

THE USE OF SOCIAL MEDIA FOR PHARMACISTS' PROFESSIONAL ACTIVITIES IN UNITED ARAB EMIRATES: A DESCRIPTIVE STUDY

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ABSTRACT

Objective: The aim of this study is to assess the perception of patients and pharmacists in the United Arab Emirates about social media uses in health-care delivery.

Methods: A cross-sectional survey was distributed among patients and pharmacists residing in Dubai, Sharjah and Abu Dhabi. Their perception of social media uses in delivering health-care services was evaluated by analyzing their attitude toward the benefits and associated risks of social media.

Results: The survey study had a total of 267 participants, including 150 patients and 117 pharmacists. Based on the results, 69.2% of the pharmacists agreed that social media, text message, or e-mail can be effectively used by them to improve patient communication. For patients, the study showed that the greatest percentage (77.3%, n=116) utilize both: Disease-related information and information on drugs. About 69.2% of pharmacists chose WhatsApp to be the most used platform, and 60.7% of patients prefer using Instagram as a health-care platform.

Conclusion: The use of professional development tools for social networking is likely to continue to evolve. Integrating social media with the practice of pharmacy and patient care will have a positive impact on achieving optimal patient care.

Keywords: Social media, Pharmacists, Medical information, UAE, Internet, Networking.

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INTRODUCTION

Social media are interactive internet-based networks of websites and applications that enable the sharing of user-generated content, including comments, digital photos, videos, and data. Popular examples today include Facebook, Instagram, Twitter, and YouTube. Each platform has distinctive characteristics that health-care providers can utilize to advance their role in public health [1,2].

Social media have been around for the best part of 40 years in the past decade; however, social media have grown to be used worldwide. In 2019, it is estimated that there are approximately 2.77 billion social media users around the globe who spend, on average, 2.5 h of their day on social media using an average of 8.9 platforms [3-5].

The internet has become an ideal source to discover health information for health-care providers and patients. Worldwide, about 4.5% of all internet searches are health-related. Pharmacists have been using the internet skillfully for years to access reliable health information resources such as government-sponsored (e.g., PubMed), organization-specific (e.g., Cochrane Database of Systematic Reviews), or commercial (e.g., Medscape, RxList) resources. Social media have also been used in pharmacy to advertise products and services to consumers through websites. An example of services provided through the internet includes "Ask-the-pharmacist" service that allows consumers to send questions about their medicine to a pharmacist through e-mail [6,7].

Studies conducted to assess the use of social media by health-care professionals, including pharmacists, reported that a small percentage of them use social media for educational and professional purposes, despite having at least one account on social media. For instance, a cross-sectional study conducted among pharmacists in the United States of America reported that more than 75% of responders were using social media daily, but only 16% used social media for

professional activities and 10% of them used it for educational purposes [8].

The use of social media for pharmacists' professional activities in the United Arab Emirates (UAE) remains unquantified. This study was conducted to measure the prevalence of social media use by pharmacists and its impact on pharmacist-patient interaction in UAE. It also examines the practices and attitudes of pharmacists using social media.

METHODS

This study was a cross-sectional survey that was conducted among licensed pharmacists and members of the general public in the Emirates of Abu Dhabi, Dubai, and Sharjah. This study has been approved by the University of Sharjah Research Ethics Committee.

Questionnaire development

A scoping review of the studies that examined the use of social media within pharmacy practice was undertaken. The studies identified informed the development of the questionnaire [8-10]. The face validity, content validity, and appropriateness of the questions were assessed by members of the faculty of pharmacy at the University of Sharjah (n=6) and practicing pharmacists (n=5). The scale's reliability was assessed by calculating Cronbach's alpha coefficient, which was equal to 0.78.

The questionnaire was developed in English and Arabic and contained 15 questions that were divided into three sections. The first section included questions regarding demographic characteristics of the participants (i.e., gender, ethnicity, level of education, and living status). The second section contained questions, which mainly explored the practices of using social media among participants. The third section covered the attitude of the participants toward social media.

Study participants and data collection

A convenient sample of 534 pharmacists and individuals from different communities in the Emirates of Abu Dhabi, Dubai, and Sharjah were selected to participate in the study. Self-administered questionnaires were distributed to the participants over a period of 4 months, from January 2019 until April 2019.

Ethical approval

Approval for distributing the questionnaires was obtained from the University of Sharjah Research Ethics Committee.

Data analysis

The data were analyzed by using the Statistical Package for the Social Science "SPSS," Version 20. Categorical variables were reported as numbers and percentages and Chi-Square test was used to assess the correlation between variables. A $p < 0.05$ was taken as a cutoff for statistical significance.

RESULTS

Participant sociodemographic characteristics

A total of 267 of 534 questionnaires were returned with a response rate of 50%. Table 1 presents the sociodemographic characteristics of the respondents.

One hundred seventeen pharmacists were included in this study. Majority were male (55.6%, $n=65$) and non-Arab pharmacists (54.7%, $n=64$). There was a greater number of responders in the age group of 26–40 years old (68.4%, $n=80$) and 41–59 years old (14.8%, $n=17$) compared with age group 18–25 years old (12.5%, $n=15$) and age group 60 years old and above (4%, $n=5$).

Table 1: Sociodemographic characteristics of survey respondents

Sociodemographic characteristic	n (%)
Total	267 (100.0)
Pharmacists	117 (43.8)
Gender	
Male	65 (55.6)
Female	52 (44.4)
Age	
18–25	15 (12.8)
26–40	80 (68.4)
41–59	17 (14.8)
60 and above	5 (4.0)
41–59	17 (14.8)
60 and above	5 (4.0)
Ethnicity	
Arab	53 (45.3)
Non-Arab	64 (54.7)
General population	150 (56.2)
Gender	
Male	34 (22.7)
Female	116 (77.3)
Age	
18–25	96 (64.0)
26–40	37 (24.7)
41–59	14 (9.3)
60 and above	3 (2.0)
Ethnicity	
Arab	132 (88.0)
Non-Arab	18 (12.0)
Level of education	
Less than high school	1 (0.7)
High school or equivalent	27 (18.0)
Undergraduate	86 (57.3)
Postgraduate	36 (24.0)
Educational background	
Medical	79 (52.7)
Non-medical	71 (47.3)

One hundred fifty participants were from the general public. The majority of the general public respondent were female (77.3%, $n=116$) and Arab (88%, $n=132$). The highest number of responders was undergraduate (57.3%, $n=86$) and in the age group 18–25 years old (64%, $n=96$). Furthermore, 52.7% of participants had a medical background.

Pharmacists' use of social media

According to this study, 79.5% of the pharmacists reported that they use social media on a daily basis and 12.8% of them agreed that they use social media every other day.

Moreover, internet access was available in 96.6% of pharmacies in Sharjah, Abu Dhabi, and Dubai, while 3.4% did not have internet access.

When pharmacists were surveyed about their use of social media to communicate with their patients, the majority (61.5%, $n=72$) reported that they use this as a communication tool. Nevertheless, (21.4%, $n=25$) pharmacists agreed that they do not communicate with patients by social media and (17.1%, $n=20$) pharmacists do not communicate with them using social media but are willing to do that in the future. Most of the social media users among pharmacists used it for answering patient questions (52.1%, $n=37$). Thirty-five percent of users obtained patient medical history information and 12.8% of users obtained current and past medication lists using social media.

Fig. 1 shows the most common social media platforms that pharmacists use or would like to use to communicate with their patients. Based on the chart, WhatsApp is the most used platform (74.4%) or preferred to be used in the future (69.2%), whereas Twitter is the least used one (5.1%).

Perceptions of pharmacists regarding social media

Based on the results, 69.2% of the pharmacists agreed that social media could be used to improve the communication between pharmacists and patients, while only 30.8% disagreed. A high percentage of pharmacists (51.3%) thought that social media should be more frequently used at their workplace. A small number of participants claimed that social media takes too much time to communicate with patients (48.7%).

Regarding pharmacists' opinions about using social media by patients to search about medical knowledge, large portion of respondents thought that social media improves patient's medical knowledge (65%).

Pharmacists in the age group of 26–40 years were statistically significantly more likely to agree that social media improves patient communication ($p=0.001$), accept that social media can be an established method of communication with patients ($p=0.021$), and that social media can improve patient knowledge ($p=0.018$).

General public use of social media

The majority of the candidates (94%, $n=141$) stated that they use social media every day, while 4% ($n=6$) of them declared that they use it every other day.

The participants were asked if they have any chronic illness, 7% ($n=10$) of participants reported living with chronic illness, while 93% ($n=140$) did not.

The largest percentage of responders (77.3%, $n=116$) use social media to know both disease-related information, and information on medication. However, 4.7% ($n=34$) of responders reported that they search for other health-related information.

Perceptions of social media

About 52% ($n=78$) of participants supported the opinion that accessing health-related information should be permitted but with close monitoring, while 44.7% ($n=67$) said that it should always be permitted, and only 3.3% ($n=5$) reported that it should not be allowed.

Fig. 2 presents the most common social media platforms that candidates preferred to use in communication, most people favor using Instagram (60.7%, n=91) and small minority (12.7%, n=19) chose e-mail.

Fig. 3 illustrates how easy it is for patients to understand the medical information on the internet. Sixty percent thought that it is somewhat easy to understand, (36.7%, n=55) declared that it is very easy, while a small fraction (3.3%, n=5) reported that it is hard.

The survey results showed that the majority of the general public participants (86%, n=129) do not trust the medical information available on social media.

Moreover, a high percentage of participants (84.7%, n=127) thought that the social media revolution increased their medical knowledge, while only a small percent (15.4%) of them opposed the former opinion.

DISCUSSION

The findings of this study showed that social media use is prevalent among pharmacists who practice in Dubai, Sharjah, and Abu Dhabi, with most pharmacists, surveyed reporting using social media on a daily basis. The majority of pharmacists also reported using it for communicating with their patients about information related to their therapy. A number of social media platforms are used by the surveyed pharmacists and members of the general public. However, there was an overwhelming majority among the general public respondents for not trusting the medical information available on social media platforms.

It is very clear that the field of health care is evolving in the way it operates with the presence of social media [2-5,7]. According to this study, around 80% of participating pharmacists and 94% of the

general public use social media on a daily basis. This finding was in agreement with a previous cross-sectional survey study conducted at Purdue University College of Pharmacy to evaluate the usage patterns of social media, where the majority of respondents reported that they use social media on a daily basis. These results support the fact that social media plays an important role in people's life in recent decades [11,12].

This survey showed that 86.3% of the pharmacies sampled in Dubai, Sharjah, and Abu Dhabi had internet connections, which gave them easier access to social networking websites. Furthermore, when pharmacists were asked if they do communicate with patients about information related to their therapy through social media, over three-quarters of pharmacists were either already doing this or willing to do that.

This study revealed that the most common social media platforms used by the members of the general public surveyed were Instagram (60.7%) contrary to the results of a study done in Tilburg University, Netherlands, in 2013, where Twitter was reported to be the most used platform by patients (59.9%) and candidates claimed that it was used for increasing knowledge and exchanging advice. The difference between the results of these two studies could be explained by the time gap between them, and the fact that Instagram has developed a more active user base over Twitter [13-16]. On the other hand, most of the pharmacists (74.4%) preferred using WhatsApp, which is also different from the results found in a study conducted by Purdue University, where Facebook prevailed as the most used platform of social media by pharmacy preceptors (60%) [17].

In this study, only 7.3% of the general public respondents suffered from chronic diseases. This low percentage is because most of the

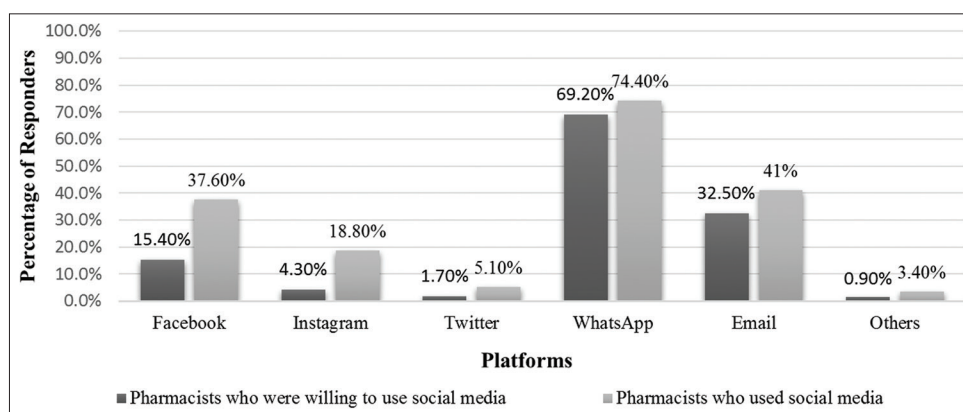


Fig. 1: Most common social media platforms used by pharmacists

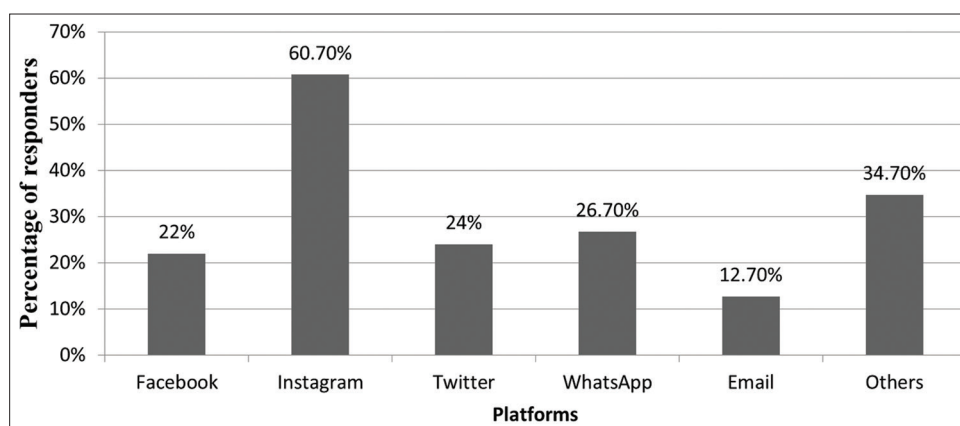


Fig. 2: Most common social media platforms used by patients

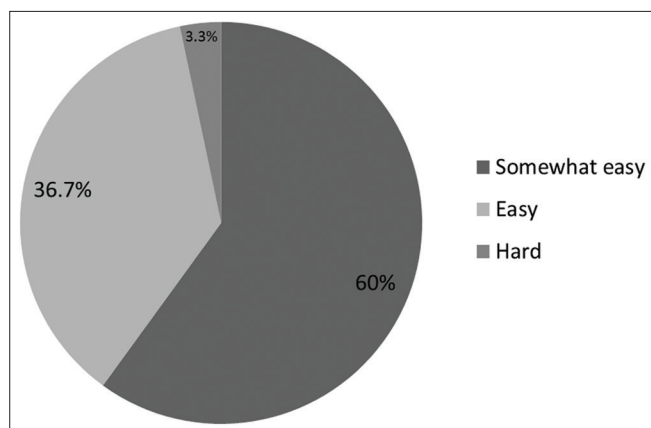


Fig. 3: General public's opinion regarding how easy it is to understand the medical information available on the internet

participants were young, belonging to the age group of 18–25 years. Furthermore, only 2.7% of those with chronic diseases subscribed to internet peer support groups related to their condition. These patients might have chosen to subscribe to support groups to communicate with other patients that suffer from the same condition. It might also allow them to stay up to date with all concerns related to their illness. Moreover, patients that participated in this study were found to usually use social media to obtain information on medications and to seek disease-related information. This supports the findings of a survey study conducted in Manchester Pharmacy School, where it was found that social media is widely used by health-care professionals and patients to obtain medication safety information [18].

As for the patients' opinion on trusting medical information available on social media, 86% of them reported that they do not trust them, while only 14% said that they do trust this information. It is clear that patients do realize that the sources of the medical information presented on social media might not be reliable since it is accessible for anyone to add or post any medical material without supervision. A study carried out in Manchester, UK, noted that the accuracy of the information on medication obtained from non-regulated sites might be good. Yet, there is concern about the validity of social media data and resources. Moreover, it is often incomplete and poorly cross-referenced, so pharmacists should consider that when they provide information on medication safety to their patients [19].

In this research, 60% of patient participants reported that it is somewhat easy to understand medical and health-related information on the internet, whereas only 3.3% thought it was hard or difficult to understand. In a cross-sectional survey study done at Memorial Hospital of Rhode Island, Brown University School of Medicine, participants pointed the internet as the second most useful and comprehensible source of health information after health-care providers [20-22].

Strength and limitations

This is the first survey conducted in the UAE that identifies the extent and pattern of social media use among pharmacists and in communicating medical information with their patients. However, this study was conducted in three out of 7 cities in UAE, so the results of this research may not be generalizable.

CONCLUSION

Overall, the study findings provide some insights regarding the use of social media in medical information dissemination among the UAE population. Social media are presently being used across a variety of platforms and by various health-care providers to enhance access to and improve engagement with patients. Integrating social media within

the practice of pharmacy and patient care might have a positive impact on achieving optimal patient care.

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AUTHORS' CONTRIBUTIONS

All authors researched data and wrote the manuscript. All authors read and approved the final manuscript.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest in this work.

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