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Benefits of Social Media Platform in Healthcare

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Abstract—The existence of technology such as social media platforms have led individuals and health experts to use it as a supplementary tool. Providing healthcare purposes through social media platforms can facilitate and encourage individuals to gather information as well as acquire social support. Integrating social media platforms into healthcare context is a developing area of behavioral research. It is also found that there is a limited number of studies that reported the benefit acquire from the utilization of social media platforms in healthcare context. Thus, this study reported several benefits that individuals can acquire from the usage of social media platforms for healthcare context.

Keywords—Social media platform, healthcare

I. INTRODUCTION

There is no doubt that the global emergence of social media platforms such as Facebook, Twitter, Instagram, WhatsApp, and YouTube have empowered individuals to utilize these platforms as an unprecedented medium of communication. Social media platforms provide a channel to share, create and exchange information [1] in various types of forms such as words, images, videos, voice or document files [2].

According to [1], the benefits of delivering information through social media platforms are the minimization of several kinds of barriers, such as time and cost to deliver the materials. Also, vast number of audiences are now able to share information across great distances [1, 3]. Basically, social media platforms can be described as any group of digital media which are based on technological foundations which allow communicating, exchanging and creating usergenerated information [4, 5].

As with most sectors, the rise in the number of users of social media platforms worldwide from 2.28 billion to 2.46 billion [39] has opened up new opportunities for individuals, health experts, or organizations to make use of these

technologies. The increasing number of chronic diseases including obesity – increase from 105 million in 1975 to 641 million in 2014 () and diabetes – increase from 108 million in 1980 to 422 million in 2014 () has led researchers to take advantage of social media platforms as an additional channel [6] to educate and communicate the public. The new technologies are also seen a means of improving the public's awareness [7], as well as encouraging the public to practice a healthier lifestyle and positive behaviour change [8]. This has been especially the practice in the widespread use of social media in a healthcare context to inform or discuss about topics such cancer [8-10], obesity [11-13], smoking cessation [14], mental illness [15] and physical activity [16].

In providing an interactive and user-centric interface which enables both anonymity and access to large number of audiences [3]. It is no surprise that social media platforms are considered a suitable medium for healthcare purposes. Using social media platforms for healthcare purposes could provide a positive effect on the general population, as well as to the patient. However, there have been only a limited number of studies conducted on the benefits of social media platforms in the healthcare area [17]. Similarly, it is reported that there are few studies which discuss online communities on social media platforms in a healthcare context [18]. Therefore, this review aims to explore the benefits which individuals, patients, and the general public can acquire from the use of social media platforms in healthcare, in addition to discussing aspects of the broader online healthcare community which is now an established part of social media platforms.

II. METHODOLOGY

This study has made use of previous literature from several number of related databases including SCOPUS, Web of Science, Taylor and Francis, and JMIR Publication. However, there are limited number of studies that discussed the benefit of social media related to healthcare context. Therefore, researcher has decided to extend the searching strategies by using Google Scholar in order to identify the other related literatures that can be used for this study. The related papers were gathered from years of 2010 up to 2017, in a span of seven years.

In this study, the related keywords such as, "Social Media" AND "Health" AND "Benefits", "Social Media" AND "Healthcare" AND "Advantages" and as well as "Social Media" AND "Online Communities" AND "Health" were used with the aim to look for literature that related to benefit of social media in healthcare context as well benefit of social media in online communities. Meanwhile, the searching process were included title, abstract, and keywords. Also, the selected references from the related article is reviewed with the purpose to obtain potential similar studies. Finally, the searching results were presented well in form of discussion and details explanation in an objective manner of the literature.

III. SOCIAL MEDIA PLATFORMS RELATED TO HEALTHCARE CONTEXT

The interactivity of social media platforms naturally provides several functions such as posting and updating a status, uploading photos, videos or audio files [2]. In fact, several aspects were identified in prior studies as typical of the usage of social media platforms for healthcare purposes: to deliver supplemental information [1, 19] which would originally be delivered through face-to-face modality (e.g: clinic visits); to remind and maximize the retention in the program conducted (e.g: follows-up) [20, 21]; to provide additional resources (e.g: exercise video) [21]; as well as more generally to encourage communication and interaction [21] among patients, health experts, donors and survivors [22] and also general public.

IV. BENEFITS OF SOCIAL MEDIA PLATFORMS IN HEALTHCARE CONTEXT

Although there has been much popular commentary on the negative impact of social media use, it is indisputable that the impact is largely positive. This positive impact is reflected in the healthcare sector. Several studies have shown that social media platforms facilitate patients to share and acquire health information and knowledge [1, 10, 23] such as symptoms, with health experts such as medical doctors or medical researchers [24]. A review study showed that Facebook and Twitter are used by both researchers and patients with the aim of accessing information related to epilepsy [25] while Facebook was utilized by the patients, survivors, and donors in order to share and exchange cancer information [26]. While conducting a review study, [17] found that health information shared on social media platforms is usually targeted at a range of populations; from the general public to specific patients. Communicating health information to the general public is aimed at increasing knowledge and awareness of diseases [10]. for example, for diabetics, publishing and posting status or videos regarding the right amount for sugar intake in daily life and the risks that might happen if right intake is not followed [18] and thus encourage them to practice a healthy lifestyle. Other studies reported about a WhatsApp group which is used among a team of health experts in Tanzania with the aim of increasing cancer awareness and disseminating the right information [27] to the public.

Communicating health information to the general population also has the aim of reducing the stigma associated with conditions such as epilepsy [17, 28] and obesity [13, 29]. Usually, these types of conditions are surrounded by misinformation [28], but the prevalence of social media, provides an opportunity for specific healthcare education campaigns aimed at stigmas [28] thereby leading ultimately, it is believed, to increase of patient self-esteem [29].

Furthermore, communicating health through social media platforms provides the healthcare sector with opportunities to understand the public's current attitudes and knowledge regarding particular healthcare conditions [28]. In a study conducted by [28], for example, a YouTube video related to epilepsy examined user reactions in the comments section, in order to gauge the public's attitudes about, and knowledge of this condition. Whereas some of the comments showed empathy, it was notable how other comments found epilepsy is a comedy thing [28].

The general purpose of communicating health information to patients through social media platforms is, of course, to inform them about their diseases' symptoms, signs, treatments, and medications [17]. It is widely used by the patients who are suffering cancer [8, 26], diabetes [18] and obesity [30]. A review study conducted by [31], revealed that social media platform is one of the technologies which are widely utilized to facilitate cancer patients with the purpose to enhance and improve the understanding regarding cancer prevention and treatment [31]. Another review study found widespread usage of Twitter among cancer patients with the purpose of sharing their cancer symptoms, diagnosis, and treatments [26].

Several studies highlighted another common function of social media platform in healthcare; provision of access to social support, motivation, and encouragement [1, 17, 32, 33]. It is generally agreed that these platforms can provide valuable peer and social support, including emotional and informational support for patients as well as for the general public [17]. Sometimes, the benefits of social support acquired through the usage of social media platforms are not offered by offline health programs such as weight loss programs [33]. A previous study reported that informational support was in fact the most frequent type of social support accessed and delivered by weight loss participants in utilizing Twitter [34]. Also, Facebook has been used in mental illness research to provide support among mental illness patients [15]. The content posted on Facebook by other mental illness group members is perceived as beneficial for these patients in managing their illnesses [15].

Likewise, the acquisition of social support via social media platforms may assist patients in acquiring positive health changes [35], thus, lead to improving health outcomes [35, 36].

More generally, it has been emphasized in the literature how the integration of social media platforms with healthcare behaviors triggers and encourages positive health behavior outcomes [7, 10, 33]. An example is the encouraging of regular exercise and the reduction of sugar consumption, which is achieved through the posting of sugar intake information certain social media platforms. This indirectly triggers a positive effect by reducing the chances to acquire chronic diseases, such as diabetes. Other prior studies utilized Facebook and WhatsApp platforms to provide a medium for supporting quitting behaviour [14] such as providing social support and discussion forums of nicotine replacement therapy [37].

Fig. 1 shows a summary of benefits that can be obtained by patients and the general public through social media platforms in the healthcare context.

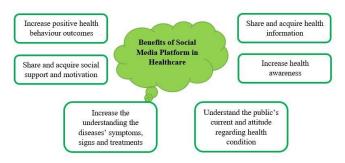


Fig. 1. Benefits of Social Media Platform in Healthcare Context

V. ONLINE COMMUNITY VIA SOCIAL MEDIA PLATFORM FOR HEALTHCARE CONTEXT

Online communities exist in the form of social media platforms such as Facebook Groups and WhatsApp Groups, where a forum is created for interpersonal communication and interaction with a varied range of individuals [38]. An added benefit of these groups for healthcare is that patients are able to interact in many-to-many interaction mode [39] compared to one-to-one interaction. Patients are provided with a place to share, exchange and acquire information or ideas easily with other group members that might be undergoing similar situations or problems [40].

Prior research conducted by [41] showed that the Facebook Group is used as one of the additional tools for the paediatrics weight loss-related programs. It is used with the purpose of providing weight loss information and support to participants. By using the Facebook Group, these participants corroborated that they were thereby encouraging to engage with weight loss-related programs [41, 42] which they believed facilitated their weight loss efforts.

Online communities using social media platforms typically chose health forum discussions for the opportunity to acquire and share advice, experience, and support together [33]. These forum discussions tend to involve polling,

images, video and also the use of website links, to encourage patients to share the progress of their conditions. It is worth noting that such communities always provide a nonjudgmental medium for patients to share their problems [29] for example; in the sharing of weight-related problems and personal efforts, with an emphasis on facilitating patients to improve their self-esteem.

As agreed by [1], online community via social media platforms provided patients with several major themes such as social support, motivation, personal experiences, information and encouragement [1]. These are beneficial and useful for those living with chronic conditions such as cancer [8, 22], diabetes [43], and as well as for weight loss condition [11]. One review study revealed that participants recruited in the online community through social media decreased more weight compared to the participants that kept their progress alone [44-46].

The community exists through social media platforms such as Facebook Group which includes survivors, donors, and other patients [22] have encouraged patients to perceive them as a source of support [13] as they also undergo the similar situation together. Thus, it created a comfort and inspire medium for patients to freely share their experience and problem with the rest of group members. Additionally, it also serves a convenient place to connect with various networks of a peer, thus facilitate for the particular patient to access to a wider array of supportive services [38].

For example, review study conducted by [38] found that a numerous number of the Facebook group is created for cancer patients to acquire and obtain social support from the survivors and donors. Whereas, a prior study [18], created a Facebook diabetes group which consisted diabetes patients and caregivers. Hence, as a result, the Facebook group found to provide diabetes' patients active interaction such as to exchange diabetes information as well as to provide encouragements and support among diabetes patients [18].

Besides that, it opens the opportunity for organization and individuals such as health organization and health promotion professional to make use social media platforms potential for reaching large audience [3] to disseminate health information [38] as well as to promote the health campaign. As revealed by [22], breast cancer group in social media platform is created by breast cancer organization to promote local and national events related to awareness of breast cancer [22] and to share related breast cancer information [38].

CONCLUSION

As a summary, in this review, it is briefly explained the benefits of integrating of social media platform in healthcare context. It is revealed that the benefits are covered up the range from general public to patients [17]. Using social media platforms for healthcare in general public are believed to facilitate them to increase awareness related to health and disease. Also, it is targeted to educate the general public to understand and reduce the public stigma regarding particular disease [28] in order to motivate and encourage

patients to keep strong to fight with their disease. Whereas, for patient perspective, integrating social media platforms for healthcare purposes give an opportunity for them to acquire, share and exchange information [8] and social support [34]. As mentioned by [26], individuals who facing a chronic condition such as cancer, they really need a support group such as Cancer Facebook Group with the purpose to facilitate them acquire a positive encouragement and motivation. Collectively, this review also briefly described the existence of an online community in social media platforms that believed to help patients to acquire social support and motivation. However, there is still a limited number of previous studies that applying and integrating social media platforms for healthcare context. Thus, it is recommended future research should aim the usage of social media platforms in healthcare context.

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