

# *Use of social media by healthcare providers in Saudi Arabia: reasons and usefulness for their professional development*

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**Abstract—** The objective of this study was to examine the use of social media by healthcare providers in Saudi Arabia, and the reasons and usefulness for their professional development. In order to carry out this cross-sectional study it was distributed an online survey among 400 healthcare providers from different hospitals. More than half of the respondents were females and belonged to different cities from Saudi Arabia. 29% of the healthcare providers worked as allied health personnel, 28% of them were nurses, 19% physicians, 13% pharmacists and 13% administrative personnel. The respondents used the following social media: Instagram (52%), Twitter (51%), WhatsApp (50%), Snapchat (50%), YouTube (49%), Facebook (31%), LinkedIn (3%) and Telegram (2%). The key reasons for using social media were new actualizations (53%), knowledge sharing (51%), networking (32%) and professional development (29%).

**Keywords—** networks, survey, motives, helpfulness, knowledge sharing, promotion

## I. INTRODUCTION

The use of social media has extended to almost all regions of the earth, influencing the majority of human activities including the healthcare providers system consisting of physicians, pharmacists, nurses, bio analysts, laboratory technicians, X-ray technicians, administrative staff of hospitals and clinics, and other physicians assistants and allied health personnel [1].

As it is known, social media have changed the model of communication among people around the world and have transformed the way in how healthcare providers communicate, access, exchange information, dialogue and discuss health topics with their colleagues and peers, patients, and other health consumers [2,3]. This process is done rapidly and efficiently through the internet and other communication systems.

Besides, social media have contributed to the dissemination of scientific, technological and humanistic knowledge, which has allowed these communication tools to serve as instruments for education and professional training of healthcare providers [4,5] The application of these tools in the field of education is extensive and versatile and can be used in a wide range of professional activities [6] Likewise, social media are useful for the exchange and updating of knowledge information related to health, clinical procedures,

research, training of medical personnel, for communication with the public, health promotion, and for professional networking [5].

In addition to the above described benefits offered by the usage of social media by healthcare providers, several authors have reflected on the risks involved in the use of these tools such as the breaching of confidentiality and privacy of patients or the dissemination of inaccurate, incomplete or unreliable information [5,7]. It is interesting to observe how a relatively high number of authors are concerned about the ethical aspects related to the use of social media by healthcare providers. In this sense, the aim of this study was to investigate the use of social media by healthcare providers, and the reasons and usefulness for their professional development.

## II. METHODS

In order to investigate the use of social media by healthcare providers and the reasons and usefulness for their professional development, we carried out a cross sectional exploratory study and conducted an online survey among 400 healthcare providers of different hospitals. The data was collected by means of a questionnaire survey created using Google Forms and a link was distributed online through the following social network sites: Facebook, Twitter, Instagram, Snapchat and WhatsApp [8]. The survey was designed based on references from the literature [9]. The questionnaire survey consisted of 15 questions. 9 questions were directed to get personal information about the participants, and 6 questions were focused to obtain information connected to professional use of social media.

## III. RESULTS

A total of 114 healthcare providers from different hospitals in Saudi Arabia responded to the survey. According to Table 1, the demographic information indicates (54%) were females, and the majority of them (53%) were between 31 and 40 years old. The participants belonged to Dammam and Khobar cities of Saudi Arabia, and more than half of respondents were from this country. From the table, we can observe that 28% of the healthcare providers worked as allied health personnel (lab technician, x-ray technician, dietitian and physiotherapist), 27% were nurses, 19%

physicians, 13% pharmacists and 13% administrative personnel. Most of them had an educational background lower than the Master degree level, and the majority had less than 10 years of experience.

TABLE I. DEMOGRAPHIC INFORMATION (N= 114)

		N	%
<b>Gender</b>			
	Female	62	54
	Male	52	46
<b>Age</b>			
	20 – 30 years	33	29
	31 – 40 years	60	53
	41 – 50 years	18	16
	> 50 years	3	2
<b>Region</b>			
	Dammam	34	24
	Khobar	24	21
	Qatif	8	7
	Makkah	16	14
	Jeddah	7	6
	Riyadh	12	11
	Other	12	11
<b>Institution</b>			
	Governmental	101	89
	Private	13	11
<b>Educational level</b>			
	Diploma	26	22.8
	Bachelor	51	44.7
	Master	23	20.2
	Doctorate	12	10.3
	Other	2	2
<b>Speciality</b>			
	Physicians	22	19
	Nurses	30	27
	Pharmacists	15	13
	Allied health personnel	32	28
	Administrative personnel	10	13
<b>Experience</b>			
	0 – 2 years	34	30.6
	3 – 5 years	40	39.3
	6 – 10 years	23	20.2
	>10 years	12	10.5
<b>Nationality</b>			
	Saudi	100	88
	Non-Saudi	14	12

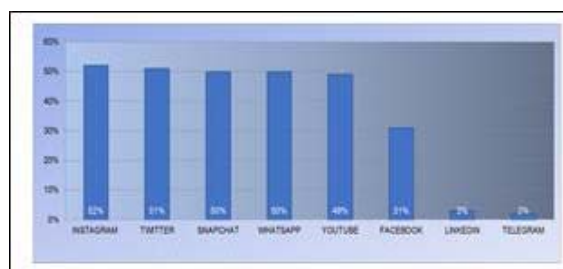


Fig. 1. Social media platforms used by healthcare providers (n=114)

The percentages of use of social media by healthcare providers are shown in Figure1. From the survey, it can be detected that 71% of the respondents employed for professional purposes the following social media platforms: Instagram, Twitter, WhatsApp, Snapchat, YouTube, Facebook, LinkedIn and Telegram. Also, in Figure 2 we observed that the time spent by the participants using these tools was variable, and most of them spent up to 3 hours daily.

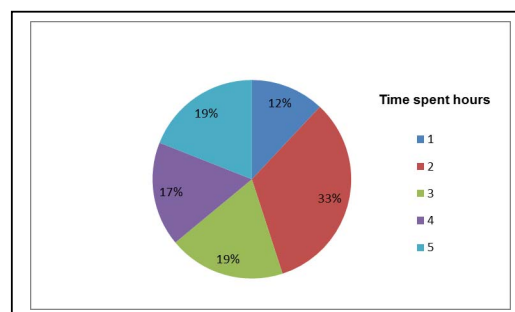


Fig. 2. Time spent daily by the participants using social media (n=114)

Similarly, the reasons for using social media professionally by the participants are displayed in Figure 3.

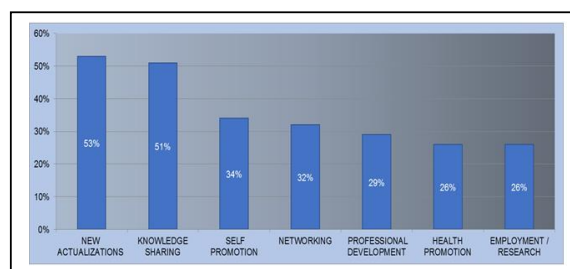


Fig. 3. Reasons for using social media by healthcare providers (n=114)

Regarding the rate of use of social media for professional purposes, Table 2 suggests that almost half of the respondents (46%) employed YouTube for this intention, most of the time.

TABLE II. RATE OF USE OF SOCIAL MEDIA FOR PROFESSIONAL PURPOSES (N=114)

		Never (%)	Rarely (%)	Most of the time (%)	All of the time (%)
Facebook		44	32	18	5
Twitter		29	37	32	3
Instagram		32	37	27	4
YouTube		12	34	46	7
SnapChat		34	33	23	9
WhatsApp		5	10	31	12
Other		53	29	14	4

On the other hand, in Figure 4 is presented the opinion of the respondents (extremely useful, very useful, somewhat useful, and not at all useful) about the usefulness of social media for professional development.

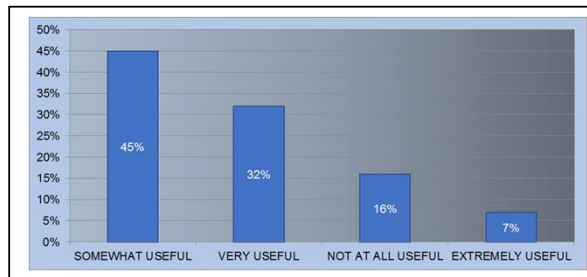


Fig. 4. Usefulness of social media to improve professional development (n=114)

In addition, in Table 3 is expressed the usefulness of social media to enhance some facets related to professional development such as knowledge about profession, critical reasoning, and creativity, among others attributes.

TABLE III. USEFULNESS OF SOCIAL MEDIA TO IMPROVE SOME FACETS RELATED TO PROFESSIONAL DEVELOPMENT (N=114)

	Not at all useful	Somewhat useful	Very useful	Extremely useful
Improving knowledge about profession	8%	13%	13%	15%
Improving clinical reasoning skills	12%	12%	14%	12%
Improving critical thinking skills	15%	12%	12%	11%
Improving clinical skills	16%	11%	13%	9%
Improving problem solving skills	12%	12%	13%	14%

Improving creativity	11%	13%	12%	14%
Improving clinical/professional decision making	11%	13%	13%	12%
Improving patient outcome	14%	13%	11%	12%

#### IV. DISCUSSION

The findings of this research show the use of social media for professional purposes among healthcare providers, and suggest the reasons and usefulness for their professional development.

In this sense, the survey participants of this study used the following social media platforms in this order: Instagram (52%), Twitter (51%), WhatsApp (50%), Snapchat (50%), YouTube (49%), Facebook (31%), LinkedIn (3%) and Telegram (2%). We can observe that the percentage of use of Instagram, Twitter, WhatsApp, Snapchat and YouTube were similar, and approximately half of the participants employed these social media tools. On the other hand, LinkedIn and Telegram were the least used tools by the respondents. The results indicated that 71% of participants employed the mentioned social media platforms for professional purposes; the rest of the respondents used social media tools for other different purposes. Similarly, Barry et al detected that 61.1% of participants used Twitter for professional purposes[10]. Likewise, in another preceding study, 71.4 % of respondents considered that Twitter improved medical knowledge and clinical practice[11]. It can be observed that Twitter was used in all of these researches; but, the percentage of Twitter use observed in our investigation is lower than in the mentioned studies.

According to more than half of the participants the main reasons for using social media were new actualizations (53%) and knowledge sharing (51%). In a preceding study, the findings indicated that knowledge exchange and networking were the principal motives for professional development [10]. We can appreciate that knowledge exchange and knowledge sharing were considered as one of the main reasons for professional development in these two studies.

About the usefulness of social media for professional development, we observed that almost one third of the participants (32%) suggested that these tools were very useful for professional development, 7% of surveyed people reflected that social media were extremely useful for the intended purpose, and about half of the respondents (45%) thought that social media websites were somewhat useful for this purpose. Only, 16% of participants believed that social media were not at all useful. These results indicate that in general, most of the participants thought that social media were useful for professional development of healthcare providers in Saudi Arabia. Alike, in a similar previous research it was reported that 70.6% of healthcare providers used social media tools for professional development [10].

Likewise, the opinions of the respondents about the usefulness of social media for improving several facets

associated with professional development were also examined, and for all of these facets we found similar outcomes to the following cases. For example, about improving knowledge, 41% of respondents believed that social media were useful (extremely useful, very useful or somewhat useful) to improve knowledge about the profession; however, 15 % of participants thought that these tools were not at all useful for this purpose. Regarding this issue, other previous studies reported that social media enhanced knowledge of healthcare providers [10,11]. The results of these studies coincide with our findings. As well, 33% of the surveyed people considered that social media were useful (extremely useful, very useful or somewhat useful) to improve clinical skills. However, 16% of them opined that social media were not at all useful for this intention. In relation with this subject, a study informed that social media improved clinical practice [11].

## V. CONCLUSION

The outcomes of this research show that more than half of the healthcare providers from Saudi Arabia used social media for professional purposes, and the majority of them considered that these tools were useful for professional development. The main reasons for using social media were new actualizations and knowledge sharing. Based on these results and the increasing use of social media in this region , it may be suggested that that there is a great potential to enhance the professional development of the healthcare providers.

## REFERENCES

- [1] What is a health care provider? Available from: <https://www.verywellhealth.com/what-is-a-provider-1738759>. Accessed September 16, 2018.
- [2] Parke J. Take two and tweet me in the morning. *Applied Clinical Trials*. 2018.
- [3] Ventola L. Social media and health care professionals. *P T*. 2014 ; 39(7): 491-499.
- [4] Bellamy L .Health care providers perspectives on social media in professional practice. Master thesis. Montana State University. 2013.
- [5] Antheunis M, ,et al. Patients' and health professionals' use of social media in health care: Motives, barriers and expectations. *PEC*.2013; 92(3):426-431.
- [6] Surani Z, et al. Social media usage among health care providers. *BMC Res Notes*. 2017; 10: 654.
- [7] Hamm M, et al. Social media use by health care professionals and trainees: a scoping review. *Academic Medicine*. 2013; 88 (9):1376-1383.
- [8] Impact of the Social Media on Healthcare Provider. Available from: [https://docs.google.com/forms/d/e/1FAIpQLSeFXyIT\\_TboH4LLA0YHcurgg2UaB\\_Zs7YadDilGcpt7hL5cKg/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeFXyIT_TboH4LLA0YHcurgg2UaB_Zs7YadDilGcpt7hL5cKg/viewform)
- [9] Alsobayel H. Use of social media for professional development by health care professionals. *JMIR Med Educ*. 2016; 2.
- [10] Barry A, ,et al. Professional use of social media by pharmacists. *Can J Hosp Pharm*. 2015; 68(1): 22–27.
- [11] Almaiman S,et al. The prevalence of using social media among healthcare professionals in Saudi Arabia. *Stud Health Technol Inform*. 2015;213: 263-6.