std. Dev.	t-value	Sig.(2 tailed)
To discuss course-related topics with class fellows	Male	3.67	8.851	1.827	.071
	Female	3.70	1.102		
To share research findings	Male	3.95	1.071	1.153	.252
	Female	3.63	1.144		
To find a job	Male	3.76	1.136	.076	.939
	Female	3.74	.958		
To share lectures & notes	Male	3.95	1.117	.786	.434
	Female	3.74	1.080		
To discuss classwork activities	Male	3.81	.981	.972	.334
	Female	3.54	1.125		
To make professional contacts	Male	3.52	1.365	.191	.849
	Female	3.46	1.232		
To share news about university events	Male	3.70	1.174	.626	.533
	Female	3.50	1.283		
To edit Wikipedia article	Male	3.40	1.273	1.027	.307
	Female	3.04	1.398		
To receive research alerts	Male	3.55	.945	.705	.428
	Female	3.33	1.269		

Note: significant alpha level is 0.05

Problems Faced by the Respondents

Respondents were inquired about the problems they faced in utilizing social media. A good number of respondents mentioned that most of the social media accounts by different persons are fake (n= 113). Hence they are sharing misleading and fabricated information. They also mentioned that privacy threat (n= 59), slow internet speed (n= 56), electricity failure (n= 55) and misuse of information (n= 42) are the major problems in using social media. It is clear from the results that to promote the use of social media among medical students, it is necessary to offer good internet connectivity and introduce strong privacy measures to keep the information secret. To promote its educational uses among medical students, the educational institutions should ensure good internet connectivity with high speed. They should also manage the electricity failure problem in educational institutions.

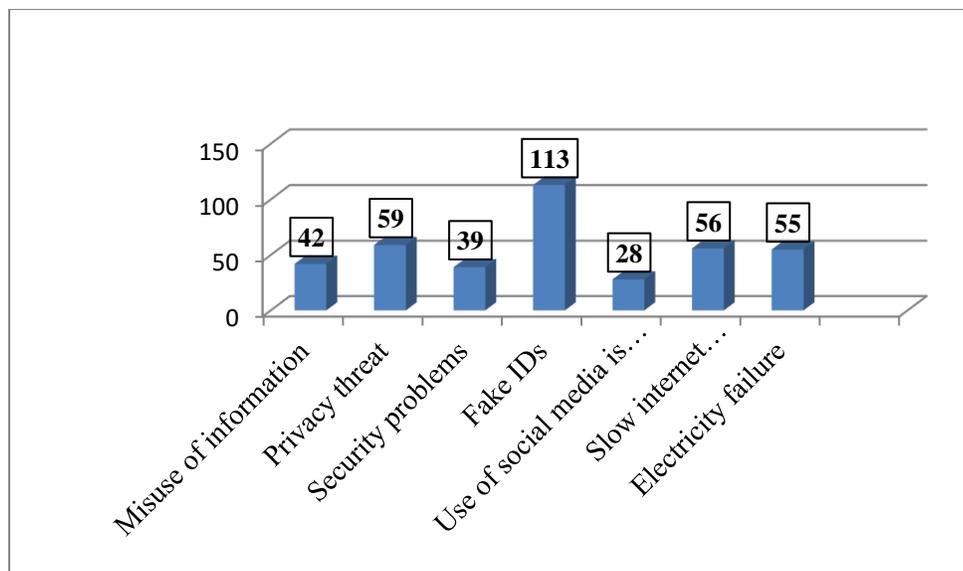


Figure 6

Discussions

The findings of the study revealed that medical students are accessing social media through their mobile phone or at home. Easy access to mobile technology has made it easier for medical students to utilize social media applications for various purposes. The results showed that medical students utilize social media daily. It is also evident from the results that the growing use of the mobile phone by youngsters has made it easy for them to access and utilize this new communication channel on regular basis and explore their needed information by using different social media sites. Keeping in view these results, it is important to utilize this channel for academic purposes to achieve educational and research goals. As Sobaih, Moustafa, Ghandforoush, and Khan (2016) identified that the growing use of social media by students at higher education requires the special attention of the policymakers to use social media as a learning medium. Faculty observed a great value of using this medium for academic purposes. They believed that social media is a great source of teaching and learning (e.g. Facebook, Youtube, Blogs and Wikis). The study identified that it can be used for peer-learning, course engagement, knowledge discussion, learning community and students studying in academic institutions. The study concluded that social media is a useful tool for academic and learning purposes and it is vital for policymakers to understand the shift to a new era of social learning and take necessary steps for its further pornification. Based on this result, the medical institutions need to develop social media policy to support medical students in achieving educational goals. Tuten and Marks (2012) also emphasized that educators should assign collaborative work to their students by using social media and they should encourage the collaborative work produced by their students. They can develop their collaborative work by using Wikis and Blogs. Social media tools can be used to enhance collaboration and interactive learning among students. The perceived usefulness of social media helps to improve communication skills. It also improves the teachers'

capability to communicate with students and deliver a lecture in an online medium. Therefore, teachers in medical institutions need to ensure their presence on social media channels so that medical students may approach them to get their guidance for the accomplishment of their medical education. Wankel (2009) pointed out that teachers and students can share a discussion on any topic by using Facebook. Medical students can organize informational meetings by creating an event on the social media site. Blogs can be used for sharing content among course learners and instructors. Teachers can create a “vlog” (video blog) to share videos of class lectures among students. They can use twitter for the fast delivery of messages and can share links to different online educational material among their students. They can share video and audio files by using MySpace.

According to the results of this study, Facebook is the most used social media by medical students. This result confirms what Clauson et al. (2013) found in their study that Facebook is the most used social media among medical students and it should be utilized for educational purposes among students because they have a very positive attitude towards social media uses for academic activities. Hamade (2012) in his study also reported that university students are greatly utilizing Facebook and Twitter, respectively. The respondents considered that neglecting educational uses of social media is not showing a positive impact. This result implies that this new learning medium should be used in an educational institution to support students in performing their educational activities. Our study also found that medical students are utilizing it for various educational purposes e.g. to communicate with teachers, to discuss course-related topics with class fellows, to share research findings, to find a job, to share lectures & notes, to discuss classwork activities and to share news about university events. Minocha (2009) also found that social media tools are highly useful for academic purposes because it facilitates interactive learning among individual students and groups. Blogs support active learning and sharing comments. With the help of Wikis, students can create

group work. By using a podcast, students can watch video lectures at their convenience. The findings of instant research are in line with the studies conducted by earlier researchers at an international level. Our study emphasized the need to facilitate medical students in using social media sites in achieving educational goals. This study showed that there was no significant difference in the opinion of male and female respondents regarding educational uses of social as both agreed that it should be used for educational activities. The medical students were in favor of using these communication tools in searching and disseminating medical information among peers and fellows. A vast majority of fake IDs on social networking sites are providing misleading information. The respondents also highlighted that they are facing problems in using social media due to slow internet speed, electricity failure, and privacy threat. It shows the need to provide good internet service with high speed at King Edward Medical University, Lahore. The necessary steps must be taken by the University administration to provide easy access to various social media sites that are useful for medical students to perform educational activities.

The critical evaluation of the results by contrasting and comparing the findings of this research with previous studies conducted at the international level shows that social media is a valuable learning platform for medical students. In Australia, nursing home sector medical professionals are greatly using social media sites for their professional education. The use of Facebook, Twitter & Youtube is common among medical professionals. The medical institutions must develop their social media policy to utilize this most used communication channel to facilitate the medical students and healthcare professionals in achieving their educational and professional goals.

Conclusions & Recommendations:

Medical students studying at King Edward Medical University Lahore are extensively utilizing social media tools for educational purposes. They use it to communicate with teachers, discuss course-related topics, sharing research findings, lectures, notes, discuss classwork activities, share news about university events and receive research alerts. Facebook is the most used social media among medical students at KE Medical University Lahore. There was statistically no significant difference in their opinion regarding the use of social media for educational purposes. Slow internet connectivity, electricity failure, misuse of information, privacy threat and use of fake IDs are the problems faced by the students in using social media. It is recommended that good internet connectivity should be provided for students to use social media more efficiently. Misuse of social media should be discouraged at all levels. Students should be provided with training to apply strong security measures for the privacy of information shared by different users. Librarians working in medical institutions should introduce the educational uses of social media for medical students and healthcare professionals by conducting training workshops, seminars, and symposiums.

Implications of Results

Outcomes of the study are practically useful for university librarians, students, and teachers. University librarians should offer their outreach library services for their users that can be accessed through social media channels. Medical students can use Facebook to communicate with their teachers, fellows, and professionals to enhance interactive and collaborative learning. They can also share files, lectures and video tutorials among co-learners and fellows to help them in achieving educational aims. They can use Wikis to develop their collaborative work on different topics to increase their understanding. Blogs are also helpful to share research articles and seek commentaries from fellows. Medical students can enhance their learning by download and upload video lectures on YouTube. They can develop a network of their professional contacts by using LinkedIn to seek

worldwide guidance on different medical issues and their treatment. They can get RSS feeds from educational and professional websites to remain updated about different educational events in their profession. They can contact their mentors at any time to seek their guidance.

Teachers working in medical institutions must encourage their students in utilizing this modern online educational tool. They should ensure their presence on social media. They should also use online and interactive learning techniques for delivering lectures. They must design different educational activities and assignments for their students by using social media. For example, they can support collaborative learning by sharing and seeking comments from their students on any new topic by using Facebook. They can assign collaborative work to their students by using Wikis. They can also upload their lectures on YouTube to facilitate their students in accessing their course material. They can also give different educational activities on social media to their students to complete them in a limited period to excel in their time management skills. The results obtained through this study have shown that medical students studying at King Edward Medical University, Lahore are interested to utilize social media for educational purposes. So, medical institutions need to understand this new shift to online learning and assist their students in using various social media networking sites for achieving educational goals.

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Appendix (A)

Educational Uses of Social Media among Medical Students: A Case of King Edward Medical University, Lahore, Pakistan

1. Are you?

Male Female

2. What is your Age?

Under 20 Years 21-25 26-30 31-35 Over 35

3. How do you access Social Media (Facebook, Youtube, LinkedIn, etc)?

Via Mobile Phone
 At University
 At Net Café
 At Home

4. How often do you use Social Media?

Daily
 Two times a Day
 Several Times a Day
 Weekly
 Monthly

5. How much time do you spent on social media activities?

1 hour or less in a day
 2-3 hours in a day
 4-5 hours
 More than 5 hours in a day

6. Which of the given Social Media do you use?

<input type="checkbox"/> Facebook	<input type="checkbox"/> Delicious
<input type="checkbox"/> YouTube	<input type="checkbox"/> Flickr
<input type="checkbox"/> LinkedIn	<input type="checkbox"/> Twitter
<input type="checkbox"/> Friendster	<input type="checkbox"/> Myspace
<input type="checkbox"/> Window Live Space	<input type="checkbox"/> Skype

7. Mainly for what purpose do you use Social Media?

- General Purpose (Communication, info sharing, chatting, friendship, uploading post, commenting etc)
- Educational Purpose (Communicate with teacher, class fellows, research work, sharing lectures etc)

8. What are your general purposes of using Social Media?

General Purpose of Social Media Use	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
For communication with friends, Classmates					
For sharing information (Photos, videos, etc)					
To get information about current events					
To chat with someone					
To find and make new friends					
To find a partner/lover for dating					
Posting and commenting					
To post a Blog					
Social bookmarking					
To kill time					

9. What is your educational use of Social Media? Plz chose the appropriate level of your opinion with given statements.

Educational Uses of Social Media	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
To communicate with teachers for guidance in study					
To discuss course related topics with class fellows					
To share research findings					
To find a job					
To share lectures & notes					
To discuss class work activities					
To make professional contacts					
To share news about university events					
To edit Wikipedia article					
To receive research alerts (RSS)					

10. In the light of your social media usage experiences, please give your opinion about the followings?

Statements	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Social media is helpful in our study					
It is a great way to share knowledge and information with fellows					
Social media should be used for academic purpose					
Teachers should use social media for class work activities					
It is helpful in sharing view point and discussing course related topics					
Use of social media is merely a waste of time					
It has bad impact on our studies					
It is destroying young generation					
Use of social media should be banned in educational institution					

11. Which of the given problems do you face in using Social Media?

- Misuse of information
- Privacy leakage
- Security problems
- Fake IDs
- Use of Social Media is blocked in my Institution
- Slow Internet connectivity
- Electricity failure

Any Suggestion:-
