Case Study

Developing online health communities through digital media

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A B S T R A C T

Twenty-first century's advancement in information technologies and the emergence of online communities have considerably influenced the online communication channels between patients and health service providers. Online health communities are now popular venues for health information sharing, yet little is known about the benefits in developing countries such as Iran. The aim of this case is to investigate on online health communities in Iran and to have a better understanding of consumer's behaviour using health services. The case integrates social support theory and social media concepts with traditional consumer behaviour theory, notably satisfaction. Using a content analysis of three online health communities indicates the value of social media in developing service quality in health industry.

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1. Introduction

Standards of living are increasingly informed with a service-centred climate (Vargo & Lusch, 2004). By default this encourages industries to seek ways they can evaluate the quality of services to improve and provide satisfaction to their consumers (Jayawardhena, 2010). However, many concerns have arisen internationally in the health care sector and it faces major challenges. Rising costs and increasing demands of patients are among the most important challenges for the health industry particularly, the improvement of quality in health care and the expense control are the main challenges in this industry (Sicurello, 2009). Concisely, patients are now demanding better quality and their expectation is higher than before.

Patients can be seen as consumers of services in health industry and are the central point in this sector. Every government is trying to improve the quality of health sector to offer service quality to the system. Increasing service quality provides satisfaction to the patients as customers (Spreng, Shi, & Page, 2009). Within this narrative service quality can be achieved when consumers perceive value and receive information quality leading to customer's satisfaction. This sector is now looking for the solutions to enhance the quality of services to their customers. Digital solutions, as a cost efficient solution, aimed at improving the quality of health care is of considerable interest amongst scholars (Black et al., 2011). E-health is such a strategy increasing satisfaction in patients. Additionally, e-health has offered a number of opportunities for health sector in past years.

The proliferation of the Internet for acquiring information on health and developing e-health has gained a lot of attention in recent years (Rains & Karmikel, 2009). The Internet has empowered patients to share their information and experiences and also to gain access to others' information using social media. Social media is one such possible digital solution for health professionals as they face up to the problems of improving provision within shrinking budgets in the industry. The increasing attraction of social media and attraction of social networking sites (SNSs) and online communities (Patterson, 2012) developed new strategies for the market to use these social platforms that enables online communication between peers. Organisations employ online communities to develop their marketing strategies (Nambisan & Baron, 2007) and facilitate social interaction of members for sharing information and knowledge about a product or a service (Ganley & Lampe, 2009). In fact, sharing information, experiences and knowledge with other members of online communities is a valuable opportunity for the health sector to improve services. These advancements offer new opportunities for the countries to develop online health communities to reduce the costs and increase the quality of services. In addition, these advancements can arguably provide different facilities that enable consumers to become empowered to provide as well as receive informational and emotional support (Åkesson, Saveman, & Nilsson, 2007), which are the constructs of the social support.

Current national spending on e-health plans is rising in the UK whereby in 2010 £12.8 billion was allocated in a national programme for information technology for health services. In the US in 2010, $38 billion was utilised for e-health investment (Black et al., 2011). This arguably demonstrates that governments are prepared to make investments that will help them to address issues in the health sector (Black et al., 2011). However, developing countries such as Iran have no clear plan to develop their spending on e-health plans. This is exacerbated by the weakness of Electronic

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services (E-services) in Iran. Developing health communities can be a solution to improve public health leading to increased quality of services and satisfaction.

Therefore the reported case investigates the potential of online communities for development of health care in Iran and examines the social relationship of individuals on online health communities. It is noted with the proposition of how social support aids online health communities in Iran. In effect, do social media provide satisfaction to Iranian patients using online health communities and finally, how can social media improve health care both in Iran and internationally.

2. Case description

Iran is a developing country in terms of information and communication technologies (ICTs). Lack of ICTs infrastructure is one of the main reasons that keep this country in developing level, although Iran has a great potential in terms of its human resources who are specialised in different sectors. The government has a number of plans to develop health care services in Iran such as family medicine. The country is trying to adopt digital technologies for different sectors and improve the services in the country. Moreover, the state government has the control of ICT and many telecom companies are state owned. However, e-services in Iran are weak and there is low satisfaction among consumers (Fathian, Akhavan, & Hoorali, 2008). People are interested to use ICTs for their daily lives, but they have a number of obstacles such as slow Internet access, lack of awareness to the benefits of ICTs and lack of infrastructure in Iran. Health services are not spread in all region of Iran. Inequity in health care services in Iran depends on national health policies such as developing family medicine and rural insurance programme. More technical readiness is one of the main agenda to develop e-health in Iran (Rezai-Rad, Vaezi, & Nattagh, 2012). Scholars argue developing health communities can provide better service quality to this region.

Investigating a developing country in terms of ICT with the current proliferation of Internet and social media can be a practical case. In this case, we will investigate on three different online health communities to have a better understanding on the impact of digital media in the development of health sector.

3. Methodology

Content analysis of three online health communities namely http://www.forum.iransalamat.com, http://www.tebeaval.ir/forum, and http://anjoman.salamatnews.com, are helping us to investigate the case. Transferring meaning recovered from text into data with the aim of a systematic procedure is content analysis (Pavlou & Dimoka, 2006). The content analysis helps the study to discover information that we could not see on the interview. Content analysis is a qualitative method, which analyses discussion communities to discover information with no availability at the surface. The method is recommended for analysis of online forums (Marra, Moore, & Klimczak, 2004). These posts had almost 70% discussion threads. The rationale behind the selection of these three cases is that they are among the most active online health communities in Iran. The number of visitors per day, clicks per posts, posts and members are the main determinants of these selections. The author also posted different posts to investigate on social relationship of members and their interaction with him. We have also asked people in Iran to introduce online health communities, which they voted for these forums.

4. Case analysis

Empowered by Web 2.0, individuals have opportunities to join online communities performing social interaction with peers to enrich their daily informational needs. Interconnectivities of individuals are largely due to popularity of social media, which facilitates sharing or acquiring knowledge, information, and experiences on the online communities such as health online communities. These advantages develop health care services and satisfaction of patients, which persuaded us to conduct a qualitative study to investigate on online health communities. The goal is to explore the ways these communities develop service quality leading to satisfaction in consumers of health services. The research targets Iranian society as this country has challenging issues with regards to healthcare services, particularly e-health. The results of content analysis of data from three online health communities in Iran show that interconnectivity of participants in online health communities produce informational support. Joining to these communities to ask a question related to health offer participants information they need by their peers. Informational support provided in these communities encourage them to ask health related questions and encourage them to use this forums as an alternative solutions for their health issues. "*These forums are good particularly, when I cannot discuss personal issues with doctors, therefore, I prefer to get information I need through these communities as previously members of this online community and a doctor helped me*", or "*it is quite expensive to visit a specialist and I like to use these communities as I can read the comments of previous posts, where I can find the experiences and knowledge of others in this issue*" are examples of comments of forums, indicating availability of informational support in online health communities. Table 1 also provides a picture of how the coding process of informational support proceeds in content analysis of data from three online communities.

As the coding process shows, members of these communities like to share their experiences and knowledge and support their peers with information they have. Data analysis from this study also highlights the availability of emotional support in online health communities. The examples of data from the forum "I like these forums as members are really supportive and they are side by side when I need some support" or "I enjoyed going online and spending some time a month in these forums as I know how difficult it is to deal with diabetic patients. Sometimes by simply sharing a positive energy can help them have more hope in life". This shows the availability of emotional support. The case shows that there are many participants that had good experiences in online health communities, encourage them to frequently visit these communities and emotionally support peers. These results show the availability of informational and emotional support, as intangible dimensional of social support in online health communities. Many participants join online health communities to seek for online social support. An example of coding process provided in Table 2 addresses the first question of this study: How social support aids online health communities?

In regard to the second question of the research "*Does social media provide satisfaction to Iranian patients using online health*

Table 1
Example of coding process for informational support.

Meaning unit	Compressed meaning unit	Code
I had the same issue last month, and I watched this video. If you click on this link you will see how to deal with the issue.	Sharing knowledge, experiences, and information with peers	Informational support