

Editorial

Health and the Internet: Beyond the Quality of Information

Salud e internet: más allá de la calidad de la información

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Article history:

Available online 11 August 2011

The public are now able to search for health-related information on the Internet, which is only the tip of the iceberg of the phenomenon most widely known as eHealth.¹ This term, which came into being at the end of the nineties,² includes the application of information and communication technologies (ICT), especially the Internet, in the area of health. This application involves not only a technological change, but also economic, organizational, social and cultural changes that have occurred during the most recent decades. Health systems, and society as a whole, have become faced with a transition period from an industrial society to a network society:^{3,4} a new type of society that originated in the seventies due to the convergence and interaction between three independent processes: the ICT revolution, the industrial crisis and restructuring, and liberal social and cultural movements. Progress in genetics, the evolving media and information systems, development of telemedicine, and citizens' increasing autonomy and responsibility for their own health are just some of the examples that characterize this transition stage.

The different health system actors can use the Internet as a source of information, a means of communication, a tool for service rendering, and lastly, an arena for public health.⁵ These possibilities, which have a huge potential to transform healthcare practice based on the virtual exchange of information, have been broken down into 5 main study areas: the quality of health information available on the Internet, how this information is used, the effects of the Internet on the relationship between the healthcare professional and the patient, virtual communities and online support groups, and finally, the provision of health-based information services.⁶

In this context, the study published in the *Revista Española de Cardiología* on the quality of information available on the Internet about aortic aneurysm and its endovascular treatment, by San Norberto et al.,⁷ reveals that there is a lack of information regarding accessibility, usefulness, and reliability. It also shows that it is difficult to read and, more importantly, explains the challenges that the public and the healthcare professionals have to face when integrating the Internet into their health management and their healthcare practice, respectively. Given that, due to the nature of

this medium, it is impossible to control the information that is on the Internet, any measure of quality control would be destined to fail. The use of this information and the consequences that result are what marks the difference and makes it necessary that we reconsider the relationship between the healthcare professional and the patient.⁸

Consulting health-related information on the Internet could mean that patients are better informed, which could improve their health and ensure that they have more appropriate healthcare services. In this respect, the Internet as a source of information and means of communication can improve the doctor-patient relationship, since both can share their knowledge and this may improve their communication, making visits more efficient. Furthermore, it could make it easier for patients to participate in the process of decision making and giving “informed consent”. Furthermore, patients may be able to access their own clinical and health records, allowing personalized healthcare, disease prevention, and health promotion programs.

All of these potentialities prove the urgency for a new patient profile,⁹ with more responsibility and participation in all aspects related to health (“empowerment”).¹⁰ This process of empowerment can be observed from various perspectives. On one hand, patients could acquire knowledge and apply it to managing their health, guided by the healthcare professional's prescription and approach as a health system-authorized expert. On the other hand, this process could be based on a more personalized approach, in which the patients are responsible for choosing different options or alternatives depending on their health problem, which may or may not be within the current bio-health model. Lastly, the third approach is related to inclusion dynamics and action in the context of social participation. This “empowerment” process may adopt the forms of a social movement in a given community or organized group of patients.

However, the urgency to create this new patient profile also reveals new inequalities, whether related to the digital divide, including Internet access, skills, and use or to health literacy, which we could call the law of inverse care 2.0. It is important to highlight that social determinants of health are closely related to social determinants of Internet use.¹¹ Furthermore, a greater volume of information may mean that those citizens that feel overwhelmed and request healthcare services irrationally and unnecessarily could slow down the functioning of the health system and hinder the relationship between the healthcare professional and the patient. This could even have a negative impact on the patient's own health.

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DOI: 10.1016/j.rec.2011.04.011, Rev Esp Cardiol. 2011;64:869–75.

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Given this new reality, healthcare professionals could feel threatened and respond defensively (health professional-centered relationship), could lead and help patients to form an opinion (patient-centered relationship), and/or could guide patients, becoming coproviders of patients' "informed" opinion.¹² As well as these attitude-related issues, healthcare professionals must also face technological problems related to Internet access during office visits, the lack of online applications for communication with patients, the design of information technology applications, and their own participation in implementing information systems. Furthermore, there are organization-related issues related to work processes, time available for visits, computer skills, lack of ICT training, and incentives. Lastly, healthcare professionals must also face issues related to privacy, confidentiality, safety, and legal responsibility, both for new medical information flows (eg, electronic clinical records, communication using e-mails, etc.) as well as new ways of providing healthcare services (telemedicine, telecare, remote monitoring of patients using devices in the home, etc.). Consequently, technological advances and new healthcare practices are needed which are in keeping with the proper legal framework.^{13,14}

All of the information mentioned until this point highlights the complexity of media and Internet use for all of the actors in the healthcare system. This complexity is very far from utopia and from the futuristic approaches in which the use of this technology alone can solve all of the challenges that health systems face. The Internet cannot be separated from the organizational, social and cultural context; therefore, there will be pressures that facilitate or inhibit its use and its impact, whether negative or positive. At present, various patient profiles and types of healthcare professionals co-exist. In some cases, the patients are the ones that help the healthcare professionals make the transition to the Internet era, showing them that a new healthcare practice is possible. In others, healthcare professionals are the ones that provide a new health space for patients. However, new pressures may emerge in areas that neither healthcare professionals nor the patients can figure out, with negative consequences for both.

These situations currently co-exist in our healthcare systems, where there is still a great distance between eHealth potentials and the actual consequences in health system efficiency, healthcare quality, and patient health.¹⁵ Without questioning these potentialities, and with the aim of making them a reality, more efforts must be made to analyze and understand what is happening from a multidisciplinary perspective that involves all actors. In this

respect, cardiology and its healthcare professionals are not immune from this phenomenon, and as such they are faced with the challenges and opportunities that the Internet offers. This does not involve a new "eCardiology" discipline, nor a new category of professionals, "eCardiologists", but the Internet must be integrated into their daily activities.

CONFLICTS OF INTEREST

None declared.

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