SOCIAL MEDIA PREFERENCE ON HEALTH-RELATED INFORMATION AMONG DIABETIC PATIENT AT THE TERTIARY HOSPITAL IN KUALA LUMPUR

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ABSTRACT

Social media represent one kind of digital channel that could be effective in sharing health information to improve self-management and promoting a positive behavior change. This cross-sectional study was conducted among 174 respondents aiming to determine media preference on health-related information among diabetic patients at the tertiary hospital Kuala Lumpur. A simple random sampling method was utilized in this study. The questionnaires developed by Van be Belt et al. (2013) and Gabarron et al (2018a) was used to determine the use of the internet and media for health information. All data were analyzed using Statistical Package for Social Science Ver.26 for windows. As a result, the platform of a social media channel to share and search for health information was WhatsApp (73.6%), Facebook (67.8%), Instagram (18.4%), and Twitter (17.2%). In this study, Type 1 diabetes mellitus preferred Facebook more, and type 2 diabetes mellitus preferred using WhatsApp for searching and sharing health information. The media preference was not significantly related to the type of diabetes mellitus, health information searched or shared on media, and frequency of media usage. The most searched or shared health-related information was about the medication and/or side effects of the medication, self-care, and symptoms of related disease. In conclusion, WhatsApp is the preferred social media channel, and diabetes' media users rarely surf health-related information. These will benefit to lighten the burdens of hospital admission as well as it can enhance the public's knowledge on promoting health care.

Key words: Diabetes mellitus, Facebook, Twitter, Instagram, WhatsApp

INTRODUCTION

Media has remained an essential platform to reinforce social awareness regarding public health. Regardless of any time or any location, the media allows the users to share unrestricted and unattended access to unfiltered information (Iftikhar & Abaalkhail, 2017). Social media are manipulated to retrieve general information, education. In Malaysia, social media users are about 24.6 million with the favored social media platform being Facebook (97.3%) followed by Instagram, YouTube, Google, Twitter, and LinkedIn (Malaysian Communications & Multimedia Commissions, 2018). Therefore, it is advantageous for improving health outcomes in diabetics by utilizing social media as a supporting tool for diabetes intervention (Gabarron, Arsand & Wynn, 2018a).

Social media such as Facebook, WhatsApp, and Twitter can offer extraordinary benefits and permits the three ways of communication (Van de Belt et al., 2013). Indeed, individuals could explore their experiences, feelings, exchanging ideas about health issues with relatives, friends, and expert content worldwide. Some studies had shown a beneficial effect of media on health care, self-management, physical fitness program, and behavior-related outcomes (Kear, Harrington & Bhattacharya, 2015; Laranjo et al., 2014; Shepherd et al., 2015; Williams & Schroeder, 2015). Besides, the health-related information shared on social media enhances the knowledge of diabetic patients to practice self-care and improve self-management (Gabarron et al., 2018a). Hence, it would promote positive behavior changes, especially among diabetic patients. On the other hand, some people will narrate their stories or interview regarding diabetes care with other people who share the same illness in the social media (Alzahrani & Alanzi, 2019). Indeed, they communicate to exchange knowledge on diabetic awareness in Facebook, WhatsApp or Twitter.

Previous studies on health-related information on social media were very general and did not focus on specific diseases such as diabetes mellitus or cancer patients (Van de Belt et al., 2013). Indeed, little is known about the media preference reflected by health-related information received in the media among diabetics in Malaysia. Therefore, a study was required to be conducted for determining the media preference reflected by health information received on media among diabetics in the tertiary hospital.

METHODOLOGY

This quantitative cross-sectional study was conducted among 174 respondents at the tertiary hospital in Kuala Lumpur. The aim of this study is to determine media preference on health-related information among diabetic patients at the tertiary hospital Kuala Lumpur as well as to examine the relationship between the type of diabetes mellitus, frequency of media usage, and media preference. A simple random sampling was implemented in this study and those who were non-internet users and patients diagnosed with Gestational Diabetes Mellitus were excluded from the study. Eligible participants had to be type one or type two Diabetes Mellitus who were able to understand Malay or English language. This study used a self-reported questionnaire modified from Van de Belt (2013) and Gabarron et al. (2018b). The question consists of eight questions relating to health information, frequency of media usage, and media preference.

RESULTS

The results of this study indicated the majority of respondents were male (52.9%), aged 45-64 years old (55.2%), and educated until secondary school (40.2%). In terms of occupational status, most of the respondents were unemployed (36.8%). The majority of the respondents were type 2 diabetes mellitus (n = 128, 73.6%).

Table 1: Socio-demographic data of respondents (n = 174)

Characteristics		Frequency	Percentage (%)
Gender	Male	92	52.9
	Female	82	47.1
Age	18 – 44 years old	38	21.8
	45 – 64 years old	96	55.2
	> 64 years old	40	23.0
Education Level	Primary school	6	3.4
	Secondary school	70	40.2
	Undergraduate	54	31.0
	Postgraduate	44	25.3
Occupational Status	Unemployed	64	36.8
	Government	58	33.3
	Private	34	19.5
	Self-employed	18	10.3
Diagnosis Type	Diabetes type 1	46	26.4
	Diabetes type 2	128	73.6

- **Types of Media Preference**

In this study, 73.6% of the respondents preferred to use WhatsApp and 69.8 % of them chose Facebook as a platform of media to share and search for health information. Meanwhile, 18.4% of respondents use the Instagram platform, and 17.2% use Twitter as their media choice to browse information about health or health care.

Table 2: Types and frequency of usage social media preference (n = 174)

Types of Media Preference	Frequency	Percentage (%)
Facebook	118	67.8
Twitter	30	17.2
Instagram	32	18.4
WhatsApp	128	73.6

- **Relationship between the type of diabetes mellitus, frequency of media usage, and media preference.**

In this study, respondents with Type 1 diabetes mellitus preferred more on Facebook for searching and sharing health information. In the meantime, respondents who had type 2 diabetes mellitus chose WhatsApp as their media preference. The result also reported that the media preference was not significantly related to the type of diabetes (p= 0.09).

Additionally, the result showed that media users of diabetic were rarely searched for health information online such as WhatsApp (54%), Facebook (48%), Instagram (16%), and Twitter (12%). The majority of respondents preferred WhatsApp and Facebook to search for health-related information once daily and weekly. Table 3 illustrated that the media preference was not significantly correlated to the frequency of media usage (p=0.94).

The results showed most of the people with diabetes searched or shared information about the medication and side effects via WhatsApp (98%), Facebook (86%), Instagram (30%), and Twitter (22%). The health information on self-care is the second topic that is popularly searched or shared by the respondents via WhatsApp (92), Facebook (82), Instagram (32%), and Twitter (18%). The less health-related information searched by the respondents through Facebook, Instagram, and WhatsApp are specific diagnosis and research on diabetes. For Twitter, the therapy or treatment is the less health-related information that surfs by the respondents. The media preference was not significantly related to the health information searched or shared on media, p = 0.94.

Table 3: Relationship between health information and media preference for searching or sharing for health information

	Media Preference (%)				X^2	Sig- X^2
	Facebook	Twitter	Instagram	WhatsApp		
Type of DM					6.45	0.09
● Type 1 DM	38	10	18	36		
	80	16	18	92		
● Type 2 DM						
Frequency					3.62	0.94
● once daily	20	6	6	20		
	12	4	4	14		
● once every two to three days	38	4	10	40		
	48	12	16	54		
● weekly						
● rare						
Health information					14.37	0.94
● second opinion	56	20	26	54		
● medication and/or side effect	86	22	30	98		
● other patient's experiences	66	16	22	74		
● specific diagnoses	54	20	22	56		
● therapy or treatment	66	14	24	66		
● symptoms	78	22	26	70		
● health problems	66	18	24	62		
● self-care	82	18	32	92		
● research on diabetes	54	20	24	44		

DISCUSSION

The purpose of this study was to determine media preference on health-related information among diabetic patients at the tertiary hospital Kuala Lumpur as well as examining the relationship between the type of diabetes mellitus, frequency of media usage, and media preference. On average, respondents of this study were male, middle age and diagnosed with type 2 diabetes mellitus. The most social media platforms for them to surf health-related information or to communicate are WhatsApp applications followed by Facebook, Instagram, and Twitter. The less favorable media are Twitter and Instagram. The result showed media users of diabetes were rarely searched for health information online while a few of them were searching for information on the media once every two to three weeks. Several factors such as free, easy-to-use, and reachable as well as can stored messages are the key factors why the WhatsApp platform is very popular with diabetes patients. These findings are also supported by the statement of Malaysians Communications and Multimedia Commissions (MCMC) in which the most preferable online social media channel among Malaysians was WhatsApp (MCMC, 2018). Moreover, Facebook and WhatsApp are focused on enabling active social communication, instant messaging, and calling connections. Meanwhile, Instagram is more visual and broadcast live content social networking which is more popular with the younger generation. According to Elnaggar et al. (2020), Facebook provides a multi-modal platform to have been found to remain a useful tool where the patients and caregivers could access content, deliver skills and receive technological assistance. Alzaharani and Alanzi (2019) also reported WhatsApp was the most used social media followed by Twitter and Snapchat for patients obtaining diabetes-related information. Indeed, they utilize social media to communicate among them and also with doctors.

In this study, respondents with type 2 diabetes mellitus are more frequent surfing the social media channel compared with type 1 diabetes users and the WhatsApp application is the most preferable. Meanwhile, patients with Type 1 DM preferred more on Facebook. This finding is in contrast with the study conducted by Nelakurthi et al (2018) in which they discovered nonusers were Type 2 DM. Nonetheless, types of social media used by the respondents were not reported in Nelkurthi et al. (2018). On the other hand, Alzaharani and Alanzi (2019) also reported that patients who experienced type 1 DM represent the group that is users of media. As for Norwegian with diabetes, they were more likely to engage with Facebook and Twitter as compared to Instagram (Gabarron et al. 2020). However, the findings of this study contradict the study conducted by Gabarron et al (2018b). Gabaroon et al. (2019b) found that Instagram is the main media channel chosen by participants under the age of 18, while Twitter and Instagram were unpopular among the respondents who are in the majority at the age of 45 and above. For them, Instagram is more appropriate for the younger generation; therefore, they did not install the website on their mobile phone.

The result showed media users of diabetes were rarely searched for health information online while a few of them were searching for information on the media once every two to three weeks. Altogether, this interprets that diabetic patients were not relying frequently on media frequently to search for health information. The media preference was significantly uncorrelated to the frequency of media usage and health-related information searched or shared on media. Our findings correspond with a study conducted by Van de Belt (2013), which found more than 90% of the Dutch population use media to search for health information at least once a year, and more than 20% of them utilize it at least every month.

In this study, most of the diabetics searched or shared the information about the medication and/or side effects followed by self-care and symptoms. Likewise, Van de Belt (2013) stated the side effects of medication, symptoms, and diagnoses are the most frequently mentioned topics searched online by diabetes patients. According to previous research, the older generation searched regularly for side effects of medication compared to younger generations and this situation may be influenced by higher consumption of medication they did. Indeed, the older generation often used webcams to discuss health problems with healthcare providers (Van de Belt 2013). Thus, it shows social media has become an integral part of communication between diabetes patients and health care providers. However, according to Alzahrani and Alanzi (2019), simple use of social media will increase the dissemination of inaccurate information.

Healthcare providers should make the effort to enlighten the public on this deficiency in knowledge (Mohamed Azhar et al., 2013). However, in Gabarron et al. (2020) study, they reported the post features among the Norwegian is about personal stories, miscellaneous posts like awareness day rather than on disease topics. Moreover, topics on the specific diagnosis and treatment as well as research on diabetes are the fewest topics searching by the respondent in this study. In their study, Nelkurthi et al. (2018) highlighted that the lifestyle recommendations were significantly correlated with visiting the media sites. A result from the review found the demand for peer-to-peer interaction on diabetes self-care is the most interesting/demanding by the diabetes patient (review).

CONCLUSION

The findings of this study revealed the most preferable media was WhatsApp, followed by Facebook, Instagram, and Twitter for receiving, sharing, or searching for health information among diabetics' users in Malaysia. The most searched or shared health-related information was about the medication and/or side effects of the medication, self-care, and symptoms of associated disease. The diabetics' media users additionally rarely utilized the media to search for health information. The media have been an essential media platform to enhance social awareness concerning public health. Therefore, health care practitioners must emphasize health promotion and empower the patient to carry out an active role in their health care outcome. This finding should be given attention by healthcare providers, especially in the nursing sector, for improvement in giving health education. A longitudinal study design would be recommended to examine the changes or development of media preference for health information purposes over a more sustained period.

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