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Conference Proceedings of
**FEDERAL UNIVERSITY DUTSINMA
LIBRARY COMPLEX**

in Collaboration with

**DEPARTMENT OF LIBRARY AND INFORMATION
SCIENCE, FEDERAL UNIVERSITY DUTSINMA
KATSINA STATE, NIGERIA**

and

**GOVERNMENT DIVISIONAL PUBLIC
LIBRARY KOTA (RAJASTHAN) INDIA**

**A PUBLICATION OF
FEDERAL UNIVERSITY DUTSINMA LIBRARY COMPLEX**

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ACKNOWLEDGEMENT

The local organizing committee of Federal University Dutsinma Library Complex 1st International Conference hereby extends their profound appreciation to the Vice Chancellor Federal University Dutsinma for honoring and accepting to be the chief-host of this great maiden occasion. Our gratitude and appreciation also goes to all our special guests, keynote speaker, lead paper presenters within and outside the country for their tireless efforts towards the successful conduct of this conference. Our profound gratitude also goes to all those who supported this conference in one way or the other. To our presenters that made their contributions physically or virtually, we say thank you all and God bless.

**WELCOME ADDRESS BY THE CHAIRPERSON OF THE LOCAL ORGANIZING
COMMITTEE DR. HAJARA YAKUBU (CLN)**

The Chief Host, Our Able Vice Chancellor, Professor Arma'yau Hamisu Bichi (FSS, FASN, OON),
The Registrar and other Principal Officers of this prestigious institution, Federal University Dutsin-Ma,
Katsina State,

Staff and Students

Distinguished Ladies and Gentle Men

Assalamu Alaikum and a very good morning to you all. All praise is due to Allah, the Most Beneficent, the Most Merciful, Peace and Blessings of Allah be upon His Messenger, Prophet Muhammad, his entire households and his companions. I am highly elated for this wonderful opportunity bestowed on me to address you this morning in this August occasion "The first International Conference/Workshop organised by FUDMA Library Complex in collaboration with the LIS Department and Public Library, Kota, India.

FUDMA Library Complex has come a long way in publishing scholarly articles in a reputable journal known as FUDIJSIM (FUDMA International Journal of Library Science and Information Management. The nurture of an idea of the FUDMA Library 1st International Conference/workshop is the culmination of the intellectuals among Library Complex and LIS Department scholars.

Of course, without the permission and support of the Vice Chancellor and the entire management, it wouldn't have been possible. Therefore, I on behalf of the LOC, appreciate our erudite, amiable, enviable and indefatigable VC, in the person of Prof. Armayau Hamisu Bichi. His tenure has elevated the status of FUDMA Library Complex in terms of expansion of the library buildings, creation of Faculty and Departmental libraries, regular procurement of information resources (prints and electronics), enhancement of staff via training and retraining as well as increment in number of users. This in line with the fifth out of the five laws of Librarianship propounded by S. R. Ranganathan which has been withstanding the test of time: "Library is a growing organism". Library has to be dynamic by adopting and adapting as well as accommodating the paradigm shift/revolutionary changes brought by information and communication technologies (ICT). Hence, the birth of this international conference. The theme of this international conference, "Emerging Information, Knowledge System and Globalisation in Education (ICEIKSGE) is a focal point on the contemporary issues in LIS and Library Practice. Its sub-themes cover a wider spectrum in both LIS and Librarianship. The topics presented and discussed, will go a long way in spurring more research studies in the field of LIS and library practice. It is with the hope that this maiden international conference will be an annual event of magnitude clamouring for chain of continuity.

Research paves the way to unravel a hidden treasure of knowledge. Research is a process of identifying a problem and attempting to proffer a solution through scientific information gathering and analysis. Therefore, research in LIS is an attempt for problem identification, proffering solutions on the contemporary issues related to library, information resources and services for documentation and posterity.

I use this medium to thank you all for gracing this event and pray fervently that may Allah (SWT) return you back safely to your various destinations.

Long live FUDMA and Dutsin-Ma LGA!

Long live Katsina State!!

Long Federal Republic of Nigeria!!!

**WELCOME ADDRESS BY THE UNIVERSITY LIBRARIAN, FEDERAL
UNIVERSITY DUTSINMA DR. UKASHATU HAMZA MUSA AT THE 1ST
INTERNATIONAL CONFERENCE/WORKSHOP ON EMERGING
INFORMATION, KNOWLEDGE SYSTEM AND GLOBALIZATION IN
EDUCATION (ICEIKSGE-2023)**

The Vice chancellor, our mentor, our leader, the Deputy Vice Chancellor Academic, The Registrar Federal University Dutsinma, the University Librarian Al 'Qalam University, Katsina, University Librarian Federal University of Technology Minna and also our keynote speaker, Dr. Deepak Shrivastava Kumar of Government Public Divisional Library Kota, the HOD Library and Information Science and Member of academic Board, FUDMA, my dear colleagues, researchers, library Stack holders, online participant to this international workshop/conference from other countries, ladies and gentlemen, all other protocols duly observed, good morning and may peace, mercy, and blessings of Allah be upon you all. It is indeed my singular honor and privilege to stand before you this morning in order to start our four (4) days first (1st) International Conference/workshop on **EMERGING INFORMATION, KNOWLEDGE SYSTEM AND GLOBAL SERVICES IN EDUCATION** which comprises:

- ✓ Paper Presentation
- ✓ Basic practical aspect in case of workshop

This conference/workshop is organized in such a way that the scholars, researchers and practitioners will discuss with the new trend in librarianship and learn new and modern technologies in library and information services.

The conference theme is well chosen and resonate (related) closely with the changes and challenges faced the library and the librarians. Let me quickly remind you that the world of librarians has gone through a fundamental change. Though the information technology and modernization have knocked at our door. Therefore, we need to accept the transformation or innovation that come to our profession. To the best of my knowledge, experience and my staying as university librarian, this is the first time in which the FUDMA library stockholders and DLIS are brought together to organized an international workshop/conference in collaboration with Government Divisional Public Library India in order to increase the visibility and productivity of the library and the university in general, and move the system forward. Furthermore, looking at the challenges in our disposal, the library stockholders has carefully decided to covers a wide range of interesting topics related to all theoretical and practical aspects of these Sub-themes Changing Role of Libraries in the Digital Environment, Social media and applications in libraries, Digital preservation and Intellectual property, Mobile information services, Web Technologies and its applications, Big data and data science, Role of Libraries in the service of society, Information literacy, Embedded librarianship, Citation Analysis, Emerging Technologies in Library Services, E-Resources Management, Knowledge Organization and Ontologies , Metadata standards and protocols, Mobile Technology and its Application in Library Services, Artificial Intelligence and Decision Support Systems, Cloud Computing and Library Services, Knowledge Management and Knowledge Innovation, Information communication technology and KM, Role of Libraries in teaching, LIS Education and Research, Research ethics and Plagiarism.

Chairman, Ladies and Gentleman, it is my belief that the conference has enough package that will address some issues facing the library and librarians.

I wish to express our profound gratitude to NLA Chairman Katsina state Chapter, also the University Librarian UMYUK Katsina for your support to the development of library services across the state.

I warmly welcome my distinguished colleagues, the University librarian of Al'Qalam University Katsina, Dr. AA Ladan, Dr. Katamba UL FUTMINNA for honoring our invitation.

To the Vice Chancellor, Sir, let me use this opportunity to thank you and your management for your continued support to the development of FUDMA library complex. Sir, you have indeed shown a good understanding of the role of the FUDMA Library complex toward the development of this university. I assure you that, the library we will continue to work and support your mission and vision of this great institution.

Chairman, distinguished ladies and gentleman, I have a great pleasure to welcome specially a man carefully chosen and singled out for the keynote Address at this conference. He is a current University Librarian FUT Minna, within the short period of time, He shares a strong interest in the conference theme Emerging Information, Knowledge System and Globalization in Education. We are very proud to have you as a partner in progress. And in sha Allah, we will like to collaborate with your library. You are highly welcome.

To our distinguished Guests who have graciously honored our invitation, I say thank you for being part this occasion.

To all participants who have travelled from far and near, we really appreciate you all for your esteemed presence at this occasion.

I would like to offer my warmest congratulations to the Conference Organizing Committee for a wonderful job and making this conference reality, you really deserve a commendation letter from management.

Chief Host **Prof Armayaú H. Bichi (FSS, FASN, OON),**
Vice Chancellor,
Federal University Dutsinma,
Katsina State

Host **Dr. Ukashatu Hamza Musa**
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THE USE OF SOCIAL MEDIA APPLICATIONS BY MEDICAL STUDENTS: A STUDY OF FAZAIA RUTH PFAU MEDICAL COLLEGE (FRPMC), PAKISTAN

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Abstract

The introduction of social media applications (SMAs) in the late 1990s has aided the diversification of our social circles on many fronts. Hence, this study sought to identify the use of SMAs by the students (undergraduate and postgraduate) of Fazaia Ruth Pfau Medical College (FRPMC), Pakistan. A survey research design was applied, while a questionnaire was used as an instrument to collect data in August 2022 from the current students (batch 2020, 2021, and 2022) of the college. The questionnaire was designed on a Google form and sent to the official WhatsApp group of the students that was created by the student affairs section of the College for distribution. Before that, a pilot study was randomly conducted on 30 students. The results of the study revealed that the students of FRPMC use various SMAs, prominent among which are WhatsApp, Facebook, Youtube and Instagram. More so, the study revealed that, though the students enjoy using these apps for an average of 1-2 hours a day to source current information for their academic activities, they usually experience some challenges like anxiety and unnecessary advertisements while using the apps. The study recommended that librarians need to offer training sessions on how to effectively use SMAs by medical students.

Keywords: Social Media Applications (SMAs), Medical Students, Fazaia Ruth Pfau Medical College (FRPMC), Pakistan.

Introduction

Communication is the process of exchanging information. History has informed us of the numerous ways of communication that the human species have used over time. In ancient times, for instance, humans tried to convey their messages through gestures and expressions. Subsequently, sounds became a better medium while pictographs and ideographs were used in writing to communicate. Different types of pictures were used to convey messages and with the invention of the alphabet, communication became easier and faster.

Over time, however, the birth of the internet was recorded and the universe became a global village. The drift of information explosion with the invention of the web greatly modified the ways of communication (Andreolini, Colajanni, & Lancellotti, 2005; Lee, 2002). Our whole life is now being swapped after the invention of the internet. We can keep in touch with anyone at any time across the world (Darwish & Lakhtaria, 2011). After the 90s when SMAs were advent, people tried to make and enlarge their social circles to communicate with their loved ones and to explore more and more (Jahan & Ahmed, 2012).

According to Kaplan & Haenlein (2010), social media is “a group of internet-based applications that builds on the ideological and technological foundations of web 2.0 and allows the creation and exchange of user-generated content. It provides a facility for users to create an account and make a brief profile that introduces them to a wider audience. Also, it provides a list of users who are already using a particular social media app. However, several kinds of SMAs are freely available on the Google Play store for interested persons to download and utilize. Some of the widely used ones are Facebook, YouTube, WhatsApp, WeChat, Snapchat, Instagram, Twitter, ResearchGate, LinkedIn, Viber, Skype, Blogs, Forums, Myspace, Friendster, Flickr, Pinterest, Tumbler, Weibo, and Reddit amongst others. These SMAs have made life easier in virtually all fields of human struggle and the medical and allied sciences fields are no exception. With the use of smartphones, tablets, and other smart applications, instant access to a plethora of information becomes easy. In sum, SMAs play an unbelievable part in our lives, particularly among the new generation. For the above reason, college and university students use SMAs for their assignments, projects and dissertations, to communicate with friends and teachers or to conduct other assigned academic tasks. Hence, the need to conduct a study on the use of social media by medical students of Fazaia Ruth Pfau Medical College in Pakistan.

Statement of the Problem

Regardless of our social strata, the use of SMAs has a huge positive impact on our daily lives. Among others, they change our lifestyles as well as contribute to our educational culture, thereby compelling many individuals and groups to become attuned to their use. The medical and allied science fields are no exception because their usage of SMAs has significant effects on professionalism, patient care and medical education, and also helps them to communicate and network more easily, gain access to resources for learning, and improve their visibility and reputation. Although, the use of SMAs by medical students also comes with serious risks, such as patient privacy violations, unethical behaviour, and detrimental effects on mental health and well-being. By implication, how medical students use social media, their attitudes toward it, the advantages and disadvantages of its use for patient care and medical education, as well as the methods for encouraging medical students to use social media safely and effectively, all require further study. Hence, the need to study the kinds of SMAs mostly used by the medical students in Fazaia Ruth Pfau Medical College, Pakistan, the difficulties they encounter while using such SMAs, and the potential advantages and disadvantages of SMA use by the students of the college under study.

Objectives of the Study

The main objective of this study is to investigate the use of social media by the medical students of Fazaia Ruth Pfau Medical College, Pakistan. Specifically, the study sought to:

1. find out the major types of social media applications mostly used by the medical students of FRPMC;
2. ascertain the main reasons for using social media applications by the students of FRPMC;

3. find out the problems faced by the students of FRPMC while using Social Media applications; and
4. offer possible solutions to the problems usually faced by the students of FRPMC on the use of Social Media applications.

Significance of the study

The study is significant to both the medical field and that of Library and Information Science. More so, the study would be of value to educational stakeholders such as the government and the medical administrators in Pakistan because it is essential to understand the invaluable consequences of social media utilization, especially for medical education and practice.

Methodology

The study employed a quantitative research method using a descriptive survey research design. Quantitative research methodology deals with quantifying behaviours, opinions, attitudes, and other variables and makes generalizations from a larger population (Jackson, 2015; Cresswell, 2012). Descriptive survey research provides a clear description of a population, situation or phenomenon in a systematic, unbiased and accurate manner. The population of the study consists of 300 current undergraduate and 50 postgraduate students that got enrolled into FRPMC in August 2022, making a total target population of 350 students, as availed to the researchers by the Student Affairs Section of FRPMC. All the respondents were selected randomly via the Random Sampling method to collect the data. Questionnaire was the instrument used to elicit data through online surveys using Google forms. The respondents were approached through the official WhatsApp groups of FRPMC students. A sample size of one hundred and ninety-five (195) was drawn from the population with the aid of the Raosoft online sample size calculator. The researchers found a 95% confidence level with a 5% margin of the total population. Prior to the distribution of the questionnaire to the respondents, a draft of the questionnaire was given to two (2) research experts for critiquing and corrections, to establish the face and content validity of the research instrument while the reliability of the instrument was obtained using the test re-test method. Without discrimination of gender, all the respondents are students of FRPMC that enrolled in year 2020, 2021 and 2022 at both the undergraduate and postgraduate levels who participated as volunteers in this research as respondents.

Review of Related Literature

The review of related literature is an acceptable practice in scholarship that aims to reduce the gap between past and present studies. Khan and Shaikh (2022) conducted a study to investigate the purpose of social media presence among the medical students and teachers in Bolan Medical College, Quetta. The authors collected the data by adopting a cross-sectional method. According to their study, the majority of users use Facebook applications for academic purposes. In addition, they found social media as a study tool that helps them in various ways. They pointed out that digital technology is most important nowadays in classroom learning. Though, few of the students are more comfortable with the traditional way of learning.

Alammar et al. (2021) investigated the impact of using social media on Mental Health of the medical students of Abha city of Saudi Arabia. The author based his study on the assessment of social media utilization by medical college students and their mental health position. The data was collected through an online structured questionnaire. Results from the study showed that the majority of the respondents use social media daily for six hours and more through their mobile phones. In Abha city, Snapchat and Twitter are the commonly used applications followed by WhatsApp, Instagram and YouTube. Though, medical students of

Abha city had neutral responses on the description of their mental health. Some pointed out that they felt unhappy and depressed when they use social media. Some responded that they felt worthless. The study concluded that more efforts should be made to increase the level of awareness regarding the use of social media.

Almoamary et al. (2021) investigated medical students' learning behavior when they use social media. The author used a qualitative research method and the population was the students of the college of medicine at King Saud bin AbdulAziz University for Health Science. Data was collected from a group discussion with 10 participants each from 4 groups. Findings from the study revealed that social media sites are mostly visited nowadays by the medical students of the university because the readymade tools of these sites help them in communicating with the rest of the world. Data from the study revealed that most of the students use social media for educational purposes and for communicating with colleagues. Though, some of the students revealed that they face some technical issues and distractions while using social media. The study concluded that higher authorities should take some positive steps that could help the students in fulfilling their educational goals.

Similarly, Al Muammar (2021) evaluated the use of social media and the internet by Saudi Arabian citizens and how they use it for health information. During the covid-19 pandemic for instance, Saudi residents took health-related information, communicated with doctors, and found causes and symptoms of diseases from the internet. An online survey was used to collect the required data from the citizens of the Saudi Arabian Kingdom. The outcome of the study revealed that websites were the common source where the respondents searched for their information. This was the best way of getting information as a result of the movement restrictions caused by the pandemic. The study also revealed that the internet also helped them in decision-making regarding choosing or selecting the doctor for an appointment. The respondents were satisfied with it to get credible information about healthcare needs from concerning sites.

Bashir (2021) used a cross-sectional method to find out the kind of information that medical students share and the type of applications they use for it. The data was collected with the help of a questionnaire and content validity was checked by the subject experts. University students of Faisalabad city were the targeted audience. The author selected four universities of Faisalabad and students were selected from every department through a quota sampling method. The findings of the study revealed that bachelor's and master's students mostly used social media daily. They usually use WhatsApp, Facebook, YouTube, Instagram, Google+, Twitter, Snapchat, LinkedIn, Blogs, and Myspace but WhatsApp was the most commonly used among them. They use Whatsapp for entertainment purposes. The study also showed that the male students usually use social media for academic purposes while the female students mostly use it for religious purposes. The study showed that the University students of Faisalabad were highly engaged in social media. Hence, it was recommended that the government should set up policies that would foster the use of social media mainly for educational purposes.

Guckian et al. (2021) examined different articles regarding social media usage by undergraduate medical students. The study followed a literature review method and focused on synthesis evidence about undergraduate medical education. The authors searched the required literature by entering thirty one terms in various databases. The data was analyzed in narrative form. As in other studies, the study also indicated that Facebook is the most popular social media platform that is used among medical students, followed by Twitter and YouTube. The respondents indicated that social media improves their knowledge and helps in developing their professional skills. More so, it was the most preferred way for them to communicate with friends, family, colleagues and teachers. However, they indicated that social media platforms

can also be used for case-based and problem-based learning. The study concluded that there should be a single platform where professionals should unite and share professional ideas, knowledge and research.

Measures	Items	Frequency	Percentage %
Gender	Male	102	52.3%
	Female	93	47.7%
Age Group	18-22	154	79%
	23-27	15	7.7%
	28-32	22	11.2%
	33-37	4	2.1%
	38-42	0	0%
Batch	2020	56	28.7%
	2021	71	36.4%
	2022	68	34.9%
Nature of Programme	Undergraduate	167	85.6%
	Postgraduate	28	14.4%

Data Analysis and Results

The collected data is presented below in the form of tables with explanations.

Table 1: Demographic Data of the Respondents (N=195)

(Source: Field Report, 2022).

Table 1 above highlights the demographic data of the respondents and details from the table show that 102 (52.3%) of the respondents are male, while 93 (47.4%) of the respondents are female; 154 (79%) of the respondents are between the ages of 18-22, 15 (7.7%) of them are between the ages of 23-27, while 22 (11.2%) of them are between the ages of 28-32, and 4 (2.1%) of them are between the ages of 33-37. Further, data from the table revealed that 56 (28.7%) of the respondents are batch 2020 intakes while 71 (36.45) of them are year 2021 intakes and 68 (14.4%) of them are year 2022 intakes of the FRPMC participated in this research

Results

Research Question 1: What are the major types of SMAs used by the medical students of FRPMC?

Table 2: Types of SMAs used by FRPMC students

Social Media Applications	No. of Respondents	Percentage
WhatsApp	174	89.20%
Facebook	159	81.50%
Youtube	155	79.50%
Instagram	140	71.80%
Snapchat	97	49.70%
Tumblr	60	30.80%
Twitter	48	24.60%
TikTok	31	15.90%

Facebook Messenger	20	10.30%
Zoom	19	9.70%
Pinterest	15	7.70%
LinkedIn	14	7.20%
Researchgate	13	6.70%
WeChat	12	6.20%
Telegram	10	5.10%
Quora	10	5.10%
Google+	8	4.10%
Meetup	6	3.10%
MeWe	5	2.60%
Likee	5	2.60%
Reddit	4	2.10%
Periscope	4	2.10%
Wikipedia	3	1.50%
Flicker	3	1.50%
Four Square	3	1.50%
Skype	3	1.50%
Medium	2	1.00%
Steemit	2	1.00%
Tape Real	2	1.00%
Viber	2	1.00%
Bibsonomy	1	0.50%
Webinar	1	0.50%
MySpace	1	0.50%
Google Meet	1	0.50%

While there are different SMAs available for use, details on Table 2 above shows that the major SMAs frequently used by the students of FRPMC is WhatsApp with 174(89.2%), followed by Facebook 159(81.5%), then YouTube 155(79.5%) and Instagram 140(71.8%). More so, Table 2 above shows that Bibsonomy, Webinar, MySpace, and Google Meet, are the rarely used SMAs by the medical students of FRPMC.

Research Question 2: What are the main reasons for using SMAs by the students of FRPMC?

Table 3: Main reasons for using SMAs by the students of FRPMC

Reasons	No. of Respondents	Percentage (%)
To network and connect with professionals	94	48.20%
To get desired information on medical science.	87	44.60%
To connect with old friends	84	43.10%
To connect with others to share hobbies and interests.	72	36.90%

To stay in touch with current friends	71	36.40%
To stay in touch with family	64	32.80%
To find funny and entertaining content	59	30.30%
To make new friends	46	23.60%
To share opinion	43	22.10%
To get news and current events	42	21.50%
To share photos and videos	40	20.50%
For instant online discussions	32	16.40%

As shown in Table 3, FRPMC students use SMAs for many reasons. The table shows that the majority of the students use SMAs to network and connect with professionals, with 94 (48.2%), followed by 87 (44.6%) who indicated that they use SMAs to get desired information on medical sciences and 84 (43.1%) of the respondents who revealed the reason they use SMAs is to connect with old friends. However, the results also indicated that only 32 (16.4%) of the respondents use SMAs for instant online discussions.

Research Question 3: What are the main reasons for using SMAs by the students of FRPMC?

Table 4: Problems in using SMEs by the students of FRPMC

Problems	No. of Respondents	Percentage %
Social anxiety	87	44.60%
Exposure to content that is inappropriate	78	40%
Unnecessary advertisements	69	35.40%
Depression	68	34.90%
Slow internet	64	32.80%
Unnecessary updates	57	29.20%
Too much irrelevant contents	56	28.70%
Jealousy & constant competition	51	26.20%
Identity theft	48	24.60%
Cyber bullying	41	21%
Self-image issues	41	21%
Invasion of privacy	39	20%
Too much content	36	18.50%
Cancel culture	35	17.90%
Unrealistic views	28	14.40%
Diagnosis without experience	27	13.80%

Table 4 above highlights a list of problems usually faced by the students of FRPMC while using SMAs. It shows that 87(44.6%) of the respondents face social anxiety, 78 (40%) of the respondents said it exposes them to inappropriate content while 69 (35.4%) of the respondents indicated that the problems they usually face in the use of SMAs is the unnecessary advertisements. However, only 27 (13.8%) of the respondents indicated diagnosis without experience as the problems they usually face by the use of SMAs.

Research Question 4: What are the some possible solutions to the problems usually faced by the students of FRPMC on the use of SMAs?

Table 5: Possible solutions to the problems usually faced by the students of FRPMC on the use of SMAs

Suggestions	No. of Respondents	Percentage (%)
Don't give medical advice on social media	90	46.40%
Always password your device for security reasons and data protection	82	42.30%
Master the art of using a particular platform very well	71	36.60%
Be a responsible disseminator of information	67	34.50%
Avoid opening illegal websites	67	34.50%
Use social media as a study tool to support community	64	33%
Always remember to log out	62	32%
Measure everything but understand the role of social media	50	25.80%
Don't get stuck on followers	48	24.70%
Remember to use strong passwords	27	13.90%

Table 5 above presents some possible solutions to the problems usually faced by the students of FRPMC on the use of SMAs. The table revealed that 90(46.4%) of the respondents indicated that giving medical advice through SMAs is not a healthy activity, 82(42.3%) of the respondents suggested that SMA users should always password their devices for security and data protection reasons, and 71(36.6%) of the respondents suggested that SMA users should master the art of using a particular SMA platform very well.

Discussion

This study examined the use of social media by the medical students of Fazaia Ruth Pfau medical college, Pakistan. The primary objective of the study is to investigate the use of SMAs by the medical students of FRPMC, Pakistan. Hence, below are discussions from the findings of the study:

The medical students of FRPMC use WhatsApp, Facebook, YouTube and Instagram as the major SMA platforms. The finding is supported by that of AlMuammar et al. (2021) who reported that WhatsApp is the most common SMA among medical students. Similarly, Pickering and Bickerdike (2017) and Khan et al. (2020) reported in their study that medical students are very fond of using Facebook. More so, Alanzi and Al-Habib (2020), and AlMuammar et al. (2021) elaborated in their study that the YouTube application is very popular among medical students. However, Wang et al. (2021) reported that Twitter and Instagram platforms are popular among medical students.

The present study also showed that the students of FRPMC use SMAs to connect with their professional peers, and friends and also to get medical science-related news like the latest updates regarding clinical conferences. These findings reflect that of AlMoamary et al. (2021), and Guraya et al. (2021) who reported that medical students usually use SMAs for communication with teachers, old friends and field experts which helps them in academics and non-academic purposes. However, the findings of this study disagree with that of Khan et al. (2021) and Diniz and Melilli (2020) whose studies showed that medical students use SMAs for study learning, social support, sharing patients' sensitive data and information, disseminating information and especially for their day to day activities.

Further, the study revealed that medical students of FRPMC faced problems like anxiety, unnecessary advertisement and inappropriate content while using SMAs. This finding supports that of Madaiah et al. (2016) and Alsabaani et al. (2018) who all nibbed that students face anxiety and post content in a very non-professional way that portrays bad behaviour toward others. However, Yousuf et al. (2017) and Siddhartha et al. (2020) pointed out that the quantity of information shared, electricity failure time management, mood swings, health-related issues (mental physical and psychological), ethical issues, academic issues, trust issues and fake IDs are the major problems faced by medical students while using SMAs.

Nonetheless, FRPMC medical students suggested a few points to overcome the problems faced while using SMAs such as never giving medical advice through SMAs and always password one device for security and data protection reasons. The results oppose that of Pop et al. (2021) and Khan (2020) who suggested in their studies that proper training and ethical guidelines are needed through seminars and workshops by librarians and these protocols can be added to the curriculum or part of a syllabus of medical students that will be better for their professional and personal lives.

Key Findings

WhatsApp is the most popular social media application being used by the students of FRPMC, followed by Facebook, YouTube and Instagram.

- i. The medical students of FRPMC usually use SMAs to connect with professional colleagues and friends, and for getting medical science-related news like updates for clinical conferences.
- ii. Anxiety, unnecessary advertisement and inappropriate content are a few of the problems usually faced by the students of FRPMC whenever they use SMAs.
- iii. Refusal to give out medical advice through SMAs and to always password one's device for security and data protection reasons are some of the best solutions to the problems usually faced by the students of FRPMC on the use of SMAs

Conclusion

SMAs have come to stay especially if one considers their essential roles in our daily lives. Based on the findings of this study, it is concluded that the medical students of FRPMC usually use SMAs for WhatsApp, Facebook YouTube, and Instagram. They use such applications to connect with professional colleagues and to get medical science-related news and updates on clinical conferences. Also, findings from the study revealed that the medical students of FRPMC also experience some challenges like unnecessary advertisements, anxiety, and inappropriate content during the use of SMAs and they suggested refusing to give out medical advice through SMAs and always password one's device for security and data protection reasons as some of the best solutions to the problems usually faced by the students of FRPMC in the use of SMAs. Hence, it can be summed up that the medical students of FRPMC use SMAs mainly for their academic activities.

Recommendations

To enhance the effectiveness of SMA use for the medical students of FRPMC, the following recommendations are made:

- i. Medical students of FRPMC should utilize their SMA skills in sharing their hidden creative potential.
- ii. Students should always monitor the time they spend while using SMAs because an unlimited use of these sites can negatively affect their mental, physical and psychological health conditions.
- iii. Users of SMAs should try focusing on their goals whenever they use such platforms, to avoid unnecessary updates and irrelevant contents that would divert their attention from what is necessary.
- iv. The government or higher authorities should plan and provide proper guidelines for the use of SMAs in schools.
- v. Librarians should arrange proper training sessions like seminars or workshops on how to use SMAs effectively.

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