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Abstract

Similarly, to other forms of technology, social media is evolving constantly to fitting into every day's activity. Following the advancement of technology, it is without a doubt that social media use has transformed the communication among the consumers and organizations on the online platforms. Social media has impacted almost every sector and healthcare is not an exemption. Today social media is not a voluntary marketing instrument for corporations particularly healthcare. Social media is not only beneficial to the patients who acquire health related information but it also benefits the healthcare sector in creating a desirable image and offering improved services based on the needs and preferences of the consumers. Thus, through the use of both secondary and primary data, this research paper will present a detailed evaluation of the impacts of social media on the healthcare industry in the world, and particularly the research will be carried in Saudi Arabia.



Chapter One: Introduction

1.1 Introduction

Social media in the contemporary society has is widely utilized in the global context by businesses as well as individuals in maintaining a connection, communicate as well as markets their services and products (Squazzo, 2010). As digital innovation is becoming more and more integrated into the healthcare sector, health institutions are beginning to establish and embrace social media's possibility to improving the experience of patients. The utilization of social media in the gathering of health-related information by patients has significantly augmented. This technological innovation has generated more of renovation to the healthcare field by offering more options for gathering information, integrating and exploration of the available care alternatives. Moreover, for healthcare providers, social media can offer a wonderful opportunity to engage with a large client/patient community. Although there are many challenges associated with engaging in social media, there are also many benefits.

Health wellness is of great significance in the modern society due to the changes in lifestyle, the need to being physically and economically productive and the necessity for prolonged life despite the prevalence of deadly illnesses. An increasing number of healthcare practitioners are working consistently to the effective social media utilization in enhancing the healthcare sector's capability to engage patients, stakeholders as well as consumers (Pinto, 2013).

Via the use of effective communication and promotion strategies, corporations are thus able to shift from the conventionally advertising strategies and utilize the internet to connect with healthcare sector's consumers. Consumers currently rely deeply on the information posted on the online social platforms and they utilize the internet as a means of gathering healthcare facts as well as connecting with the larger populace of patients to garnering encouragement, care and comprehend more in reference to similar health



conditions. Others utilize the platforms to research and seeking health advice from the healthcare providers as well as other connected corporations (Ventola, 2014).

Individuals nowadays are using social media in posting their evaluations commentary that recommends or warns the public from opting for a certain healthcare institution, treatment option or physicians. Therefore, it is highly essential for the healthcare providers to sustain accurate and reliable information in connecting with the society and also implement appropriate marketing strategies where required. It is apparent, that social media and contemporary healthcare are inseparable, based on the potential it has on the quality and information distribution in creating awareness and the familiarity (Ventola, 2014).

1.2 Research Question:

- *What is the impact of social media on healthcare industry?*

The research question is further divided into three major sub-question which are:

- a) The impact on social media on healthcare quality?
- b) The impact of social media on the communication and relation between patients and healthcare givers?
- c) How should social media utilization be integrated in generating healthcare communication success for healthcare companies?

The aim of the study is to review and measure social media's influence on health systems in general and on patient behavior globally, and to show the advantages and also the risks and challenges of using these tools as a communication strategy on healthcare. Additionally, the research will be carried particularly in Saudi Arabia to investigate how social media have been used by healthcare businesses and practitioners and how this impacted the global healthcare in the country.



1.3 Study Objectives

- a) Establish social media role and enhance the utilization of these media sites within the healthcare sector
- b) Establish the possible benefits and disadvantages of using social media as the communication means in healthcare
- c) Determine how social media can be utilized in improving healthcare services

1.4 Significance of the Study

The study will benefit the healthcare sector, healthcare institutions, stakeholders, medical practitioners, marketers and the public. In that social media is current a vital instrument in every individual's life and most businesses and corporations are utilizing the tool in creating sustainable relationships with consumers, investors as well as patients. The subject is of significance to the healthcare sector given that it focuses mainly on building better relations with the consumers and patients in delivery satisfactory services.

Consumers are the most important part of any given business based on their capability to drive performance and revenue generation. It is therefore the interest of any investor to know how an organization can generate more through communication. The society in general will get to understand some of the measures that should be taken in making decisions regarding healthcare and how the posted data can be evaluated. In fact, the essence of social media on healthcare is one that cannot be underrated.

1.5 Problem Statement

Despite the demonstrated potential possessed by social media in transforming the healthcare sector, it is interesting to note that, there are only a few organizations that are utilizing the dynamism of communication that is offered by these platforms. Other than just gaining information, patients can utilize the information in improving their wellness (Carter & Wilson, 2015). This is because social media provides a communication that is two-ways and



patients therefore gets the chance of interacting with physicians and other patients. However, most physicians consider the interaction as a time waste forgetting that engaging the public in health debates is one of the most effective way to creating lifestyle change that is of necessity based on the dominating illnesses such as high-blood pressure, diabetes and obesity (Carter, 2014).

However, despite the fact that social media is of essence to the healthcare sector it should be noted that the communication strategy should be adopted with caution. Most individuals are likely to share some misleading facts thus endangering the public health. In addition, too much detail might be offered to the public which might in turn hinder the capability to advocate for the right healthy existing information (Centola, 2013). In addition, there is a need to integrate a number of strategies in creating communication efficiency and avoiding the occurrence of misunderstanding among parties. Familiarity of the use of these information is also essential given that based on statistics it is suggested that the younger generation is more reached by the information which demonstrate the need to engaging the larger populace in general (Denecke, 2015).

1.6 Definition of Terms

- a) Social Media – refers to the webpages and software’s application that permits users to develop and share information or engage in social integration.
- b) Social Media Marketing – can best be described as an internet form that utilizes social interacting sites as their marketing platforms.
- c) Healthcare – the maintenance and enhancement of physical and psychological health particularly via the provision of clinical services.
- d) Practitioner – is an individual who is actively involved in profession, or artistic discipline particularly in medicine.
- e) Consumer(s) – is an individual who is involved in the purchase of services or good for individual benefits or utilization.
- f) Patient(s) - an individual requiring or acquiring medical treatment.

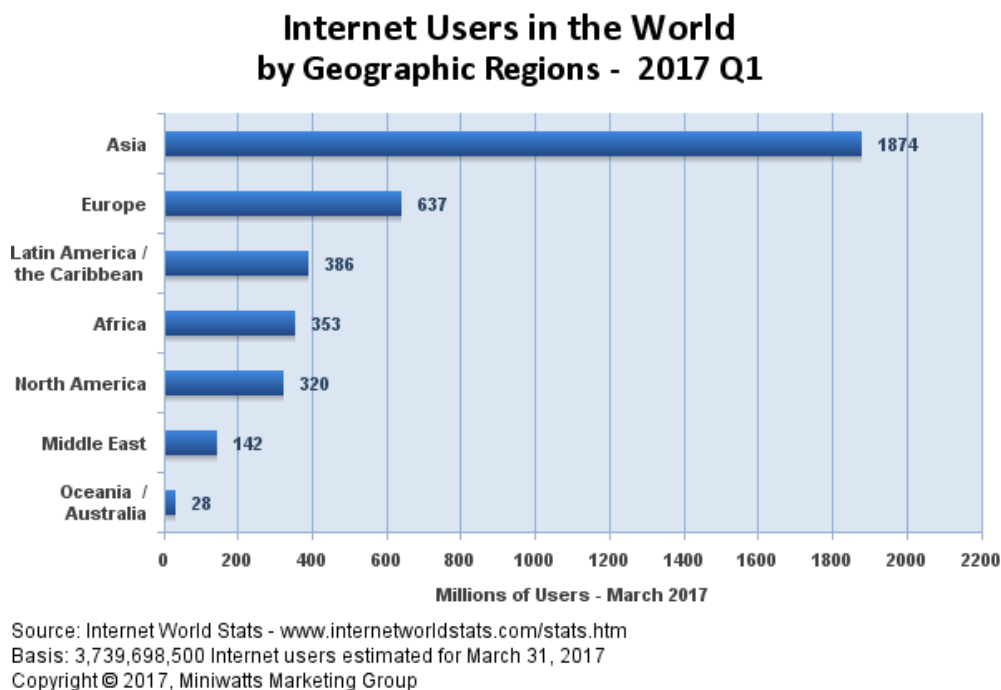


Chapter Two: Literature Review

2.1 The Internet Revolution

The Internet has dramatically changed people's life. The use of the internet started in the mid-1990s, and since that time the internet has had a dramatic impact on the culture. It has become a global means of our daily communication (Rozenblum & Bates, 2013). In 2015, the ITU, The International Telecommunication Union, estimated that almost half of the world's population (roughly 3.2 billion people), would be online by the end of the year 2017 (Figure 2.1). Indeed, this made a huge revolution in many different fields in our lives, one of them is healthcare.

Figure 1: Internet users in the world - 2017



Source: Internet world. (2017). Retrieved from <http://www.internetworldstats.com/stats.htm>

Based on Pinto (2015), since the discovery of the internet, the way of the internet use changed during the years. The first generation of the internet, popularly known as Web 1.0 is defined as the web system that only supported reading rather than participative



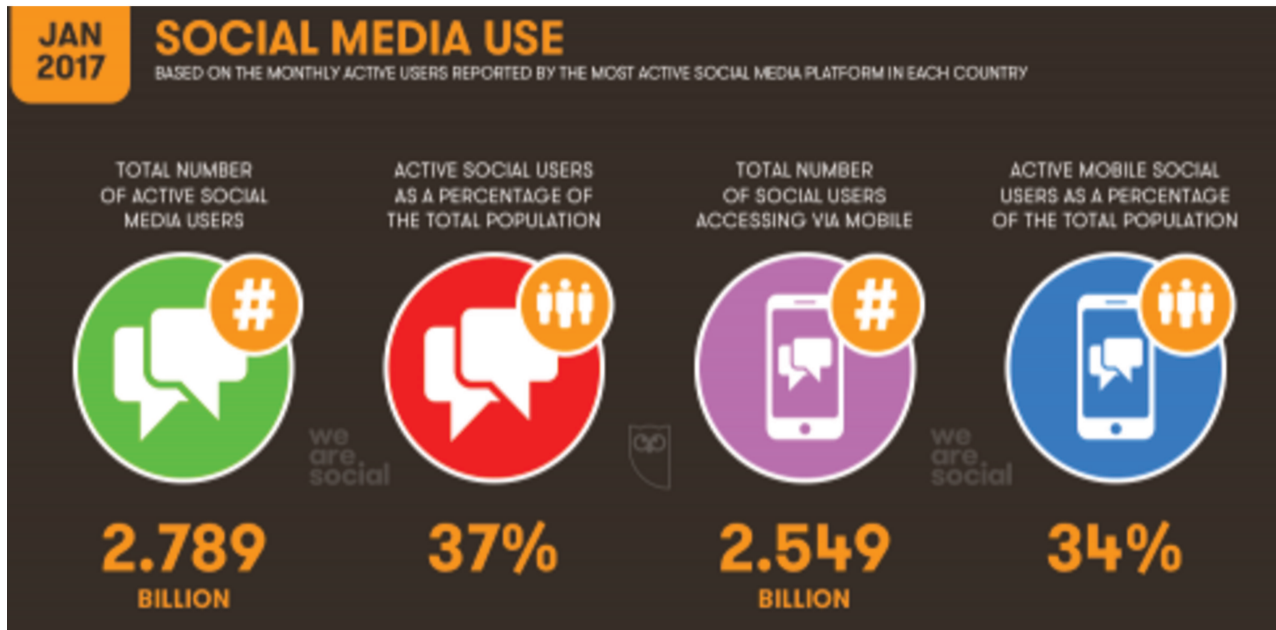
interaction. The advent only permitted individuals to track as well as examine the required information. This therefore only the provider of the online information can control the content.

In 2004, the year of the emergence of social media, the online environment is rapidly evolved into a new usage. The Social media, are also referred to as “Web 2.0”, normally permit the control of online information where one can search, read, and also users can post and share as well as leave commentary (Sarasohn-Kahn, 2008). The system is more developed as it permits the sharing of more textual as well as graphical content. The media accomplished several functions such as expertise integration, social integration, media and information sharing, content production, entertainment and creating awareness regarding certain issues. Web 2 is more advantageous because it promotes participation, sharing as well as interaction (Ventola, 2014).

2.2 Social Media

Social media can best be described as the technology tool that permits individuals to communicate while sharing ideas, opinions, knowledge as well as experiences. In addition, it allows them to track as well as collaboration with other users in real time (Peck, 2014). The participation by the universal community in social media has augmented abruptly over the previous years. For example, according to Facebook recent statistics in June 2017, users exceeded 2 billion persons universally, this number epitomizes 2/7th of the global populace (Chaykowski, 2017). And in all the social media platforms, there are over 2.5 billion active users worldwide and the number is increasing at a rate of 9% a year (Ward, 2016). Indeed, this growth and its consequence effect cannot be neglected, and this present study will discuss the impact on the healthcare industry in particular (Figure 2.2).



Figure 2 : Social media users

Source : <https://wearesocial.com/uk/special-reports/digital-in-2017-global-overview>

2.3 Social Media and Healthcare

Social media is today's integral portion of the global health. Many pieces of evidence show how healthcare, social media, and the Internet are beginning to come together. Since the year 2004 when social media advanced, the proportion of patients who utilizes the social media for reasons related to their health is increasing (Ventola, 2014). According the PEW Research Center's Internet and American Life Project on Health, the research reveals that 80 percent of Americans have utilized the internet as per today in researching for health-related details. Amongst them 78 percent have utilized social media in particular. The internet began to intensely with physicians in the year 2008 in the provision of health information (Fox, 2011) and (Ventola, 2014). Patients or consumers use social media for many purposes, ranging from online appointment scheduling, patient support groups to social online training for smoking termination and weight reduction. Nowadays the Internet offers an essential health sources and provides the users with different health services.

Moreover, these innovative platforms offer patients with an opening to effortlessly



interaction with practitioners and also other patient (Hawn, 2009). For example, patients can express opinions about doctors, medications and share patient involvements of particular disease through blogging. These frequently offer the ailing populace with a countless source of evidence in regard to specific institutions, practitioners and services. Twitter permits patients to interact and deliberate circumstances and involvements in factual time, these deliberations lead to better patient engagement (Rozenblum & Bates, 2013). The search about certain conditions by the patients and the general engagement in the debates results in increased awareness about the condition and treatment options, and they are more probable to making the required lifestyle and attitudes transformations and they become more compliant with their treatment. It was additionally established that the more patients engaged in their own healthcare, their results in health improvement based on the awareness created (Surowiecki, 2005).

Furthermore, it is not just an advantage to the patient but also the healthcare practitioners can advance knowledge which will result in health quality improvement. This phenomenon is consistently operating in changing the conventional attitudes and behaviors in learning. Physicians, health plans, and pharmacists can share ideas, discuss symptoms, and debate on treatment options together online and over the seas. In that globally the internet has now grown to a tool for connect and not only to push information (Sarasohn-Kahn, 2008).

2.4 The Effect of Social Media on Consumer (Patient) Behavior

In general, social influences have a great impact on patient's health, they are prime influences in the acceptance of new well-being behaviors. Many studies showed that compliance with nourishment and diet programs, exercises maintenance and doing a preventive screening, all can be contingent on having interaction with your social peers, networks, and family who play active engagement in these actions (Smith & Christakis, 2008).

With the engagement of people to their social media world, and as broadband and mobile access spreads, their behavior in term of health-related consumption dramatically changing (Dejong, 2013). The internet has been categorized for many people as an



essential tool in searching of information which might either about certain treatment or prescription, researching in regard to having a number of symptoms that might be utilized in diagnosis or that necessitates medical attention. This has not only grown to be a habit, but individuals depend on such programs in keeping pathway of health wellness and some strategies that can be utilized in preventing the rise of illnesses (Dejong, 2013). In addition, the internet is highly preferred based on its general capability to offer unlimited information based on the category of interest. Unlike the physical institutions it is easier to access this details at personal convenience at any provided time. The internet and social media is also, a way to bring patients together, to aid other individuals, and be assisted by them simultaneously (Fox, 2011). In addition, they offer the ideas and commentary in regard to the existing care services (Squazzo, 2010).

Additionally, as mentioned before, the utilization of social media in the health sector is rapidly changing the relationships between care givers and care receivers, thus permitting stronger involvements and empowerments. However, despite the increasing benefits of this kind of communication, most adults tend to depend on conventional strategies in the offline world in accessing information. They mainly shift to the physical access of health practitioner's support, friend, or family member; the internet plays a growing but still supplemental role (Fox, 2011).

It is clear that patients use social media as a complement to health practitioner's practices as well as to fulfil their needs of health curiosity that would not otherwise be solved by physicians. In that the relations with healthcare providers are accounted to be more medical, and therefore physicians are providing only expert knowledge and treatment options but based on their medical knowledge, but not on their experience. In addition, patients prefer to acquire details from the online platforms and join online health communities, as their physicians fail in satisfying their physical as well as emotional needs. Physicians experiences challenges in expressing the empathetic truth and therefore they opt on filtering the results which leaves the patients with a lot of unanswered questions (Smailhodzic, 2016).



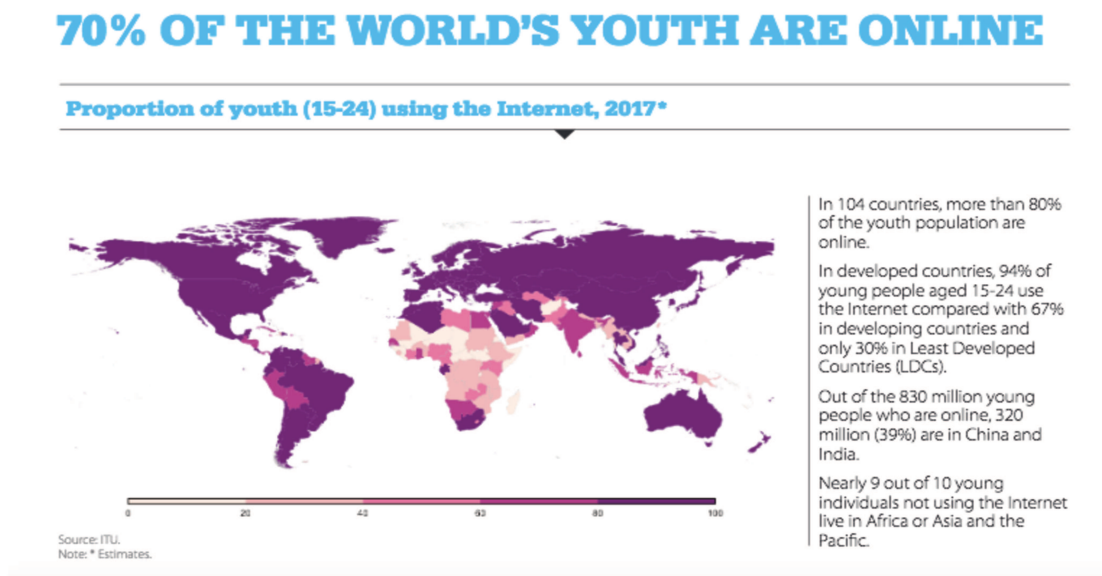
2.5 Who is online? Who Is the Target?

With the growing of internet, social integration sites and mobile phones utilization, the users can be categorized in two kinds. Where one group is able to access as well as share the acquired information while the other group is mainly involved in searching and keeping track to the posted data for personal benefits. In reference to healthcare, this normally translated to individuals sharing details regarding their physical exercises operations, healthy lining that incorporates diets and healthy living. In addition, individuals normally comment and evaluates in regard to medical treatments they had experienced, thus creating awareness in regard to a number of health circumstances. This normally benefits the patients that engages actively in purpose of acquisition of knowledge (Sarasohn-Kahn, 2008).

There are two influences that plays part to the increased access of online health details which are internet high access and health consciousness. And in regard to the gender aspect both men and women are equally triggered in accessing online details but based on findings women are highly likely to search for health-related facts on the online sites as compared to men. Moreover, the internet users who have experienced themselves or someone related to them, a recent medical emergency, will most definitely try to gather those with similar conditions to share the experiences when compared to those that are not social media users (Fox, 2011).

Moreover, among Internet users, social media are found to strongly penetrate the population regardless of factors such as level of education, race/ethnicity, or health care access, however, some studies highlighted age as the strongest predictor of both social networking and blogging where the younger generation reporting more frequent use on this technology, and relatively low penetration in the older population of 55 and older, according to ITU statistics, 70% of the world's youth are online (Figure 2.3). This conclude that health communication efforts utilizing social media will have the broadest reach and impact when the target population is the younger generation(Chou, Hunt, Beckjord, Moser, & Hesse, 2009).



Figure 3: Proportion of youth (15-24) using the Internet, 2017

Source: *ICT facts and figures 2017*. Retrieved from <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf>

No one can deny that millennials are influenced by opinions posted on social media. Those are a group of people who have grown up with the Internet and are regularly engaged on this new media. They tend to refer to the online sites such as blogs and Facebook prior to making any choices relating to learning, career, travel, and acquisitions. For the majority of them, online social networking sites are their first option when they want to search for information, including health-related matters (Denecke, 2015).

2.6 The Use of Social Media Marketing Strategy in Healthcare Industry

For all kind of business, social media has become a very important strategy. At the beginning, every brand tried only to be present across the major social media platforms, but now they are doing more than that. Active planning strategic campaigns around social networks are one of the main marketing channels. However, while many industries have foster social media, it seems that healthcare field has been slower to join the party. The internet offers unending choices for the organization that seeks to share specific health details with the public. However, in acquiring success in these ventures there is a need to



integrate innovation with knowledge in ensuring that the needs and goals of both an organization and involved persons are met (Geckle, 2016). This is because healthcare practices must create value for participants which can be acquired via continuously updates to ensure that the information are refreshed and updated to attract comments and questions and respond to them.

In fact, the impact of using social media in healthcare business often is not straightforward. Healthcare and pharmaceutical companies that adopt social media to their strategy probably will not generate new sales immediately. However, it can, over the long term, benefit the company in many ways, such as; by educating people and provide them with health information they are seeking, integrating patient care and build friendliness in a community (Hajli, Bugshan, Lin & Featherman, 2013).

One of the best practices that other industries made is the improvement of customer services through social media. For example, Comcast Corporation has a lot of customers to serve, 7.6 million Comcast Digital Voice customers nationwide. The company found that customers were going online to complain about cable service issues, they began reaching out to their customers online by answering their concerns. They found many areas to improve in their services just by listening and also responding to their customers via social media (Squazzo, 2010). The basic mode of communicating and listening to consumers based on the recent research is through the use of social media where direct responses can be acquired. These platforms are does not only incorporate the distribution of data but it mainly involves the formation of sustainable relationships it is generally about forming connections with people (Hackworth, & Kunz, 2010).

Furthermore, although healthcare organizations are slow in using social media, it is apparent that the technological advent can greatly enhance the image, the reputation and perceptibility of hospitals and health centers. Based on a recent study, 57 percent of consumers stated that the presence of physicians as well as a health institution in social media basis would powerfully impact their optimal concerning their search for service and facilities, and 81 percent of these consumers interpreted that robust social media presence as the indication that an organization offers advanced technological services which are linked to quality (Ventola, 2014). It should be the goal of health care providers to create a



presence online, considering that with the technological advancements, it is realistic to predict that the time spend online by the average consumer will be more than his visit to the doctor office. Thus, it should be wisely used by the health care providers to better improve their service to their customers and have a competitive advantage in the industry (Hackworth, & Kunz, 2010).

Finally, Social media is not only used for regular communication with patients or staff, but it can be a vital, reliable form of communication in emergency situations (Squazzo, 2010). And although there are many benefits in using social media, there are also many challenges and risks in using these tools, which will be discussed in the next part.

2.7 The Benefits of Using Social Media on Healthcare

With the fast growth of social media in our life, it created some challenges associated with engaging in social media, but there are also many benefits to start with; (summarized in table 2.1).

- **Patient education and spreading awareness:** are one of the major benefits (Pinto, 2015). Social media Sites such as blogs, Facebook and other social networks are all fast-moving and inspiring communication with health information. Physicians are utilizing social media to promote patient health care education. These tools have shown good results of patient education and increase health awareness (Ventola, 2014). In America, it is said that 30 percent of the adults' population have or know an individual who has benefited from health material initiated online. Moreover, fully 44 percent of care providers report that they have acquired benefits from online investigation especially in learning about the available options of treatment as well as the healthcare needs and preferences of the consumers (Fox, 2011).
- **Increase online content of health information:** Social media utilization results in the increase of online health information. Social media allows people to share their experience and this led to a huge content of health information, some people call it "the power of collective wisdom", where the presence of more contributors in



communal online network means that the more value they create (Surowiecki J, 2005). In his book, *The Wisdom of Crowds*, James Surowiecki notes that “*groups are remarkably intelligent, and are often smarter than the smartest people in them.*” (Surowiecki J, 2005). It allows patients over the seas from a diversity of communal and geographic backgrounds to share material in regard to new treatment technologies and preventive health screenings and provide novel well-being resources, ranging from material about food and nourishment to openings to study about patient encouragement (Centola, 2013). This positive network effects, when patients who manage the equivalent chronic disorder shares their experience and opinions with each other, this can produce clinical understandings more than an understanding of some single patient or even clinicians (Sarasohn-Kahn, 2008).

- **Patient engagement:** further, this huge content and the ability to engage the patients in their own health condition, which brought a positive impact in healthcare, As Dr. Kibbe from the American Academy of Family Practice, described this situation, he said, “*We have the World Wide Web, and it’s becoming more intelligent in searching. It’s more interactive. There is untold potential for what people might be able to do with self-management and self-care if people had the right information at the right time available to them.*” (Sarasohn-Kahn, 2008, p.12). In healthcare, patient empowerment refers to “the inherent capacity to be responsible for one’s own life”, and that means, patients are empowered by the knowledge, information, and self-awareness required to recognize and achieve their health goals. Most studies have established that patient empowerment undeniably affects the patients’ confidence, ability and readiness to actively participate in clinical interactions (Smailhodzic, 2016).
- **Network for professionals:** On the other hand, it leads to the creation of a network for professionals. Similarly, when physicians meet online and share information through their Facebook pages, twitter or any social media application, the results are beyond the conventional physician’s meetings for sharing clinical understandings and perceptions. In addition, physicians from the third-world nations can utilize social media to connect them with authorities in other developed countries which are more pathologically progressive. For instance, surgical measures can be viewed online and enquiries can be requested and answered in factual time. Therefore, social media



delivers a fresh form of expertise communication that was never before possible (Ventola, 2014).

- **Patients social networks:** the history of peer-to-peer collaboration in the health segment began a decade or so ago, with the conception of sustenance groups for alcohol and tobacco nonparticipation, weight regulator, enduring treatment, depression and trauma therapy (Centola, 2013). Many studies showed that these networks had a positive impact on those patients. One large-scales study done in California in 1979, showed that supportive social networks improve people's health outcomes, and they found that people who have low social interaction held a mortality probability between two and four percent higher as equated with those that have robust social networks (Berkman L.F. and Syme S.L, 1979 as cited in Sarasohn-Kahn, 2008).

After the internet, this has been extended into the virtual domain with the development of online tools for training and abstention. The online communal network facilitates this interaction between patients even over the seas. Internet chats became a great way to create communities of patients with similar medical problems and create simulated support groups. Through the wide internet expansion, users can link into networks based on shared interests. It includes over-all sites, or exact interest-based systems, such diabetes groups. These communities are a great method to connect patients with other patients, so they are capable to support one another, and this works well for improving compliance (Centola, 2013).

- **Patients - physician communication:** not only between patients but also it results in improving patient-physician communication and relation. Dr. Ted Eytan family physician observe that, more and better communication via social networks will have other benefits as well and will improve the overall quality of healthcare. When practitioners are vigorous on these sites, it affords them with an extra chance to influencing patients and it is a simple technique to reach more individuals in the shortest time duration (Hawn, 2009).



- **Clinical trials recruitment:** is another benefit. Patient enrollment and admission is frequently the largest obstacle to victory in a medical trial. Many major academic institutions are active on social media platforms to promote clinical trial enrollment, this is because clinical trials and staffing for patient recruitment and enrollment use a large percentage of their budget. Social media can benefit the trial personnel by spreading the word about a precise trial and links them to patients. In addition, once they are enrolled in the trail, it can be utilized for updates for subjects as well as investigators and can also be a great foundation of funding for subjects and improve compliance (Khatri et al., 2015). Recruitment by this way may be quicker, more efficient and cost effective (Denecke, 2015).

2.8 Risks and challenges

Although, with all the benefits mentioned before in using social media in healthcare, there are also many challenges and risks;

- **Patient privacy:** is one of the major risks of healthcare engagement in social media. Health data can best be categorized as personal and therefore it should never be utilized to expose an individual or for exploitive purposes. With the evolution of social media, there are also growing concerns about how social media affects patient privacy and how to protect their health information. As more members connect with the social networks, this will allow more communication among many parties simultaneously. Some companies like Google stated that they will be implemented health data records a subject that raises many patients and consumer concerns about their privacy and they refused the idea, which led to failing of their plans (Hawn, 2009), this is because some would not want others to know about their true health status and concerns, or that their health be 'broadcasted' to their social network.

Moreover, another concern raised because of the use of social media by Healthcare practitioners, which may lead to potential negative effect resulting from the breach of patient confidentiality. And also, given that corporations possess most of the consumers personal details ranging from the search patterns it is feared that the information might be utilized in future for undesirable purposes that the users has no



knowledge about. This can best be described as the exploitation of individuals based on their health needs, as those in search of helpful health information and support are often willing to lose part of their private details in exchange for valuable services (Von Muhlen, Ohno-Machado, 2012).

- **The health information content online lack quality and reliability:** because the content of social networks depends largely on the users to generate the information, and as more users join the social network, the more channels will grow and they will possibly diffuse and spread information that is inaccurate. Moreover, based on critics it is clear that social media data can be misleading and might result in deadly impacts (Sarason-Kahn, 2008). Therefore, it is important to create reliable online communication channels that can help patients and at the same time to prevent such misguided information (Carter, 2014).
- **Affecting patient opinion:** social media use by patients for health-related reasons can lead to shorter interactions between them and healthcare specialists and it increased switching of doctors by patients. Patients may change doctor due to online discussions with other patient about physicians (Smailhodzic, 2016).
- **The professional and legal risks:** using social media by professionals can distort the border between one's private and expert life. In the publication by the Canadian Medical Association (2011), it issues and rules of engagement for guiding physicians' involvement with social media. The policy states: 'Physicians must retain the appropriate boundaries of the patient-physician relationship when dealing with individual patients. The same standards of professionalism that apply in face-to-face physician-patient interactions also apply in electronic interactions. In addition, personal lives should be separated from the professional ones given that this would affect the general quality of healthcare (Pinto, 2015).

Finally, the continually evolving nature of the Internet, including social media tools, mobile applications, have raised questions and concerns about how to apply existing regulations for companies to promote in these newer media (Fox, 2011). Furthermore, until now there is no contemporary healthcare privacy legislation in



North America or Europe stating that individuals should stop posting their health information online. The privacy today only protects an individual's healthcare information from institutions (Denecke, 2015).

Table 1: Summary of the benefits and risks of using social media on healthcare:

Benefits	Risks and challenges
<ul style="list-style-type: none"> - Increase public awareness - Increase healthcare content online - Patient engagement - Patient social network - Professional network for practitioners - Patient – physician communication tool - Ease clinical trials recruitment 	<ul style="list-style-type: none"> - Concerns about patient privacy - Increase the content may increase the wrong and unreliable information - Affect patient opinion - Professional and legal issues for practitioners

2.9 Summary:

With the growth of social media in our life, it is essential to measure the impact of this technology on our life and particular on healthcare. From the literature review, the impact was obvious, social media and online information affected how patients search for health information, and how they share their experience to each other, it also affected the relation between patient and their physician and finally the corporates were keen to use this technology to improve their consumer communication. Many benefits and some risks were discussed. And furthermore, the next chapter will explore how this technology impacted the Saudi Arabia population.



Chapter Three: Case Study – Saudi Arabia

Social media and healthcare in Saudi Arabia



3.1 Introduction

The previous chapters were focusing on the impact of social media on healthcare in the worldwide, and indeed the impact was obvious in all the researches reviewed. Most of the positive and some negative and challenges effects were discussed. And as the research will be conducted in Saudi Arabia, this chapter, will cover some relative information about the country and the impact of social media in general and on healthcare.

3.2 Rationale for Using Saudi Arabia as the Study Setting

Saudi Arabia is among the most fast global developing economies (Figure 3.1). Its development is mainly fueled by the conducive and the strategic business operations. More than half Saudi Arabian population are social media users, it is considered as the fastest growing methods of communication in the region. And it is affecting all the aspects in the Saudi's life. Despite this increasing importance, there is little published literature and researches dedicated to social media among health professionals (Alhashem, 2015). There is therefore the need to create an understanding of the possible benefits and challenges that the health sector would acquire for embracing social media in healthcare, educating the public and creating healthcare familiarity.

Figure 4: Map of Saudi Arabia

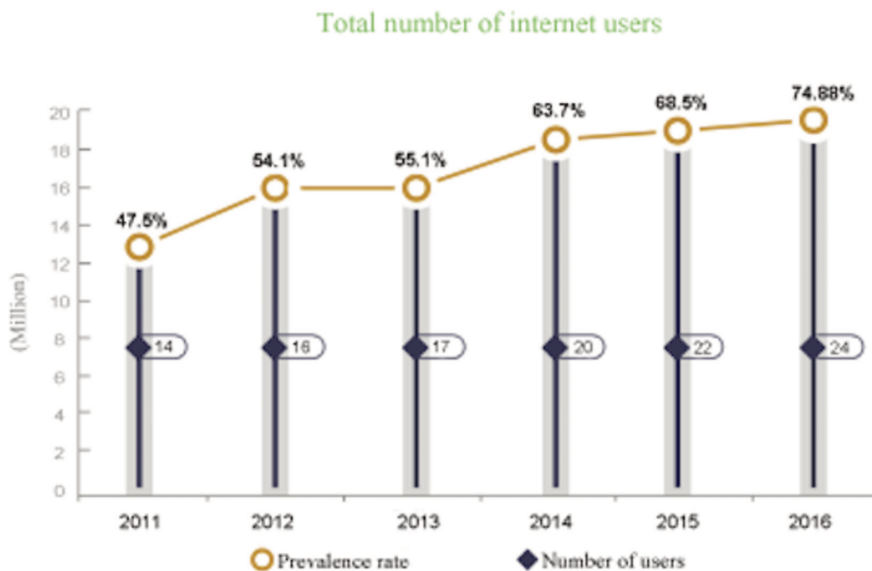


Saudi Arabian kingdom was founded by King Abdul-Aziz back in the year 1932, and it is recognized throughout the world with its main characteristics as the center of the Islamic world and an oil-rich country. Saudi Arabia has for a significant while remained as the integral economic player within the Arabs regions globally. The population survey conducted in 2017 by General Authority for Statistics (GASat) in Saudi, revealed that the general populace is accounted to be 32,740,602 and 50% of the population are under 25 years old.

3.3 Saudi Arabia and Social Media

In reference to the Middle Eastern region, Saudi Arabia is considered as one of the largest social media markets. According to CITC the Communication and Information Technology Commission, in 2016 annual report, the internet spread increased form 47% in 2011 to reach 74% in 2016, with 24 Million users, and it is increasing (Figure, 3.2), and as per the report this was significantly related with the increase of the social media channels such as YouTube and Snapchat.

Figure 5: Internet users in Saudi Arabia



Source: The Communication and Information Technology Commission, in 2016 annual report. Retrived from: <http://www.citc.gov.sa/en/MediaCenter/Annualreport/Pages/default.aspx>

Moreover, according to the Ministry of communication and information technology 2016 report, 18 Million of the country’s population are social media users who represent



53%. And the average hours of connection are 4 and half hours daily. Additionally, Facebook and Twitter are the most popular websites with 11 Million, 9 Million users respectively. Moreover, Saudi Arabia comes the first country in the Arab world and in the top ten worldwide of using Snapchat.

Indeed, all these statistics showed that social media has been impacting various aspects of the life of Saudis, including politics, economy, sports and social life and healthcare is not an exception (Alhashem, 2015).

3.4 Growth Factors of Social Media

Like every country in the world, Saudi Arabia have a significant growth in internet use and in social media. The popularity of social media in the country associated with the high rate of smartphone ownership and the wide usability of applications, such as social networks, chat tools, and games. And this is expected to rise in upcoming years. Moreover, another factor that has contributed to this growth is the growing public awareness of the usability of the Internet in different online purposes, such as e-government, banking and e-commerce. In addition, the increase in the number of Arabic websites and the decrease in the cost of personal computers and laptops are as well contributing to the Internet and social media growth in Saudi Arabia (MCIT, 2013 cited in Alhashem, 2015). Furthermore, the youthfulness of the Saudi population can also explain the popularity of social media, were 50% of the population are under 25 years old.

Although, the government of Saudi Arabia, in 1999, applied an extensive filtering system to monitor and restrict access to the Internet and special websites, such as websites display unapproved content that are against the values of the Islamic religion, and those with content that considered as a threat to national security, this restrain did not affect the usability of the internet in the Kingdom and it is still increasing (Communications and Information Technology Commission [CITC], 2010, cited in Alhashem, 2015).



3.5 Social Media and Healthcare

With the digital revolution, the number of social media users are increasing, and according to the latest report by Ernst & Young Middle East (2017), it states that patients are becoming more aware, they raise their expectations regarding the health service provided and they demand to be involved in every step of their treatment. This indeed encouraged most governments and hospitals to aggressively pursuing better engagement through social media and digital technologies to communicate with the public and spread awareness (Longhi & Sear, 2017). One of the best examples is the Ministry of health in Saudi, which for example have million and half followers in their Twitter account where they tweet every day to push health information to increase the awareness across the country. In a study done by AlGhamdi & Moussa (2012) aimed to explore the use of the Internet for health-related purposes among the public in Saudi Arabia, and they highlighted that this subject has never been studied before. The researchers found that 58 percent of the participants used the Internet for health-related information, although that 89 considered their physicians to be their primary sources of health information (Al-Ghamdi & Moussa, 2012).

In another study done by Alrukban (2014) in an examination of the health-related usages of social media within Saudi Arabian Kingdom, showed that 80 percent of the users reported that they are following health-related accounts and the positive impact and benefiting of these accounts where confirmed by around 86 percent of them. In addition, when they were asked about which accounts they are following, 69.8 % reported following public related accounts and 62.1 % follow accounts of physicians and health practitioners (Alrukban, 2014). Moreover, the study showed that female users are more interested to this type of accounts and those with high level of education.

To conclude, these studies showed the impact of social media on consumer and the public behavior related to health, but no study found to show how these tools have been used among physicians and healthcare companies and what are the reasons and motivation for them to use it. The next chapter, will detailed the method utilized in gathering data in support of the study's objective.



Chapter Four: Research Methodology

4.1 Introduction

This chapter will be presenting an investigation plan that was utilized in gathering specific information objected at providing answers to the study question case study of Saudi Arabia.

4.2 Research Methodology and Design

A study design can best be described as a structurally developed plan for the objective of investigation on the ground of the presented study. On the other hand, a study methodology entails a calculated plan that seeks to generate answers to the study's objectives and questions. In the present study, qualitative approach method was followed.

Based on the literature review most of the studies done on Saudi Arabia regarding the impact of social media on healthcare were quantitative research to measure the percentage of the populace who uses this technology, and they were discussing the subject from the patient side. To hear the other side of the story, this study will follow a qualitative approach, interviews were conducted on two different groups; the first group incorporates business professionals and marketers in healthcare companies in Saudi, and the other group is for physicians and healthcare specialist who are active in their personal accounts to push health information to the public. The aim of the research is to examine the situation according to their experience of using social media in the field of healthcare and to measure the benefits and the risks they encounter from their activity.

4.3 Reasons for Choosing Qualitative Approach:

The first reason for choosing the qualitative approach is that this type of research allows a close supervision and management of the research process which can increase the likelihood to attain the research objective (Polski, 2001). Secondly, due to the geographic



distance between the researcher and the interviewees, it was easier to focus on a small and narrow sample of candidates. Finally, the study utilized semi-structured questions, by asking open-ended, skype and phone interviews to have more room for the interviewee to explain their experience freely, with no borders to their insight, to examine their motivation and also their opinion from their experience in using social media in healthcare, according to Mariam Polski, “*Qualitative research is a strategy for going beneath the surface. It yields a holistic overview of consumer behavior which provides insights into emotions and motivations*” (Polski, 2001, p.55). This gave me as a researcher in healthcare business and as a marketer, a deep understanding of using the social media in healthcare business development and particularly in my country Saudi Arabia.

4.4 Research Process and Stages:

The process of collecting data and conducting interviews, goes through specific steps in a certain order, to insure the acquisition of accurate and relevant information. The benefits of these are multiple, and as a result, the energy was focused to the required audience, the data was collected in reasonable time and it was adequate to establish the required results. Accordingly, the followed steps listed below:

4.4.1 Forming Questions:

The first initial step included writing two different sets of questions: the first set is for healthcare practitioners either doctors or specialists who are active in social media to explore their motivation and opinion regarding their experience.

The other set of questions are dedicated to healthcare business professionals, such as; marketers and business developers in healthcare companies. Because of their position and experience, to see how they integrated the social media use in their business and what are the benefits and challenges they encounter in this particular industry. Below are both sets of questions made for the interviews:



Questionnaire 1:**❖ Interview for practitioners who are active in social media:****A. Present the interviewer:**

- Can you present yourself (Optional)? Your specialty?
- What type of social media you are active in?
- Which one do you prefer? Or which one is more useful to you?

B. Motivation:

- Why you use social media?
- What are the effects on your patients?
- Can you give an example/a story that is relevant for you?
- What are the effects on your daily job?

C. Opinion on social media:

- What are the advantages you found?
- What are the risks and challenges?
- Do you think it is important in healthcare? For which reasons?



Questionnaire 2:**❖ Interview for business professionals in healthcare companies:****A. Present the interviewer and the business:**

- Can you present yourself (Optional)?
- Can you tell me about your business? Your products?

B. The marketing strategy:

- Who are your costumers? who is your target?
- What are the main marketing tools you use in your strategy to reach them?

C. Social media:

- Do you use social media in your business?
- **Yes** → in which social media you are active? → what are the purposes? → do you have social media strategy?
- **No** → For which reasons do you think your company does not use social media? How do you think your company could use social media?

D. Opinion on social media:

- What are the advantages that you see in social media?
- What are the risks and challenges?
- Do you see future of social media as a marketing tool in healthcare business?
- Could you provide an example of social media that seems working for you?



4.4.2 Allocation Potential Candidates

This step included searching for those who are considered ideal for the research. The aim was to reach minimum 12 candidates total, from the two groups, fortunately the sample reached 17 candidate totals of both groups, 9 healthcare practitioners and 8 healthcare business professionals who participated in the interviews from Saudi Arabia. This was done through informal contact with my family, friends and previous work colleges, who also suggested other respondents and since the candidates are always active in social media, I contacted them through their accounts and they were keen to participate and share their experience.

Moreover, the practitioners were chosen according to the number of followers in their active accounts and the less where 17,000 followers where the higher number where around 400,000 followers. Whereas the healthcare business professionals were from large companies who have been noticed their presence and activity through the different social media platforms to give some deep insight and information needed.

After that, contacting them through e-mails and phone calls to make appointments with a specific date and time for the interviews, in regard the time difference in Saudi and their convenient time. Only one candidate preferred to answer the questions through e-mail, due to difficulty in scheduling time for a phone interview.

4.4.3 Data Collection

Using structured strategy was essential in the generation of maximum and essential data that can support the objective of the study. The sample population also was mainly chosen based on their knowledge to insure to reach the study objectives. Most participants were very open, cooperative and very excited to share their experience; which helped ease the process of data collection. To get the maximum benefits, the interviews were conducted under certain circumstances;

- The interviews were arranged in June, according to the participants' time preferences.
- The use of semi-structured guide with no flow structured, gave the interviews flexibility and the potential and accuracy on data collection.



- Most of the interviews were conducted in the Arabic language, and were recorded, based on their confirmation, for translation and analysis purposes.

4.4.4 Data Analysis

Data acquired from the interviews was analyzed with the utilization of content analysis. Using one of the common method in data analysis, thematic analysis, is a method for identifying, analyzing and defining themes within data (Braun & Clarke, 2006). It has advantaged on organizing and explain the data in rich details.

Started directly after finishing all the interviews, reading and rereading of the interviews to get familiar with the data. Then, the sample audience was grouped using the first set of questions which is, present the interviewees, and place the data in data display matrix or table. After that, coding and labeling the whole text, then reviewing the themes to correlate with the study objectives. Finally writing up to establish a coherent text with including some quotes of the interviewees.

4.5 Ethical considerations

The study was particular following to a number of ethical concerns. First, participants were fully informed about the purpose of the study and the interviews, and that their responds will be treated on total confidentiality. Second, the authorization has been acquired to record the interviews, and it was confirmed to the participants that it will be used for academic purpose only and it will be deleted after the analysis.

Moreover, the responses were treated in total confidentiality, as most of the business professionals insisted that the company's name and the sensitive information regarding the company and cannot be revealed.

4.6 Limitations

Similarly, to any other study this study had some limitations. To begin with the geographical distance between the researcher and the interviewees, most of the researches done by skype or phone, although it has many advantages, as it is easy to arrange and make the interviewee more comfortable, but it miss the advantages of face to face interviews, such as capturing the emotion and behavior of the interviewees, and also the



non-verbal cues including body language which can give extra information to the research (Opdenakker, 2006). In addition, sample size was small in particular, a large sample would enhance the study's reliability. Moreover, the participants especially those who work in big companies, were not willing to offer some sensitive information in reference to their corporation. Time as well as cost were also constraint since there is a time difference between the two countries and the cost of international calls.

4.7 Summary

For the success to any research, a study design, methodology and the choose of the research approach is essential to generate the maximum relevant results that help in reaching the study objectives. The data collection went smoothly that helped in generating adequate results that will be analyzed in the next chapter.



Chapter Five: Results and Findings

5.1 Introduction

This chapter will reveal the results obtained from the qualitative data interviews. The total number of the sample was 17, which divided into two groups, detailed in the next part of grouping, data display, and finally, using the coding technique to analyze the responses into themes and construct the final text, which lead to the conclusion.

5.2 Grouping

There are two main groups in the sample:

1. The first group are nine healthcare practitioners who are known to be active in social media platforms for healthcare purpose. For rich results, the sample included practitioners from different specialties, to have different experiences and point of views. There were six doctors, Internal medicine physician, Consultant Gastroenterologist and transplant hepatology, Radiologist, ENT surgeon (Otorhinolaryngology), infectious diseases consultant, and finally a doctor who shifted to health education and business. In addition, three specialists, one dietitian, physiotherapist and principal researcher. The participants detail in table 5.1.
2. The second group are eight Healthcare Business Professionals, they were from six different healthcare companies in Saudi. They have different positions in marketing, communication and business development. And they work with different products and customers. The participants detail in table 5.2.

It should be mentioned that the gender was a strong factor as only one from the seventeen participants was female, which may be linked to the conservative culture in Saudi Arabia.



Table 2: The healthcare practitioners

Participant Number	Participant Name	Specialty	Position
Participant No. 1	-----	Dietitian	University professor
Participant No. 2	Dr.Ahmad Alamar	Internal medicine physician.	Doctor and currently the vice president of the awareness center in the ministry of health in Saudi.
Participant No. 3	Dr.Almoataz Hashim	Gastroenterologist and transplant hepatology.	Doctor and university professor
Participant No. 4	Dr. Amr Ajlan	Radiologist	Doctor in governmental and privet clinics
Participant No. 5	-----	ENT surgeon (Otorhinolaryngology),	Doctor in privet clinic and University professor.
Participant No. 6	-----	PHD, Principal investigator	Senior scientist in King Faisal Hospital & Research center
Participant No. 7	Dr. Nizar Bahabry	Infectious diseases consultant	Privet and governmental hospital
Participant No. 8	Obai Albashir	Doctor, MBA holder	Health educator and business man.
Participant No. 9	-----	Senior musculoskeletal Physiotherapist and	Surgical center executive manager at large hospital

Table 3: The healthcare business professionals:

Participant Number	Participant Name	Position	Company	Product and business
Participant No. 10	-----	Senior position, business unit director and corporate affairs director.	Large International Pharmaceutical Company	Oncology Products
Participant No. 11	M.D	Regional marketing director for Middle East and Turkey	Large healthcare company	Ultrasound portfolio products
Participant No. 12	Mohamad Almoussaoui	Regional Product Manager	Smith & Nephew	Orthopedic



Participant No. 13	Ali	Engineer marketing manager	Large healthcare company	Ultrasound Machines
Participant No. 14	-----	Marketing manager	Tadawi healthcare	Retailer and wholesaler of pharmaceuticals products
Participant No. 15	Hisham.	Marketing manager with experience in three healthcare companies, Pharma, devices and laboratories	Privet laboratories	Products and services
Participant No. 16	H. Albebery	Business marketing	Large International company	MRI machines
Participant No. 17	-----	Self-sales engineer and communication assistant	Siemens Healthcare	Healthcare products

5.3 Coding

Using the coding method, sorting the data into different themes, then the results were categorized into different parts:

5.3.1 Social media types and using factors among healthcare practitioners:

The social media applications noticed to be used among all the participants are varied depend on their preference and usefulness to their objectives. Snapchat, Instagram, Twitter, Facebook, YouTube channels and WhatsApp, are all mentioned but under different objectives and factors. The follower's number were ranging from 17,000 to 400,000 followers, and they were from public, their personal patient and other doctors, interns from different specialties.

For the first group, the healthcare practitioners, their choice of the social media platform depends on many factors. First, they all agreed that Snapchat and Twitter are the trends among Saudis, followed by the other platforms. As one of the practitioner who is active in Snapchat and Instagram said, "people likes Snapchat because as they see you live they think they trust me more, and I think that it is more convincing, but the problem is that videos stay only 24 hours then it gets deleted, while I use Instagram because the information last and they can get back and review it anytime". Dr. Nizar Bahabry agreed that live



Snapchat had more advantages on his patients, but he mentioned that he use other platforms such as, Twitter and his own YouTube channel to download the Snapchat videos to be saved for later review.

On the other hand, the trend of the applications at the time of their start, made them take the choice, as Dr.Almoataz said,” when I came back from my study abroad in 2012, Twitter was the trend, that’s why I have more followers their and my account is rich with medical information related to my specialty”, on the other hand, those who started recently followed the trend and used the Snapchat as primer account. But in general, they all agreed that they switch between the different applications and they are keen to try them and any new technology.

Other factor mentioned depends on the personality of the user, as participant 9 said, “it is not easy for me to go live, I am not into public appearance, and I prefer Twitter because I just post the information in a few words”. He continued, “once you go live often, it will expose your personal live and privacy in one way or another which what I don’t like. While others said, that they prefer public speaking and snapchat is more spontaneous, they don’t have to prepare and design the posts like on Twitter and Instagram. Moreover, some of them think that using Twitter and LinkedIn make them more professional.

Other factor depends on the type of information and the best way to deliver it. The Radiologist who have been using social media accounts for medical education, most of his followers are medical students, interns, also consultants from radiology and other medical specialties and not usually patients, he has another point, he said,” I use Snapchat for teaching as it clearer for the audience to see live cases with my voice in the background, and I download the videos on my YouTube channel so they can go back to it many times, it is more useful for me than Twitter. Students from all over the world contacted me and said that they revise for their radiology exams from my YouTube channel, which is amazing”.

Finally, the participants communicate with the followers through all the social media platforms to answer their general concerns, while the dietitian preferred WhatsApp on particular to contact her patients and follow their diet plan and progress and answer their questions.



a. Motivation for using social media in healthcare among practitioners

The motivations were varied between the users:

- The first thing that all of the participants agreed on, that what motivate them the most is being part of public health education, participant 9 said, “we as healthcare providers have a role to educate the community and share our knowledge”. In addition, they were promoting health information online because all agreed that the people in Saudi Arabia lack awareness and there are many misconceptions that it became harmful to the public. Dr. Alamar the vice president of the awareness center in the ministry of health said, “we face many cases that indicate that the people have a high degree of unawareness and they misguided by wrong information and myths, a large number of new mothers refuse to give their newborn the injections as they believe that it will lead to disability!”. Dr. Almoataz also mentioned that some of his new patients consult google, which contain a lot of wrong information, he said, “doctors from all the specialty have to participate to raise awareness in their own specialty, Saudi population needs a trustful source, and our own doctors are the best to deliver it”.
- Professional communication also mentioned as motivation, as they are discussing and learning from each other online, and it gather and communicate people who have the same interests. One good example for that is Dr. Amr Ajlan, radiologist who has passion for teaching, he said, “social media helped me to reach people of my field, who I can transfer my knowledge to, not only in my country but I have followers from all over the world, and we discuss radiology cases online and we exchange our knowledge”. On the other hand, Dr. Bahabry had another experience to encourage his colleagues in the field, his famous video “The success of a loser”, where he talked about his failure in the first years of medicine and how he overcome the obstacles and transformed it to a huge success, this video has hundred thousand of views and shares, he showed how the use of social media to share experiences has a huge impact on his followers and colleagues.



- Personal brand and promotion was another motivation factor, all the participants agreed that they build their names by social media, as Participant No. 5 said, "everybody now is connected to social media, it became part of people's live and they consume it for hours, in addition, it became a tool to advertise for their work also, you can see plastic surgeons and dermatologist use it to show the before and after results, although I am against this, but defiantly it helped them to promote their privet clinics". Dr. Albashir added, "when you want to reach people by promotion, you go to the street they pass by to reach them, now everybody is attached on average 4 hours to his phone, this should be one of the first tools you invest in in healthcare, if you are not there, you are not there".
- Self-satisfaction by giving back to the community, mentioned by five participants, Participant 9 said, "giving back to the community is like social responsibility, it is our role to deliver our knowledge and social media facilitate the role, and it give me self-satisfaction".
- Last factor was the passion of public speaking, it was mentioned by most of the participants, especially those who uses live application and appear in the public. Dr. Alamar said, "it is my personality, I like public speaking and I believe that I have the skills to deliver the information and to motivate people".

b. Social media influence on their followers (patients)

All the participant agreed that social media had a great influence on the public, they became more aware and keen to know more. Participant 5 said, "People now are very active in social media, they ask and comment on each post, you feel it that they need to know more and educated themselves about their condition, social media became important source for medical information". Dr. AlMoataz added, "I believe they became more aware, I post questions from time to time to see if my posts influenced their knowledge, I also get 50-60 questions daily to ask about different health issues". Participant 6 added, "everywhere I go even to the supermarket, people recognize me and stop me to ask questions, which means that they need more information".



Other impact mentioned by most of the participant, that it changed the relationship between the physicians and their patients, and they notice that the number of patients in their clinics increased in a huge way, as the physiotherapist commented, “the day I post a new information about a new back pain therapy, the next day my clinic filled with patients have the same condition”. Moreover, it helped the patients to build trust toward their physician, Dr. Bahabry commented, “patients come to the clinic looking for me, as I helped them understand many concepts in my videos, they think that I am an expert and they show trust to my treatment options. Moreover, it made the consultation easier as they already heard or saw my explanation about the disease, and sometimes I advise them to watch one of my episodes that answers all their questions about some drugs and their side effects”. Dr. Almoataz added, “not only they trust us, but I personally feel comfortable when I know that the patient came to me and say that I know you from your accounts, social media is a valuable two-ways communication”.

The dietitian and Dr. Albashir who is active to post about exercise and healthy life style tips, they mentioned another impact, they noticed that by engaging their patients they became more committed to change their bad habits, Dr. Albashir explained, “I believe in social support and that if you have a healthy environment, definitely they will push each other’s to adopt healthy life. My followers and patients became more attached and motivated to do exercise and live healthy life”. The dietitian added, “when I started to share some results of my patients, I got many requests from my followers, I now started an online coaching, customized diet and I post healthy recipes, and I feel with close following through my online network they became more committed and happy with their results”.

c. The impact on their career

To know more if this affected somehow their own career, we asked the participants, and they all agreed that it has an effect on many aspects. Some of the doctors said that they received job offers through their social accounts, Dr. Alamar a good case example said, “I was working in a hospital while I started my awareness accounts in social media, few years after, I got an offer from the ministry of health (through my snapchat account) to join the team of awareness center, so definitely you can say that social media changed my career path”.



Another point is that social media helped them to build their names in their field of specialty, explained by Dr.Nizar, “it gave me more stability in my job, it helped me to build my name in my field of specialty and I became reference in all the regions of the country and outside the country”.

In addition, they get many invitations to participate in awareness events and conferences, Dr, Almoataz said,” I received many invitations to speak in awareness events regarding my specialty”. Participant No. 5 mentioned that he had two invitations from famous TV channels to appear in the health TV shows.

Moreover, Dr, Albashir, who shifted from medicine to business, said,” I can’t say that I changed my career because of social media, but it was one of the tool that helped me to build my business, it is important tool for any business to be sustainable”.

d. Advantage of social media on healthcare

The last set of questions aimed to cover the advantages, risks and challenges of using these tools in healthcare in Saudi, to compare it with the literature review. The advantages mentioned were many and can be divided into two groups, general advantages and personal advantages to the practitioners.

To start with the general advantages mentioned by the first group:

1. Social media made an easy access to the population, one can reach large number of audience in less time. And on contrast make an easy access for the population to search for medical information.
2. Information can be delivered in many ways and as the personal preference, it give the user many options, video, pictures, small articles and more to deliver their knowledge in a way which is easy for the public to understand.
3. It helps to target the messages, as most of the followers to any account mainly needs the same messages.
4. Great communication tool with the public, direct contact through comments and messages, Participant No. 9 said, “you can answer their question in real time”.
5. Increased public awareness, all the participants mentioned that they believe that their accounts helped a lot in raising the public awareness and that their activities increased the health contents. Dr.Albashir said, “when you find doctors from different



specialties talk and post reliable information, this increased the health content online for the population”. Dr. Bahabry said, “before my engagement to social media I ran many awareness campaigns, we go to the malls, schools and we spend a lot of time, but I can tell you, that now, one video shared on my accounts have far more impact than regular campaigns”

6. It is a great tool to clear many misconceptions regarding health information, Dr. Bahabry who is specialized in infectious diseases, he used his social media accounts to educate people about HIV and infectious sexual disease, because it is prohibited in our religion, the society put a barrier to talk about these subjects. He said, “I have special situation, as I broke the barriers and I am talking about HIV and sexual diseases in public, you cannot imagine the number of patients came to me and say that they had the disease and they kept it as a secret, they were awaiting just to die from the disease because they thought there is no treatment for it, and they were afraid from the society, they thank me a lot that I gave them hope and I let them back to their normal life”.
7. Patient engagement and social support are other advantages, where all agreed that social media is a great tool to gather patients who have the same condition together to discuss and support each other.
8. In addition, it helped to understand some concepts about some medical specialties. The physiotherapist mentioned, “there is a lack of awareness about the role of the physiotherapists, some go to surgeons when they have back pain, so it was my role to explain when to reach a doctor or physiotherapist to save the time for patients and doctors”. On the other hand, the radiologist added, “many medical students showed an interest to specialized in Radiology, they tell me that we did not know how important this specialty and that I cleared their wrong perceptions”.
9. Useful education and teaching method, Dr. Amr Ajlan said, “the way people are learning is changing, it changed in the way they want to receive the information and how they search for it. Because the new generation are attached to social media, so you need to talk to them in the same language, they are not accepting the traditional way of education. Moreover, instead of teaching few people, you can teach thousands outside the class rooms”.



And as of the personal advantages they encounter:

1. Increase their own knowledge, as they are searching and filtering the information, this helped to build their own knowledge and kept them updated in their field.
2. Second, is that it became as market research tool, participant No.1 said, "by reading the comments under each post and communicate with public, I learned a lot from them, what the information they are missing, their needs, and how to attract them with my next posts, this helped me a lot as there are a lack of local researches in all the fields".
3. Brand image, they became well known in the regions and across the country.
4. Improve personal skills, such as public speaking, presentation, teaching methods, and self-confident.

e. Risks and challenges:

Although the participants mentioned many benefits, they showed the other side of the use of this technology. Divided into the risk on the public and the challenges faced by practitioners:

Starting with the risks:

1. The risk that mentioned by almost all the participants, is that some people ask for consultation online which may lead to harmful results if the doctors started to diagnose people through social media accounts. Dr.Almoataz said, "doctors should provide only general medical information, and not privet consultations, it is very important to give information without crossing the line and accidently give a consultation, it will never replace the one to one consultation". Dr,Alamar added, "followers send me their blood test results and ask if they can reduce the dose of certain medication, it is wrong to answer them without seeing their medical background, it will not substitute for face to face examinations".
2. As the health information increased, also some inaccurate and wrong information increased, Dr.Almoataze said, " because some doctors likes to have more followers they want to be active with their posts, so they don't give the efforts to make sure of the sources of the information and sometimes they talk about information not from



their specialty”. This may lead to harmful results as people are influenced by the information doctors are posting.

3. The risk of impersonate, the participant No.1 said,” the social media world is really large and growing, the risk is that anyone can impersonate and claim that he is a doctor and start to post health information without showing his picture, hoping for fame and more followers”.
4. Ethical issues were also mentioned, using the patients to market for themselves and their clinics, participant No. 5 said, “some doctors especially plastic surgeons, film the surgeries online and post before and after pictures for their patients, and they offer the patients discounts if they accepted to appear in their account, which I believe is unethical to breach the patient privacy, and especially in our conservative society”.
5. Social media can affect the patient opinion regarding their doctors, participant No.5 said, “some very good doctors are not into social media which may affect the patient opinion on them, one day I had a patient who came to me and said that she changed her doctor to come to me after she saw me on snapchat, her doctor was my professor and the one who taught me, I explained that to her but she refused to go back to him”.
6. These activities are not legally regulated, anyone can post information without evidence and without punishment, as participant No. 9 said, “I don’t believe that it can be monitored, but people should be accountable for the information they post, like if a doctor posted a new cure for cancer that it is not approved, he should be accountable for that”.

The challenges faced by practitioners:

1. All the participants mentioned time consuming as the main issue, participant No. 6 said, “it is time consuming, I have to give too much effort for reading, so I can be ready for inquiries and present evidence for any health information that I post”. Participant No.5 said, “after long research I have to translate the information to Arabic, and to design my posts to be attractive to the local audience”.
2. Effect on their personal life as participant No. 9 mentioned, “it is time consuming and it takes from your time with the family and your personal life”.
3. Criticism from followers, enemies and negative people, participant No. 9 said, “they can insult you in public, and you don’t know who is behind these accounts”. Dr.Bahabry who talk about a subject that considered a red line in the Saudi society



said, “I face a lot of criticism and rejection, people insult me in public because they think that I am encouraging the sexual acts in the country, they were really hard on me and on my family”.

4. No IP (intellectual property) rights, competitors can copy the work that the practitioners worked hard to deliver it.

f. Future for social media on healthcare:

All the participant agreed that now social media have a great impact on the Saudi community, and they were asked about their opinion on the future of this technology. Dr. Nizar said, “our country is really behind in healthcare, and I believe that social media is very important tool to help us foster and accelerate the wheel of development”.

Moreover, although they are happy about the impact, they believe that it should be more organized and regulated in the future, as Dr.Almoataz said, “I feel that by now we have a good source online, but I wish it will be more organized. It will have more impact if it was organized by the ministry of health, so the good accounts will be under the umbrella of the ministry, and the people will know exactly which accounts are more trustful”. Dr.Alamar, the vice president of the awareness center in the ministry of health said, “We need to invest more to improve the health content, we have shortage in the studies about the social media impact, we know it is working but we never measured it”.

In addition, all agreed that using advanced technologies will help them to provide better service to the patients and public in the future, and that it is important that healthcare move toward patient-centric services, the dietitian mentioned, “it ease the contact with my patient for better serve them, I can follow their progress and they can consult me anytime if they have adverse reactions, hospitals needs to get all the advantages of this technology”. Dr.Albashir added, “Healthcare is changing, we all know now that we have to move toward patient-centric service which have been proven their effectiveness on the patients”.

Finally, another future hope was mentioned with different ideas such as; it will ease the research recruitment, online seminars which can target high number of participant with low costs, special applications for each specialty, and finally rating for doctors to better improve the services.



5.3.2 Using social media in healthcare Business:

The second set of interviews were conducted with healthcare business professionals, to have an overview about the use of social media in healthcare business. It has been noticed that although they believe that social media is slowly entering the healthcare field compared to other industries, but they believe that it is the future.

To have a global idea about how the business works, the questions started by describing who are their target customers, what strategies they are using to reach them, and how social media integrated their business.

The answers were almost similar, mainly doctors and healthcare institutions are the main targets. Starting with segmentation as a first step, premium costumers were medical cities and university hospitals, then comes the Ministry of health hospitals and privet hospitals, and finally the small clinics. But they all agreed that the main target was not the patients, as one of the participants a business developer from a large pharmaceutical company explained saying, "we cannot reach the patient directly to market our products in pharmaceutical companies, it is illegal and restricted industry". Another marketing manager explained that "before it was mainly Business to Business, but now it is a different game, you can find Business to community, Business to human, so you can reach patients but indirectly".

Moreover, it was essential to know some of the marketing strategies that they have been using to reach their targets and how social media fit in their activity. This was best described by Mr.Albehery saying, "I studied MBA in marketing and strategy, I can say that strategy is the whole picture, then we use tactics and marketing tools to achieve it. Our main strategy is differentiation, how to be unique from our competitors, so we use social media and marketing tools to achieve this goal and market ourselves to position the image of the company". Participant No. 10 added, "social media is not the only channel we use but it is an important one".

In addition, comparing social media to traditional marketing, they all agreed that medical education through workshops and events, is number one, but social media used in alignment with these tools, as participant No. 11 detailed the subject saying, "we still relay on traditional marketing tools, such as conferences, symposium, workshops,



brochures...etc., but each year we reduce the budget dedicated to these tools and increase the digital marketing budget, this year in our company it reached 10% of our marketing budget, and it is increasing, but I have to mention that it is slow in Saudi, as our branch in Japan for example pointed 30% of the budget this year for digital marketing”.

a. What type of social media?

Many applications were mentioned, Facebook, YouTube, Twitter, LinkedIn, Instagram, WhatsApp groups and some companies have special applications. Mr. Hisham said, “mainly we use LinkedIn, Twitter, and Facebook. We found that people check their Twitter every 10 minutes, while when I send emails, sometimes it stays 10 days not opened”. Snapchat was not mentioned by any participant here, only one declared that Snapchat is not yet professional tool for healthcare business, and that it needs to be updated frequently.

b. How it has been used?

1. The first thing all the eight participants agreed on, is that the presence of the company in the different social media platforms and being active with updates, is essential for the company’s image.
2. Not only to keep the image, but also it has been used to changed it, one participant from Siemens said, “we use it now for branding our new transformation, the Siemens company have different divisions, like healthcare, power and gas, and since first of January 2017, international wise, they announced that the healthcare division will be independent and they name it “Siemens healthcare”. So, to change this in the consumer mind, we use social media for branding the new slogan “Siemens healthineers” and it is working”.
3. To market and advertise any new technology for some companies. But its definitely different than other industries, explained be Mr,M.D, “ we use awareness campaigns, like if we want to promote using ultrasound machines instead of X-rays for breast imaging, it is not enough to only talk about the technology, we need to educate people and patients about the disease itself, and that breast screening is easier with Ultrasound, and more affordable, so it is indirect way”. Also in the case of pharmaceutical companies, as one of the participant said, “we call it “Marketing Through Education”, as we cannot talk about a medication in public, what we do is



we talk about a disease and educate the public and we show that there are ways to tackle it, so we make people ask about it”.

4. Most of the large companies have people who are responsible for their own social media content, on the other hand, small companies hire third party to design and update their accounts, which shows how important it is for their business. In addition, some collaborate with practitioners from the same field who have high number of followers to talk about for example, the importance of breast screening, so people start to ask about it.
5. Promotion to their activity also mentioned, companies tend to promote all their activities through their accounts, any achievement, news, and promote activities, one participant said, “we announce any new conferences or workshops through social media accounts before, and also we publish the results after”.
6. Some companies use it in CSR (corporate social responsibility), one example was mentioned by participant No.14 saying, “our competitor Alnahdi company, did a very smart move, starting campaign called “Milliard step”, where they encourage the population to participate in walking event and count their steps by the phone, many people participated, and they reach 2 Milliard step, it was a credit for them to encourage people to care about their health, and it worked for them, and all that by using social media and influencers”.

c. The advantages of social media on healthcare business

1. Reach more people with less time and cost
2. Effective if used properly
3. High and fast impact
4. Valuable research tool
5. Communication tool with public
6. It gives the company positive image

d. Risks

1. Legal issues were mentioned, as using this technology in healthcare business is not clear, so most of the participants mentioned that they are using it with cautions.
2. Concerns about patient’s privacy, as it is illegal to post patient’s cases online.



3. Negative attackers, can post rumors and nobody cannot stop what people say in public and it is viral.
4. The competitors will be open to any activity of the company and may take advantage to copy or enhance their services.
5. Uncontrolled health content accuracy

e. Challenges

1. As the main target are the doctors, it is hard to reach them and convince them to buy the products through social media, as Mr.Almousawi said, “our products are high tech and the doctors needs full education and face to face explanation of how it works, its advantages ..etc. social media may be used to advertise but not for sale purpose”.
2. Moreover, the doctors do not trust the information on social media they rely on scientific papers to search for information.
3. Content development takes time.
4. It is new technology for this business and still they did not master how to use it, participant No.10 mentioned, “it is new for us, and like any other technology if it is not handled properly, it may have negative impact and damage the company’s reputation”.
5. Difficult to customize the messages, Mr.Hisham said, “when you have public account, you will have followers from different nationality, cultures and different mentality, so you have to generalized, you cannot customize the content”.
6. Not easy to measure the impact, some rely on the number of likes and views but they believe it is not clear. Participant No.10 mentioned, “We used it to promote a diagnostic genetic test, and we found increase in the number of patients who took the test, but we are not sure if it is the social media or other tools we used was the main reason, but the results were amazing”.

f. Future of social media in healthcare business

All the participants agreed that, the future is there, and all industries have to adapt to this trend, Mr. Hashim said, “The country is going in huge transformation, it is witnessing unprecedented dynamic leap in achieving the Saudi Vision 2030, this vision was revealed last year by the Saudi government, and one of the important goals is e-government services, to



improve their services including healthcare. So, we as companies have to keep up with the revolution and embrace social media in our activities". Moreover, Mr.M.D said, "Those who will not move now to social media, they will be behind and they will take more time". Only few participants mentioned that it is slow for healthcare industry, but they confirmed that they will still use it.

The future hope is that social media will foster this business, increase their connections and in consequence their profits. In addition, like the first group they wish it was more regulated by the authorities and they mentioned that they are keen to learn all its secrets.

5.3.3 Recommendations and proposed solutions:

After the analysis, some recommendations extracted from the interviews and the literature review done on Saudi Arabia:

- The impact of social media on healthcare in Saudi is something cannot be neglected, more researches should be done to have a clear idea on how to efficiently use this tool to get all the advantages and reduce the risks.
- More regulation from the authorities on these activities to insure the maximum benefits reached and eliminate all the risks.
- Researches on specific groups like youth or women, such as why women are less participating? And how to stimulate that?
- Narrow the research to cover specific areas such as, ethics, legal and social aspect in using social media in healthcare.
- Healthcare business professionals, should participate to convey their experience, to enrich the local business on how to use social media as a tool in Saudi.

Conclusion

The research offers some significant insights in regard to the emerging use of social media in the healthcare sector. Specifically, the study established that social media has



undoubted benefits to the healthcare sector which is fueled by the wide internet use. Social media is widely utilized in searching for health-related content by patients which act as a source of knowledge and familiarity creation. From the development of social media back in 2004, an increasing proportion of patients today utilizes technology and specifically social media platforms for health associated reasons. Some of the issues that were established in relation to the use of social media in the healthcare sector include, the lack of patient privacy which might lead to the violation of their privileges and the loss of confidentiality and stigma, cyber bullying which tends to intensify health problems, the incapability to ascertain the reliability and accuracy of information.

On the other hand, despite the intensifying challenges that hinders healthcare efficiency while utilizing social media, the approach besides acting as a marketing and informative tool is more capable as it reaches more people. In addition, if utilized under caution it is effective in achieving the set objective and a valuable search tool. In that unlike physical consultations with doctors the internet provides unending data based on searches at any given period which illustrates its flexibility and convenience. This does not only help in the provision of knowledge but also ensuring that consumers make the most suitable choices in regard to medical alternatives.

In Saudi Arabia, Social media is perceived by most individuals as a form of entertainment and social connections but it has impacted the healthcare sector positively by increasing information accessibility, healthcare engagement, and platforms where practitioners can directly connect with the patients. This benefit cannot be ignored given that today healthcare is amid the most sectors that have benefited largely from technological advancement ranging from diagnosing to treatment alternatives. Based on the acquired findings it is apparent that the framework of these research can act as a guide to future studies within a similar context. The findings have direct and practical implications for health care practitioners as well as policy developers. Despite the immeasurable benefits of social media, it is recommended that it should be utilized with caution given that healthcare is amongst the most essential and sensitive sectors today. In that, accurate information should be provided to the users to avoid the occurrence of misinterpretation and landing on the wrong medical hands.



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Annexes

Examples of the interviews conducted in the current research, two with business professionals and two with healthcare practitioners:

Social media and healthcare

The aim of the research is to measure the impact of social media on the healthcare industry in Saudi Arabia.

Interview for healthcare givers (doctors, specialists) who are active in social media:

Interview number 1:

Present the interviewer:

- Can you present yourself? Your specialty?

Nizar Bahabry / internal medicine specialized in infectious diseases

- What type of social media you are active in?

Twitter / Facebook/ Snapchat/ Youtube I have channel

- Which one do you prefer? Or which one is more useful to you?

Snap is more useful/ and in Twitter I download the snap videos to be saved for future
My followers around are around 35 000

Motivation:

- Why do you use social media?



1. Mainly Education to the public
2. And also, I talk about my experience about my failure in the first years in medical college and how this changed now to a huge success.

- What are the effects on your patients?

1. Excellent effect, it helped a lot of patients
2. I can't deny that it increased the number of patient in my clinic.
3. And they trust me a lot, they think that I am the best and they say that I look like an expert.
4. And it made it easy to explain to the patient, I usually say that you can go to my account to watch my explanation about a specific disease.
5. I have special situation as I talk about HIV and sexual diseases in public, and you cannot imagine how people have miss understanding about these diseases, they thank me a lot to show them this information.
6. I broke a barrier that our culture put on these subjects.

- Can you give an example/a story that is relevant for you?

You know how our society are putting barriers regarding the sexual diseases as it is prohibited in our religion.

So, the messages, the number of patients who thought that when they have the HIV they will die, and they lived keeping the secret because they were afraid of the society!!

And they say that my videos helped to go to their live normally, I had patients from outside the kingdom, from Qatar, Kuwait as there are rarely doctors speak about this subject and the people have misconceptions about HIV.

- What are the effects on your daily job?



More stability in your job, I build a name in my field in Saudi and outside the country and I became a reference for this field.

Opinion on social media:

- What are the advantages you found?

1. Helping people by educating them.
2. Publicity and popularity and build brand image
3. Confidence of the patient
4. You make impact on the society and you fix a lot of misconceptions in the society
5. I did a lot of campaigns before my engagement in SM, but an impact of one video shared on my accounts are far more impacted than the regular campaigns.

- What are the risks and challenges?

- Actually, because I speak about a subject which is considered as forbidden to mention and I crossed the red line imposed by the society, about the sexual diseases, I face a lot of criticism and rejection and they insult me on public because they think that I encourage the sexual acts in our society.
- The people where really hard on me and on my family, they call my wife and mother to say let him stop what is he doing.

- Do you think it is important in healthcare? For which reasons?

Yes, it is very important, as our country is really behind in the healthcare, I believe that social media is very important tool to help us foster the and accelerate the wheel of development.

The society have a lot of misinformation and we need doctors from all the specialty to talk and help increase the awareness.

It is makes it easy to reach a lot of people.



Interview number 2:

Present the interviewer:

- Can you present yourself? Your specialty?

Almoataz Hashim, consultant gastroenterologist and transplant hepatology, and I am the vice team of quality and development in the university of Jeddah.

- What type of social media you are active in(snap, insta..etc)? and the idea about the accounts?

The main is Twitter where I have 140 000, then Snapchat, Instagram and I have a YouTube channels.

- Which one do you prefer? Or which one is more useful to you? And why?

I like Twitter because when I came back to Saudi after my studies abroad in 2012, I started in Twitter, because it was the active social media platform in Saudi at that time, and was thinking about health education through social media, so it was a good start from there.

Motivation:

- Why do you use social media?
 - There was a huge gap between patient's population and physician, physicians became big selfish and trying to improve their own clinical experience and research without getting back to the patients.
 - Health education for the public there was a huge lack of information.
 - Many people go to google to ask for information and they diagnose their selves.
 - I only talk about my specialty, I try to teach them about hepatitis, bowel syndrome..etc



- What are the effects on your patients/followers?

- Huge impact
- They became more aware, I post some questions from time to time to see if my posts are affecting their knowledge.
- The other thing is that I get a lot of questions 50-60 questions in the comments every day, because they want to know more.
- And by the way I try to give them information without crossing the line and give the diagnosis or treat them online, as I see it is not ethical and it will not replace the one to one consultants.

- Can you give an example/a story that is relevant for you?

Not really a story but with high number of followers in Twitter, in it I educate them but they don't know who I am.

but when I started Snap the number of patients in my clinic increased because they said that when we saw you talking we felt that you know what you are talking about.

Not only they trust us, I personally feel comfortable when the patient comes to me and say I chose to visit you because I knew you from your accounts.

- What are the effects on your daily job?

- I got job offers in other cities
- They call me to participate in awareness events
- My account is the 3rd in the kingdom as in the number of followers,
- For 2 reasons:
 1. I am very specialized, I don't talk about anything other than my specialty just to gain more followers
 2. I draw a line between giving a lot of information without giving consultation online



Opinion on social media:

- What are the advantages you found?

1. I am a huge believer in social media, I believe that every physician has to talk about his knowledge, and just setting behind his desk.
2. We have to get back to our community and this is the tool.
3. You feel satisfaction from giving back to your community.
4. Your engaging to your patients
5. You help them understand

- What are the risks and challenges?

1. You will get throes, the negative people
2. They will attack you
3. Because people likes to gain more followers so they start to post not evident based information.
4. Not to break patient confidentiality, like the plastic surgeons, who put before and after pictures.
5. It is now used in unethical way, as they do a long snap on how they inject patients lips or more, which is unethical way and not appropriate to our culture in Saudi.

- Do you think it is important in healthcare? For which reasons?

Defiantly, I feel that by now we have a good source online, but I wish it will be more organized,

It will have more impact if it was organized by the ministry of health, so the good accounts will be under the umbrella of the ministry, and the people will know exactly which accounts are more trustful.

Interview number 3:**Present the interviewer and the business:**

- Can you present yourself?

M.D, Regional marketing director for middle east and Turkey

- Can you tell me about your business? Your products?

Responsible for Ultrasound portfolio products.

The marketing strategy:

- Who are your target costumers?

Before, we were manly doing business to business. But now it is a different game, you can find mix between B2B, Business to community, Business to human, regulatory like FDA.

- What are the main marketing tools you use in your strategy to reach them?
 - The scientific events (symposium, congresses..etc) now is less than 5% of our budget.
 - For our product the Ultrasound, education activity is number 1 strategy, we do many types of education, even online education with collaboration with online universities.
 - Onsite activity in hospital.
 - 10 % of our budget is digital marketing and we will increase it to 15%, it is slower in our region, compare to our branch in Japan they do 30% digital marketing.

Social media:

- Do you use social media in your business?

Yes

- In which social media you are active?
 - Facebook remain number 1 in terms of the interactions.



- YouTube is more than twitter (we make educational videos)
 - We signed a collaboration with LinkedIn but we found it came in the 4th place in terms of interactions
-
- What are the purposes?

3 MAIN REASONS:

1. Awareness campaign

When we talk about breast imaging and screening or liver disease, it is not enough to only provide the technology, we need to educate people and patients that it has to be done!

2. We consider the Saudi Market as Premium market, they like to buy expensive devices with high features, and what happened in the region (the political tension) recently stopped many purchases, so the right decision is to use lower price equipment that serve the main purpose (to use Ultrasound for breast screening) So, what we do now is that we use digital marketing to show the physicians that they can use affordable UltraSound to perform these clinical procedures, we found that in face to face with sales Rep are not effective and they are not convinced, so we utilize SM to send the message, we talked about the technology not the disease and that by using US it is more efficient

We called the campaign as smart technology, and we try to define smart is to be more effective and that should be related to the investment in equipment.

3. Understanding what happening in the market, the key is that we know that we are emotional purchasing culture!
- 79% of the purchases can be changed due to decision makers during the purchases process. We are different than Europe in terms of emotions, relationships..etc. many patients depend on emotional factors; the opinion of peers, colleagues, WhatsApp groups..etc and our connection to media is increasing.

-



4. because we depend on education, we use KOL (doctors) who have large follower to educate patients like breast checkup, but also, we have our own team who do our content, 70% by external, 30% by our team accounts.

Opinion on social media:

- What are the advantages that you see in social media?

Healthy imagination middle east campaign, directly to the consumers, it helps a lot, some ppl where not engaged but with the champagne the get attention with all the health information we deliver by the doctors, we use simple ways like infographics in twitter and FB.

It is related to our activity with the ministry of health. And helped to reached a lot of ppl.

- What are the risks and challenges?
 - Content development it takes time and expensive.
 - Our people are not expert because it considered new tech.
 - There are some expert companies in USA (Third party) but they have different mentality than our locals
 - It is Expensive because they are not experts.
 - Large audience, u don't know if u reach the right people, and we cannot measure the impact directly.
- Do you see future of social media as a marketing tool in healthcare business?
 - Not really future it is NOW, even conferences I think one day it maybe online!
 - Also, the E-store we already sold in Brazil through it
 - Who will not move now to social media he will be behind and he will take more time.
- Could you provide an example of social media that seems working for you?



1. One way is to use it in competitive way, we are trying to convince the radiologist to use one of our Ultrasound products instead of mammogram (it was hard since they prefer mammo), for breast screening, we say that US is save with no radiation to the patient, any nurse can do it, and also one of the reasons, in Saudi you cannot do mammo screening for less than 40 years, SO, people Started to do it and we discovered a lot of cases by breast US and all that by pushing infos in SM
2. Another example which was very touchy, in Mexico we spread a video (pregnant blind women), it's about 3D printing for the US of pregnant women, SO she could touch the baby, it was highly podcasted in twitter and FB, and we used in Arab health and made a large impact (it gave a good image to our company).

Interview number 4:

Present the interviewer and the business:

- Can you present yourself? Your position?

Hisham albihairi, business marketing for MRI in SAUDI , Turkey and middle east

- Can you tell me about your business? Your products?

Philips healthcare company for 14 years

The marketing strategy:

- Who are your target costumers?

We have t segment, 3 segments

1. Premium costumers, like the medical cities and university hospitals
2. Satirized, the MOH hospitals and some the privet hospitals
3. Economizers, the main need is the ROI, they are not advanced in technology and applications.



- What are the main marketing tools you use in your strategy to reach them?

I studied MBA in marketing and strategy, you have to know that strategy is the whole picture, and then we use the tactics and marketing tools to achieve it.

Our main strategy is differentiation, how to be unique from our competitors, so we use social media and other tools to market ourselves.

Social media:

- Do you use social media in your business?

Yes

- in which social media you are active?

Mainly LinkedIn, Twitter, Facebook also we have WhatsApp groups with the engineers and doctors to post educating cases

The emails are the least open, we can send email and they open it after 10 days, but they check Twitter every 5-10 min.

- What are the purposes?

The country is going in transformation with 2030 Vision, so to keep up with the revolution, we have to go to digital marketing.

- Do you have social media strategy?
 - We use it as marketing communication tool, so we post about a specific disease and then we say that to discover this disease you can use this kind of software, so we do marketing through education.
 - We announce about the conferences and events through this.



Opinion on social media:

- What are the advantages that you see in social media?
 - Easy and fast tool.
 - The cost depends on the way you use it
 - High and fast impact

- What are the risks and challenges?
 1. As it has fast impact also the negative impact is fast, if there are rumors or bad news it will spread fast.
 2. To breach the patient confidentiality

- Do you see future of social media as a marketing tool in healthcare business?

Yes of course

- Could you provide an example of social media that seems working for you (or in other company)?
 - All our accounts are highly active and we have a good communication daily with our KOL.
 - What I want to say also is that LinkedIn started as professional network to search for jobs, but now it is transformed to a good marketing tool for health companies.
 - With our economy impacted by the economic crisis in the world we have less work now with GOV hospitals, so we moved to the private, which need more marketing, we used the marketing intelligence and we use it as a research tool to see what the other hospitals wants.



Norah ALHUSSAINAN

Titre du mémoire: Social Media and Healthcare Industry

Similarly, to other forms of technology, **social media** is evolving constantly to fitting into every day's activity. Social media has impacted almost every sector and **healthcare** is not an exemption. Following the advancement of this technology, it is without a doubt that social media use has affected the healthcare services, the **patient behavior** and their relationship with the physicians and transformed the communication among the consumers and organizations on the online platforms. Today social media is not a voluntary **marketing** instrument for **corporations** particularly healthcare. Social media is not only beneficial to the patients who acquire health related information but it also benefits the healthcare sector in creating a desirable image and offering improved services based on the needs and preferences of the consumers. Thus, through the use of both secondary and primary data, this research paper will present a detailed evaluation of the impacts of social media on the healthcare industry, its **benefits** and also the **risks** and challenges. Literature review on the subject around the world, and as a case study a qualitative data research particularly carried in Saudi Arabia.

Key-words: social media, healthcare, patient behavior, marketing, corporation, benefits and risks.

En parallèle, comme autres formes de technologie, **les médias sociaux** évoluent constamment pour s'adapter à l'activité quotidienne. Les médias sociaux ont touché presque tous les secteurs et la **santé** ne constitue pas une exception. Suite à l'avancement de cette technologie, c'est sans aucun doute que l'utilisation des médias sociaux a affecté les services de santé, le comportement **des patients** et leur relation avec les médecins et transformé la communication entre les consommateurs et les organisations sur les plateformes en ligne. Aujourd'hui, les médias sociaux ne sont pas un instrument de **marketing** volontaire pour **les entreprises** en particulier pour la santé. Les médias sociaux ne sont pas seulement bénéfiques pour les patients qui acquièrent des informations liées à la santé, mais ils profitent également au secteur de la santé pour créer une image positive et offrir des services améliorés en fonction des besoins et des préférences des consommateurs. Ainsi, grâce à l'utilisation de données secondaires et primaires, ce mémoire de recherche présentera une évaluation détaillée des impacts des médias sociaux sur l'industrie de la santé, ses **avantages** et aussi **les risques** et les défis. L'analyse bibliographique sur le sujet à travers le monde et, comme étude de cas, une recherche de données qualitatives a été menée essentiellement en Arabie Saoudite.

Mots-clés : les médias sociaux, santé, patients, marketing, les entreprises, avantage et risques.

