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RESEARCH ARTICLE

The Use of Social Media in Delivering Rehabilitation Services by Healthcare Professionals at a Rehabilitation Healthcare City in Riyadh, Saudi Arabia

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Abstract:

Background:

The growing popularity of social media has been welcomed by medical professionals. With an increase in the number of healthcare providers addressing healthcare issues by using social media, such as Facebook, Twitter, YouTube, Snapchat, and Instagram, as well as communicating and educating patients on public health, this new technology has a substantial impact on improving the overall public health.

Objective:

The primary purpose of this study was to examine the challenges and benefits of using social media in delivering rehabilitation healthcare services from the perspective of healthcare workers at a private institution in a rehabilitation healthcare city in Riyadh, Saudi Arabia.

Methods:

A cross-sectional study was conducted among rehabilitation department staff working at a selected rehabilitation healthcare city in Riyadh, Saudi Arabia. An online web-based questionnaire was developed based on previous studies. The survey was distributed to the employees of the rehabilitation department *via* their work email addresses.

Results:

The study population was 108 healthcare providers. Overall, 77.78% of participants had used social media for over five years. Participants reported using social media for numerous purposes. The majority (35.19%) used it for education purposes, 30.56% used it for networking, and others used it for other things, such as communication with patients, online consultations, and job hunting. Furthermore, 49.07% of participants were already using social media to deliver rehabilitation services.

Conclusion:

The study found that most healthcare providers agreed on the benefits of utilizing social media in the healthcare sector. Most of the benefits were expanding the knowledge of both healthcare workers and patients, easier communication with patients, and also a cost-effective means of communication. However, some of the concerns that were raised by healthcare providers were regarding patients' privacy and confidentiality, the dissemination of false or misleading information, and legal and ethical considerations.

Keywords: Social media, Rehabilitation services, Healthcare professionals, Benefits, Challenges, Medical professionals.

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1. INTRODUCTION

The development of the World Wide Web (WWW) in 1990 by Tim Berners Lee and other researchers working at the

Conseil European pour la Recherche Nucleaire (CERN) in Switzerland has substantially impacted the manner in which people interact. The capacity and motivation for social interaction are essential components of what it means to be human [1].

The proliferation of social networking sites (SNSs), commonly referred to as social media sites (SMSs), has

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significantly impacted millions of people globally [2]. Over the course of human history, social communities have flourished, with individuals being empowered by a sense of belonging to share their knowledge, ideas, and experiences with one another. The development of social media coincides with ongoing global technological progress. Social media can be defined as "a group of internet-based applications (apps) that allow the creation and exchange of user-generated content," and it has rapidly become an indispensable component of the lives of billions of people globally. Furthermore, social media has impacted virtually every industry imaginable [1].

It is widely acknowledged that social media platforms (SMPs) are among the most effective communication platforms available in the 21st century. Specifically, social media is evolving into an important tool in the healthcare field as it enables users to access and share information, connect with HCPs, and communicate with coworkers, patients, or the public on matters pertaining to health. Social media also encourages patient empowerment by increasing patients' knowledge and putting them in a position where they can manage their own healthcare needs, thereby putting them in control of their own healthcare [1]. The use of social media not only fosters a culture of participation, but it has been demonstrated to make health promotion and the selfmanagement of chronic conditions easier [3]. However, social media is associated with several issues, such as the privacy of patient data, low quality of information, and the breach in the relationship between the client and healthcare provider [4 - 6].

Over 80% of internet users search for health information online, particularly information pertaining to diet and nutrition, physical activity, signs and symptoms, therapy, and public health interventions [7]. Studies have investigated how to enhance health outcomes *via* social media; however, findings have been inconsistent. It is not yet obvious which components of successful interventions have led to their success [8].

Based on the most recent data, the most popular SMPs in the Gulf Cooperation Council (GCC) are Facebook, Twitter, and YouTube. The advanced socioeconomic conditions of these countries, as well as their highly functional networking and communication infrastructure, have enabled the widespread use of such platforms [9].

SMPs are helpful tools for healthcare providers (HCPs) that can be utilized for a variety of purposes, including education, professional development, job hunting, health promotion, personal promotion, communication with patients, colleagues, and students, dissemination of health information, discussion of public health policies, and analysis of various issues related to general health topics. Numerous medical subspecialties, such as pediatrics, radiology, oncology, pathology, cardiology, emergency and critical care, nursing, surgery, dentistry, pharmacy, and healthcare quality, use social media for many purposes [10].

The application of social media in the medical field has not been extensively studied in Saudi Arabia. According to the findings of a survey carried out in Riyadh, 70.6% of HCPs use social media to enhance their professional development, networking ability, and knowledge exchange. A previous study that investigated the attitudes of HCPs toward the utilization of social media in patient care found that most HCPs support the use of social media as an effective tool to provide patient education and public awareness [11].

The use of social media by physical therapists in the planning and delivery of patient care presents an opportunity to increase the likelihood that patients will engage in the healthy behaviors prescribed to them. Physical therapists have referred to social media as a straightforward channel to communicate with patients, address their concerns, and disseminate information [12]. A previous study proposed that physical therapists could leverage SMPs to engage in user-generated dialogues with their patient populations, thereby enhancing care delivery models and contributing to the evolution of the physical therapist practice [13]. The treatment of chronic disorders and diseases that are not spread by direct contact is currently the primary focus of most health systems globally. This presents a significant opportunity for physical therapists to engage patients in health promotion and disease management in the coming years. There are numerous examples of social media being utilized to engage customers, and research suggests that patients are ready for social media to be integrated into the way healthcare institutions provide treatment [12].

The use of social media by HCPs for provider-patient contact involves answering questions posed by patients, conducting online consultations, and proactively presenting advice and health information to the users who follow their social media accounts [4]. HCPs have used SMPs to encourage learning, increase the theoretical and practical knowledge of the profession, conduct research, and publish relevant scientific information. Several studies have indicated the significance of social media in knowledge sharing and education continuation, teaching and learning in medical education through participatory models, and clinical research, as well as its possible use as an open-learning resource in medical education [11].

Studies have indicated positive professional behaviors and attitudes about the education of patients and the promotion of their health [11]. George et al. surveyed the opinions of U.S. medical students regarding the beneficial impact of social media in increasing communication with patients [14]. Overall, 44% indicated that they should and would reply if a patient sought their medical advice over Facebook [14]. In a crosssectional survey in Saudi Arabia, over half of the HCPs felt that SNSs were beneficial to be used in healthcare services as they are an appropriate medium for educating patients and increasing public health awareness [15]. Research on Saudi Arabian orthopedic doctors indicated that they are more inclined to publish basic medical knowledge online as opposed to providing specific treatment suggestions [16]. However, most expressed an openness to the possibility of making greater use of social media for the purposes of teaching, sharing knowledge, and improving patient outcomes. Another study indicated that, in terms of patient communication, 65.4% of urologists believed that social media increased patient education, and 55.1% felt it increased patient communication [17].

Social media could be a beneficial instrument for improving patient-centered care as it is an effective, economic, and widespread means of communication that is sensitive to patient requirements. Patients suffering from arthritis benefit greatly from participating in self-management programs conducted through Facebook. These programs successfully increase patient knowledge levels and self-efficacy. SMPs enable a patient-centered approach that provides emotional support, advice, inspiration, and empowerment for patients, as well as enables them to connect with other patients. In addition, the use of social media can improve professional networks and growth, encourage collegiality and communities of practice, and contribute to the dissemination of information and research pertaining to public health [18].

It is possible that social media, if handled in an intelligent manner, could prove to be an important instrument for promoting healthcare and expanding the expertise of HCPs [19]. Social media can offer significant benefits in the treatment, education, and health programs provided to patients [11].

In Saudi Arabia, the average age of social media users is 18-35, with 83% of individuals in this age group using social media [11]. In light of these user numbers, it is becoming increasingly difficult to overlook the potential role that various online SMPs could play as potential avenues for the promotion of public health. Twitter, Facebook, YouTube, Snapchat, and Instagram have all emerged as popular SMPs for addressing health-related issues. These types of platforms are becoming more widespread in many parts of the world, including countries that are members of the GCC, namely Saudi Arabia, the United Arab Emirates, Kuwait, Oman, Qatar, and Bahrain; it is estimated that over 54 million people live in these countries [9].

The Saudi healthcare sector aims to enhance the efficacy and quality of preventive and therapeutic healthcare services by streamlining processes and diversifying communication channels. This is consistent with the steady growth that has occurred in several different sectors, including the healthcare sector. However, to achieve this, greater emphasis must be placed on patient participation by lowering the obstacles that prevent effective communication by using SMPs [9].

The primary purpose of this study was to examine the challenges and benefits of using social media in delivering rehabilitation healthcare services from the perspective of healthcare workers at a private institution of a selected rehabilitation healthcare facility in Saudi Arabia. The sub-objectives were to determine the benefits of utilizing social media among healthcare workers, to identify the challenges of using social media to deliver rehabilitation services among healthcare workers, and to recommend solutions for the identified challenges.

2. METHODOLOGY

This research aimed to investigate the benefits and difficulties associated with using social media to deliver rehabilitation services. A cross-sectional study was conducted among rehabilitation department staff working at the selected rehabilitation healthcare city in Riyadh, Saudi Arabia. An online web-based questionnaire was developed based on previous studies [10, 11, 20, 21]. The survey was distributed to the employees of the rehabilitation department *via* their work email addresses after being pilot-tested by four HCPs to ensure its clarity and error-free nature. Data collection was carried out in November 2022 after obtaining the required approvals. Participants provided consent to participate voluntarily in the study. Responses were collected using Google Forms, a common tool for conducting online surveys.

2.1. Questionnaire Description

The questionnaire consisted of 23 questions designed to study the use of social media for professional development among HCPs and to analyze their perspectives on its effectiveness and consequences. The survey consisted of five sections: (1) eligibility criteria, (2) sociodemographic data, (3) general use of social media, (4) HCP perceptions of social media benefits, and (5) HCP perceptions of social media challenges.

In the first section, the eligibility requirements for employment in the rehabilitation department were outlined. The inclusion criterion was employees working in the rehabilitation department at the selected rehabilitation healthcare city. Respondents from other departments or those working in other hospitals were excluded.

The second section involved the collection of demographical and professional data. Participants provided information about their age, nationality (Saudi, Non-Saudi), gender (male, female), marital status (single, married, divorced, widow, other), educational level (diploma, bachelors, masters, other), employment status (full-time, part-time), profession (physical therapist, occupational therapist, speech therapist, rehabilitation assistance, other), population served (adult, pediatric, both), and the number of years working in the rehabilitation field (< 1 year, 1-5 years, > 5 years).

The third section included several questions regarding social media use: 1) what is the purpose of using social media, in your opinion? (education, networking, job hunting, communication with patients, online consultations, other); how many years have passed since you started using social media in general? (< 1 year, 1-5 years, > 5 years); have you used social media to deliver rehabilitation services?; how many years have passed since you started using social media with patients? (< 1 year, 1-5 years, > 5 years); and which of the following social media networks do you use in the rehabilitation field? (Facebook, Twitter, Instagram, Snapchat, YouTube, TikTok, other).

The fourth section involved participants answering questions related to their perceptions of the benefits of social media for rehabilitation care delivery on a 5-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). Several questions comprised this section: Can rehabilitation services be delivered through social media?, Is social media a good tool to deliver rehabilitation care?, Could social media help in delivering rehabilitation care?, Does social media help in improving patients' knowledge?, Does social media help patients that live in a rural geographical area?, Does social media help provide patients with emotional support?, Does social media help improve your knowledge?, Does social media help improve communication with your patients?, Does social media help improve communication with other healthcare providers?, And do you think social media would help you in your specialty to deliver health information?

The fifth section contained questions regarding the challenges of social media: Can social media breach patient privacy?, Can social media be used to spread poor quality information?, Is social media a potential risk to patient health status?, Can social media break the trust between healthcare providers and patients?, Could social media damage your professional image?, Is social media a potential risk to healthcare professionals ethically?, Is social media a potential risk to healthcare professionals legally?, And do you think social media can negatively affect patient adoption of some practices related to your specialty?

The target sample was 290 participants. Considering a 95% confidence level with a 5% margin of error, the minimum sample population was determined to be 166 responses. Descriptive statistics was used to present the data in frequencies, percentages, and means. Data are presented in tables.

3. RESULTS

In total, there were 194 respondents in the current study. However, 24 were disqualified due to ineligibility. A further 62 responses were excluded as the responses were incomplete. Therefore, the final sample size was 108 HCPs from the selected rehabilitation healthcare city.

Most participants were 20-29 years old (52.78%). The other participants (47.22%) were divided among other age groups (30-39, 40-49, > 50) to analyze the influence of age on the results. No participants were over 60 years old, as reflected in Table 1. Most participants were single (55.56%) and held a bachelor's degree (86.11%). No participants had intermediate or low education levels. Physical therapy was the most prevalent profession (49.07%), followed by occupational therapy (43.52%). Most participants have treated the adult population (62.04%); only 20.37% of participants were involved in pediatrics. Regarding years of experience, most participants had 1-5 years of experience (54.63%), while 44.44% had over five years of experience. Only one participant had one year of experience or less. Most participants were Saudi Arabian (72.22%). There was no significant difference in gender, with 53.70% and 46.30% of participants identified as female and male, respectively.

It was assumed that the participants' general use of social media would have a significant impact on this study. Overall, 77.78% of participants had used social media for over five years. Participants reported using social media for numerous purposes. The majority (35.19%) used it for education purposes, 30.56% used it for networking, and others used it for other things, such as communication with patients, online consultations, and job hunting. Furthermore, 49.07% of participants were already using social media to deliver rehabilitation services. Table **2** shows social media usage among healthcare providers.

Table 1. Demographic data of participants (N = 108).

Characteristic	n(%)
Age (Years)	-
20-29	57 (52.78)
30-39	33 (30.56)
40-49	14 (12.96)
> 50	4 (3.70)
Nationality	-
Saudi	78 (72.22)
Non-Saudi	30 (27.78)
Gender	-
Male	50 (46.30)
Female	58 (53.70)
Marital Status	-
Single	60 (55.56)
Married	45 (41.67)
Divorced	2 (2.78)
Widow	0(0)
Other	0 (0)
Education Level	-
Diploma	3 (2.78)
Bachelor	93 (86.11)
Post graduate degree Other	12 (11.11)
	0 (0)
Employment Status	-
Full-time Part-time	107 (99.07) 1 (0.93)
	1 (0.93)
Profession	-
Occupational therapist	47 (43.52)
Physical therapist Speech therapist	53 (49.07) 6 (5.56)
Rehabilitation assistance	2 (1.85)
Other	$ \begin{array}{c} 2(1.05) \\ 0(0) \end{array} $
Population Served	-
Adult	67 (62.04)
Pediatric	22 (20.37)
Both	19 (17.59)
Years of Experience in the Rehabilitation Field	-
< 1 year	1 (0.93)
1-5 years	59 (54.63)
> 5 years	48 (44.44)
Years Working at the Rehabilitation Healthcare City	-
< 1 year	14 (12.96)
1-5 years	55 (50.93)
> 5 years	39 (36.11)
Primary Purpose for Using Social Media	-
Communication with patients	24 (22.22)
Education	38 (35.19)
Networking	33 (30.56)
Job hunting	21 (19.44)
Online consultations	22 (20.37)
Other	11 (10.19)

The number of years participants had utilized social media directly affected the degree to which they felt social media had impacted the delivery of rehabilitation healthcare services. Most participants had used social media with patients for 1-5 years (66.04%). Many social media programs and applications are available on the internet; however, there are several that are more commonly used to deliver rehabilitation services. As shown in Table **3**, Twitter was the most common social media

application used among participants (30.19%), followed by Instagram (26.42%), and then Snapchat and YouTube (both 22.64%). When asked if rehabilitative services could be offered *via* social media, 50% of participants agreed, while 25.93% strongly agreed. Regarding whether participants felt social media was an effective method for providing rehabilitative care, 44.44% agreed, and 25.93% strongly agreed. Only three participants (2.78%) disagreed.

When asked whether they felt social media could enhance patient knowledge, 49.07% of respondents agreed, and 41.67% strongly agreed. When asked if they felt social media could aid patients living in rural areas, 49.07% of participants agreed, and 34.26% strongly agreed. Regarding whether they felt social media could provide emotional support to patients, 46.30% of participants agreed, and 38.89% strongly agreed. Regarding their own knowledge, 55.56% of participants agreed that social media have helped them improve their knowledge, while 28.70% strongly agreed. Most respondents (44.44%) agreed that improving patient communication was vital for improving patient health, while a significant proportion (22.22%) strongly agreed.

Table 2. Social media usage.

Social Media Usage	n (%)
Years Since Starting using Social Media*	-
< 1 year	2 (1.85)
1-5 years	22 (20.37)
> 5 years	84 (77.78)
Previous Utilization of Social Media for Delivering Rehabilitation Services *	-
No	55 (30.93)
Yes	53 (49.07)
Years of using Social Media with Patients **	-
< 1 year	9 (16.98)
1-5 years	35 (66.04)
> 5 years	9 (16.98)

Note: *Percentage of total column of N =108

**Percentage of total column of n = 53

Table 3. Social media networks used to deliver rehabilitation services (n = 53).

Social Media Networks Used in the Rehabilitation Field	n (%)
Facebook	6 (11.32)
Tik Tok	2 (3.77)
Twitter	16 (30.19)
Instagram	14 (26.42)
YouTube	12 (22.64)
Snapchat	12 (22.64)
All of the above	1 (1.89)
Other	6 (11.32)

Reflecting upon their relationships with other HCPs, 59.26% of participants agreed that social media improved their communication with other HCPs, and 29.63% strongly agreed. Furthermore, 55.56% of respondents agreed that social media helps HCPs disseminate health information pertaining to their

specialties, and 26.85% strongly agreed. These results indicate that most participants agreed that social media use is associated with benefits. These results were statistically significant (p < 0.05).

In response to the question regarding whether the use of social media violated the privacy of patients, 51.85% of participants agreed and 11.11% strongly agreed. Additionally, 55.56% of participants agreed that information of poor quality could be propagated through social media, with 25.93% strongly agreeing and only 0.93% strongly disagreeing. Regarding social media's risk to patient health statuses, 47.22% agreed that it posed a potential risk and 10.19% strongly agreed. Regarding whether social media could break the trust between HCPs and patients, 27.78% agreed, 5.56% strongly agreed, and 1.85% strongly disagreed.

In response to whether they felt social media could damage their professional image, 27.78% of the participants agreed, 5.56% strongly agreed, 30.56% disagreed, and 1.85% strongly disagreed. Regarding whether social media posed an ethical risk to HCPs, 36.11% agreed, 7.41% strongly agreed, 18.52% disagreed, and 2.78% strongly disagreed. Concerning whether social media posed a legal risk to HCPs, 36.11% agreed, 6.48% strongly agreed, 14.81% disagreed, and 1.85% strongly disagreed.

Lastly, when participants were asked if social media could negatively affect patient adoption of practices related to their speciality, 57.41% agreed, 7.41% strongly agreed, and 7.41% disagreed. Table **4** shows the perspectives of healthcare providers regarding social media benefits and challenges in delivering rehabilitation services.

4. DISCUSSION

The use of SMPs and the internet is increasing at a rapid rate globally. The current study found most participants to already use social media to deliver rehabilitation services. Furthermore, they felt that it has aided in improving their communication with patients and the provision of patient education. These findings align with those of Surani *et al.* [21], who concluded that the use of social media in healthcare settings for community participation, health promotion, and patient education is constantly expanding.

According to the current findings of our survey, the most popular SMPS among HCPs working at the selected rehabilitation healthcare city were Twitter, Instagram, YouTube, and Snapchat. These findings are consistent with those of Alshakhs and Alanzi [11], who reported that Instagram, Snapchat, and YouTube dominated the social media market among healthcare quality workers in Saudi Arabia.

Regarding age, most participants in the current study who used social media were under 40. This is consistent with the findings of previous studies that have shown the number of people who use social media to decline with increasing age [22]. Similarly, Surani *et al.* [21] found healthcare employees under the age of 40 to utilize social media more frequently and spend a significantly greater amount of time on social media compared to workers over the age of 40.

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Table 4. Healthcare workers perspective on social media benefits and challenges in delivering rehabilitation services (N =	
108)	

	n (%)					
Item of Measurement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Benefits of Using Social Media for Deliver	ing Rehabilitat	ion Services	*			
Ability to deliver rehabilitation services through social media	0	1 (0.93)	25 (23.15)	54 (50.00)	28 (25.93)	
Social media is a good tool to deliver rehabilitation care	0	3 (2.78)	29 (26.85)	48 (44.44)	28 (25.93)	
Social media is helpful in delivering rehabilitation care	0	1 (0.93)	21 (19.44)	63 (58.33)	23 (21.30)	
Social media is helpful in improving patients' knowledge	0	0	10 (9.26)	53 (49.07)	45 (41.67)	
Social media helps patients living in a rural geographical area	0	2 (1.85)	16 (14.81)	53 (49.07)	37 (34.26)	
social media helps patients for emotional support	0	1 (0.93)	15 (13.89)	50 (46.30)	42 (38.89)	
social media helps in improving healthcare providers' knowledge	0	1 (0.93)	16 (14.81)	60 (55.56)	31 (28.70)	
Social media is helpful in improving communication with patient	0	5 (4.63)	31 (28.70)	48 (44.44)	24 (22.22)	
Social media is helpful in improving communication with other healthcare providers	0	0	12 (11.11)	64 (59.26)	32 (29.63)	
Social media is helpful in specialty to deliver health information	0	0	19 (17.59)	60 (55.56)	29 (26.85)	
Overall Chi-square Fit Value	$X^2 = 59.9825, DF = 27, P = 0.000$					
Challenges of Using Social Media for Delive	ering Rehabilita	ation Servic	es*			
Social media breaches patient privacy	0	11 (10.19)	29 (26.85)	56 (51.85)	12 (11.11)	
Social media spreads poor quality information	1 (0.93)	2 (1.85)	17 (15.74)	60 (55.56)	28 (25.93)	
Social media is a potential risk to patient health status	0	5 (4.63)	41 (37.96)	51 (47.22)	11 (10.19)	
Social media breaks the trust between healthcare provider and patients	2 (1.85)	26 (24.07)	44 (40.74)	30 (27.78)	6 (5.56)	
Social media damages my professional image	2 (1.85)	33 (30.56)	37 (34.26)	30 (27.78)	6 (5.56)	
Social media is a potential risk to healthcare professionals ethically	3 (2.78)	20 (18.52)	38 (35.19)	39 (36.11)	8 (7.41)	
Social media is a potential risk to healthcare professionals legally	2 (1.85)	16 (14.81)	44 (40.74)	39 (36.11)	7 (6.48)	
Social media can negatively affect patient adoptions of some practices related to specialty	0	8 (7.41)	30 (27.78)	62 (57.41)	8 (7.41)	
Overall Chi-square Fit Value		$X^2 = 138.4$	6, DF = 28	, P = 0.000		

Note: * Percentage of total raw

Patients' access to healthcare information and other educational resources can be improved with social media [23]. The use of social media has numerous benefits, including improved decision-making, enhanced experiences, increased disease control through improving patients' personal healthcare capabilities, and the correction of dangerous health behaviors [6]. The findings of the current study were similar, as most participants agreed that social media could improve patients' understanding and health outcomes. Recent research indicates that physicians are starting to take an interest in communicating with their patients online [6]. This is in line with the current study results, where a large proportion of participants agreed that social media had enabled better communication with their patients. Househ [24] reported approximately 60% of physicians to be in favor of interacting with patients through social media to provide better patient education and health monitoring, stating that these efforts will result in "better education, increased compliance, and better outcomes."

The use of social media in professional practice has been hypothesized to facilitate more meaningful connections with patients, colleagues, and researchers. This is partially attributable to the fact that the use of social media in professional practice gives clinicians an online voice, allowing the profession to enhance its reputation and provide reliable health information [25]. The majority of participants in the current study agreed that their communication with other HCPs had improved as a result of using social media. By evaluating the patterns of communications exchanged between users of online health communities, Goh *et al.* [26] revealed that SNSs can be instruments of social equity by facilitating the dissemination of health knowledge and the improvement of skills. Correspondingly, in the current study, most participants agreed that using social media had improved the health and knowledge of patients living in rural areas by facilitating better communication.

While social media can be used to improve patient care and knowledge, it also poses several risks to patients [27]. Therefore, to realize the full potential of social media as a positive mediator of health, the effects of inaccurate or misleading content, confirmation bias, and issues related to security and privacy must be overcome [8]. The majority of participants in the current study agreed that social media could impact patient privacy. This is consistent with the findings of Langenfeld *et al.* [28], who reported that over half of the surveyed Chinese urologists had published information or photographs of patients on social media; however, only 5% had obtained the patients' permission before publishing.

A significant number of participants in the current study agreed that social media could cause ethical issues, including risk awareness, lack of information clarity regarding patient treatment, and the possible dissolution of professional boundaries [29]. HCPs have several concerns regarding the authenticity of health-related internet content. More than half of the participants in the current study agreed that the distribution of low-quality content could harm patients. Furthermore, a substantial proportion agreed that social media could tarnish their profession's reputation, although some disagreed.

The use of SNSs by medical professionals and their associated ethical risks necessitate usage regulation [30]. Social media use among HCPs has implications for the providerpatient relationship and public trust in the profession, as well as potential legal challenges. In the current study, some participants agreed that social media could break the trust between HCPs and patients. HCPs must actively contribute to this conversation, as inappropriate use of SNSs (*e.g.*, complaints about patients or a lack of empathy and respect) may result in legal and/or ethical issues that could damage their organization's reputation [20,31]. Studies investigating HCPs whose patients' privacy was breached due to their ignorance of ethical implications have found that these HCPs were uninformed about social media privacy settings [32].

There are both advantages and disadvantages to disseminating health information through social media [27]. The use of social media by HCPs may impact the security and confidentiality of patient records, patient agreements, employment practices, medical certification and licensing processes, and could lead to breaches of HCP-patient boundaries, among ethical issues. Therefore, healthcare organizations should develop social media use guidelines for employees [33]. The majority of studies investigating the use of social media in a healthcare setting have advocated for the creation of ethical, legal, and technical guidelines and the formalization of a code of conduct or governing legislation that addresses these concerns [34, 35]. Furthermore, the creation of such guidelines and legislations will help instruct HCPs and academic researchers in the appropriate use of various SMPs [36, 37]. Future studies should investigate research techniques and develop practice recommendations that may address privacy concerns related to the use of social media in health research, intervention, and patient-provider engagements, with the aim of encouraging and enhancing the use of social media in healthcare practice and research [12]. In the absence of best practice evidence-based guidelines for the use of social media in rehabilitation delivery, clinicians and researchers should use their judgment to dictate what is and is not appropriate for use.

CONCLUSION

Healthcare delivery has typically been accessible *via* specialized healthcare centers, home care, and public facilities. As the world evolves, it is critical that healthcare delivery evolves as well. Since the introduction of social media in the 1990s, more healthcare services have begun to utilize this technology to enhance healthcare outcomes.

This study examined the challenges and benefits of using social media for delivering rehabilitation healthcare services among HCPs working at a specialized rehabilitation healthcare facility in Riyadh, Saudi Arabia. The study found that HCPs agreed on the benefits that utilizing social media offers, particularly regarding the improvement of communication between HCPs and patients, provision of online consultations, and improved patient education and emotional support. Furthermore, participants agreed that social media had helped to expand their knowledge base. However, participants had several concerns regarding the use of social media to deliver rehabilitation services, primarily concerning patient privacy and confidentiality, the spread of inaccurate information, and legal and ethical considerations. To overcome these challenges, healthcare organizations should formulate best practice guidelines for the use of social media and provide HCPs with appropriate training. Furthermore, organizations should create a social media policy that ensures that HCPs comply with all applicable laws and regulations.

One limitation of the current research is that a crosssectional study design was used that involved a limited number of HCPs from a single rehabilitation hospital. This may limit the generalizability of findings to a wider population, thereby restricting their applicability. In addition, the sample size was smaller than the minimum sample size calculated. However, despite these shortcomings, the research also has certain strengths. As it was conducted at a specialized hospital, the participants had a high level of knowledge and expertise regarding rehabilitation care. Despite the limitations of this study, this study provides a foundation for future studies. Social media is pervasive in most individuals' daily lives; therefore, investigating its clinical utility is crucial so that the HCPs can develop best practices. Future research should look into developing and providing guidelines for social media use to improve treatment outcomes.

LIST OF ABBREVIATIONS

SNSs	=	Social Networking Sites	
SMSs	=	Social Media Sites	
SMPs	=	Social Media Platforms	
GCC	=	Gulf Cooperation Council	
HCPs	=	Healthcare providers	

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The ethical approval of the research was obtained from the Institutional Review Board IRB at Sultan Bin Abdulaziz Humanitarian City in Riyadh, Saudi Arabia, with study code # 78/SBAHC/MSc/RH/2022 on November 03, 2022.

HUMAN AND ANIMAL RIGHTS

NNo animals were used that are the basis of this study. All the humans involved in this research adhered to the tenets of the Helsinki Declaration of 1975, as revised in 2013.

CONSENT FOR PUBLICATION

Participants provided consent to participate voluntarily in the study.

AVAILABILITY OF DATA AND MATERIAL

The data supporting the findings of the article is available

on reasonable request from the corresponding author [B.B].

STANDARDS OF REPORTING

COREQ guidelines were followed.

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CONFLICT OF INTEREST

The authors declare no conflicts of interest, financial or otherwise.

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