Chapter 60

How Web 2.0 Shapes Patient Knowledge Sharing:
The Case of Diabetes in Italy

Chiara Libreri
Università Cattolica del Sacro Cuore, Italy

Guendalina Graffigna
Università Cattolica del Sacro Cuore, Italy

ABSTRACT

Web 2.0 has totally changed the health communication world. In particular, it has reconfigured peer exchanges about health. These exchanges are important because they allow knowledge sharing and construction between patients, in particular chronic patients. Although their importance is well established, this field of study brings together a variety of theories not uniformly shared or understood. It is not clear how patients use Web for knowledge processes: what kind of knowledge processes happen in Web 2.0 between patients? How does Web 2.0 sustain or impede these processes? The aim of this research is to map virtual exchanges about diabetes in Italy by developing a systematic exploration of Web using the main search engines (Google, Yahoo) and analyzing the site that hosts posts and exchanges about diabetes. According to a psychosocial perspective, findings highlight the main features of online knowledge processes among patients.

INTRODUCTION

The Internet, and in particular Web 2.0, has totally changed the healthcare prevention and communication world. According to Turner et al. (2011), the Web 2.0 is "the transition of use of the Internet from primarily information receiving to information generating […] Web 2.0 tools are seen by some as a revolutionary leap in the ability to

manage, remix, and transform health information" (p. 103). Indeed, the advent of Web 2.0 has offered even more potential than the Internet alone by particularly encouraging participation. Using Web 2.0, we consider all the sites that allow people to interact with each other to the Website's content, in contrast to Websites where people are limited to just read the information that is provided to them. Tim O'Reily defines Web 2.0 activities, such

as based on "participation architecture" (Grivet Foiaia, 2007). This means that Web 2.0 and its applications structure is constructed to promote cooperation and sharing between participants (Norris, Mason, & Lefrere, 2003).

In practice, the use of Web 2.0 dramatically increased in the last ten year in the Western society (the 78,6% of the USA population and the 61.3% of the European one use the Internet[1]). More than the half of the Internet users[2] has employed this technology to search for health information. Moreover, people who suffer from chronic conditions use the Internet significantly more than healthy people (Siliquini et al., 2011).

As a matter of fact, patients are becoming increasingly independent in the process of information-seeking and decision-making about their self-care (de Boer, Versteegen, & van Wijhe, 2007). So, thanks to Web 2.0, not only searching for information but also participation in online peer exchanges is more and more a growing phenomenon, also for topic that concerns to health and in particular chronic disease issues (Nambisan, & Nambisan, 2009).

In literature, it is well established the role that offline peer exchanges and peer support groups have on the management of chronic diseases, such as diabetes, cancer or cardiac diseases (McPherson, Jospeh, & Sullivan, 2004); scholars more and more agree on the importance of online peer exchanges between patients (Ancker et al., 2009) who face with a daily and active care&cure management, and/or between family caregivers (such as parents or children): they use the online exchanges to get informed about their condition (Nettleton, Burrows, & O'Malley, 2005), to seek support from other patients (Bar-Lev, 2008) and to share experiences, opinions and knowledge about care management (Graffigna, Libreri, & Bosio, 2012).

This is even more evident as far as chronic conditions are concerned: in this case the engagement of patients (Barello, Graffigna, & Vegni, 2012) in their daily management of care and cure, as well as their psychological endurance and ability to cope with the disease may benefit from support received in the online exchange with peers (Mo, & Coulson, 2010).

Even if the importance of this phenomenon and the great interest toward it in literature:

- It's not clear how chronic patients share and construct their knowledge online (O'Grady, Witteman, & Wathen, 2008); in particular, which conditions favor or hinder the activation of "good" processes of knowledge sharing and construction among patients are still a matter for debate.
- Even more confuse is the role of the medium (and its different formats) in shaping the processes of peer exchanges and the kind of achieved knowledge outputs.

On the basis of these premises, in this chapter, starting from the discussion of pragmatic and psychological relevance of patients knowledge sharing and moving through the theoretical positions toward the knowledge sharing and construction processes in the online context, we will outline the role of Web 2.0 and of its different formats (i.e. blogs, forum, social networks…) in shaping the processes and their outcomes. In order to empirically support our arguments, we will discuss the results achieved by an exploratory study of the online exchanges which take place among diabetic patients in Italy.

BACKGROUND

To examine online exchanges and knowledge processes requires the use of different theoretical points of view (often external to the health field) within a quickly expanding literature and within the increasingly complex and continuous evolvement of the Web.

Related Content

A Geocast Protocol with Information-Centric Perspective in Vehicular Ad-Hoc Networks (VANETs)

Houacine Abdelkrimand Guezouri Mustapha (2018). *International Journal of Wireless Networks and Broadband Technologies (pp. 1-18).*

www.irma-international.org/article/a-geocast-protocol-with-information-centric-perspective-in-vehicular-ad-hoc-networks-vanets/236063

Spectrum Sensing and Throughput Analysis for Cognitive Radio An Overview

M. A. Matin, M Ahmedand N. Ferdous (2012). *Developments in Wireless Network Prototyping, Design, and Deployment: Future Generations (pp. 203-224).*

www.irma-international.org/chapter/spectrum-sensing-throughput-analysis-cognitive/67011

Received Signal Strength Models for Narrowband Radios

Hüseyin Yiitler, Ossi Kaltiokallioand Riku Jäntti (2018). *Positioning and Navigation in Complex Environments (pp. 50-87).*

www.irma-international.org/chapter/received-signal-strength-models-for-narrowband-radios/195713

On BFSA Collision Resolution in LF, HF, and UHF RFID Networks

Varun Bhogal, Zornitza Genova Prodanoff, Sanjay P. Ahujaand Kenneth Martin (2015). *International Journal of Wireless Networks and Broadband Technologies (pp. 44-55).*

www.irma-international.org/article/on-bfsa-collision-resolution-in-lf-hf-and-uhf-rfid-networks/133998

Enhanced Priority Load-Aware Scheduling Algorithm for Wireless Broadband Networks

Aminu Mohammed, Abdulhakeem Abdulazeezand Ahmed Tambuwal Yusuf (2020). *International Journal of Wireless Networks and Broadband Technologies (pp. 94-114).*

www.irma-international.org/article/enhanced-priority-load-aware-scheduling-algorithm-for-wireless-broadband-networks/250909