Health information sharing on Facebook: An exploratory study on diabetes mellitus

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Summary

Background: Increasingly, people are using Facebook (FB) to share health information. However, little is known about the type of information sharing and its potential health consequences in the Arabic speaking world. This study attempts to fill this knowledge gap for diabetes mellitus (DM).

Method: We conducted a retrospective qualitative FB content analysis using predefined eligibility criteria. The analysis was restricted to diabetes related groups in the Arabic speaking world. The data were collected between June 2010 and December 2015. A total of 55 groups were screened of which seven met the eligibility criteria.

Results: We found 6107 posts in Arabic related to DM of which 1551 posts were included for further analysis. There were 458 (30%) FB posts from Egypt with no posts from Somalia, Yemen, Comoros, and Djibouti. The majority of the posts, 863 (56%), were from females. The focus of the posts was on sharing personal experiences ($n = 423$, 27%), raising awareness ($n = 210$, 3.5%), providing spiritual support ($n = 162$, 10.4%), sharing latest research ($n = 147$, 9.5%), and providing education ($n = 110$, 7.1%) on DM. A large number of the posts by people in 40—60 year age group were around finding out diagnosis related information due to limited access to care in their home countries.

Conclusion: Patients with DM are increasingly sharing their health information with other FB users. This study will help inform future research with regard to health information sharing and designing appropriate interventions to harness the power of social media in improving public health.

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Introduction

The use of social media platforms such as YouTube, Twitter and Facebook (FB) are rapidly growing. Facebook alone has over 800 million active users [1]. Social media is increasingly used as an alternative platform for sharing and seeking health-related information. People are using online resources for health purposes including seeking advice, connecting with experts and individuals with similar experiences, sharing questions and concerns around treatment options, or understanding professional diagnoses [2]. In the United States alone, it is estimated that 74% of all Internet users utilize social media [3]. Furthermore, the Internet has become a major source for health-related information and users are expected to significantly increase over the coming years [4]. With the widespread use of the Internet and its relatively inexpensive bandwidth, social media, and especially social networking sites, are beginning to be used by both healthcare professionals and patients [5]. In 2011, Korda et al. founded that one of the most popular online activities was searching for online health information [6].

Househ examined the impacts of social media on healthcare organizations, clinicians, patients and noted that patients can use social media for a variety of reasons that include education, information, networking, research, support, goal setting and tracking personal progress. Most importantly, patients have the ability to express themselves, share their stories, learn from others and spread health knowledge [7]. Modahl et al. found that some physicians believe that social media can be beneficial for patients with chronic diseases, cancer, rare diseases, depression, maternal and infant care, weight management, wellness and prevention [8].

A recent study on how people in the Arab world access information, use social media, and rate the credibility of the information source showed that FB was the leading social media platform used in the Arabic speaking world followed by Twitter and Google+ [9]. Within FB, the information is posted which can then be shared, commented upon, or liked by other users.

Diabetes mellitus (DM) is considered one of the most common chronic diseases globally. It is characterized by an increase in glucose level in the blood with major abnormalities in the body metabolic process of the three nutrients i.e. carbohydrate, fat, and protein. Exchange of health information related to DM on social media sites can provide a good source of knowledge, support, and engagement for the patients and those with a vested interest in the care and well-being of patients suffering from DM. In spite of a large number of people using FB to share health information, little is known about the type of information sharing and its potential health consequences on the patients and their relatives in the Arabic speaking world. This study attempts to fill this knowledge gap for DM.

Table 1 Arabic speaking countries and their type II diabetes mellitus prevalence.

Country	Population (000)	Diabetes prevalence (%)
Kuwait	1868	21.2
Lebanon	2788	20.1
Qatar	1541	20.1
Saudi Arabia	17,023	20.0
Bahrain	986	19.8
UAE	6107	19.2
Egypt	48,305	16.9
Libya	3875	14.1
Jordan	3268	12.3
Oman	1810	10.7
Syria	10,824	10.1
Yemen	10,902	9.8
Tunisia	7084	9.6
Iraq	15,068	9.3
Sudan	22,000	8.7
Algeria	22,619	7.0
Morocco	19,964	6.9
Djibouti	480.9	6.4
Mauritania	1756	4.3
Somalia	4275	4.2

Methods

Study design

A mixed-methods quantitative and qualitative content analysis was undertaken to assess FB posts written in Arabic, which were publicly available on the FB discussion groups. The search was undertaken between 1st June 2010 and 1st December 2015.

Study setting

The study was carried out on FB groups pertaining to DM in majority Arabic speaking countries. There are 22 majority Arabic speaking countries with a total population of about 422 million. Over half of the people are under the age of 25 years [10]. The main countries and their DM prevalence are shown in Table 1. The countries in the region have very high prevalence of DM, which ranges between 4—21% [11].