## The Impact of the Internet on the Doctor - Patient Relationship

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I must confess that I've never trusted the Web. I've always seen it as a coward's tool. Where does it live? How do you hold it personally responsible? Can you put a distributed network of fiber-optic cable "on notice"? And is it male or female? In other words, can I challenge it to a fight?

Stephen Colbert. Talk show Host of The Colbert Report

Traditionally, the patient has relied on the expertise of health care professionals. When doctors take the time to talk with patients about their condition, to involve them in decision-making and to give them access to information, patients can become active participants in the care process. These actions have been shown to reduce inappropriate utilization, reduce costs and increase satisfaction. (1) In the 'pre-Internet era' medical information was only available in textbooks, journals or from doctors. Decisions on treatment were always made by the doctor with little or no consultation with the patient. Nowadays, patients can access volumes of medical articles online. Therefore people are more likely to expect to be consulted about choices of treatment available. This has a profound impact on the doctor -patient relationship. (2) However it is also recognised that not all information on the internet is reliable. Therefore, in an age of the increasingly empowered patient, physicians and other public health professionals should work in tandem to improve their patients' knowledge about searching for appropriate high quality health information. In addition, the clinician is still the most valued source of medical advice for most patients. The well informed patient understands his condition and the reasons for adopting a healthy lifestyle. He is therefore more likely to accept medical advice. Secondly, he can interact knowledgeably about his condition consequently the doctor-patient relationship develops such that, the patient takes greater responsibility for their condition. Patients have different ideas about what it means to 'take charge' and 'be empowered'. Some of them simply want to be given information about their condition whilst others want to have full control over all medical decision-making. (3)

The Internet also has implications for medical practice. It allows practitioners to store, retrieve, and search for very specific information by deploying sophisticated search engines, allowing real-time research at the point of care. (4) Related technologies allow asynchronous, real-time, and mobile communication with colleagues, patients, and health organizations. These same technologies have empowered patients to seek health information independently in on-line libraries, support groups, and seek second opinions, creating knowledgeable and value – conscious consumers.(5) The internet is effectively a treasure trove of health

information. "Health seekers" can be inundated with different opinions; they can join chat rooms, support groups or surf Web sites. Inevitably the quality of this information can vary so that some information might be misleading or misinterpreted compromise health behavior and ultimately harm the patient. At worst it can lead to requests for inappropriate clinical interventions and at best it can forge partnership between doctor and patient.(6)On the other hand some medical specialists are challenged by informed patients and might employ strategies to reinforce traditional passive patient roles.(7)

Surveys from the Pew Internet and American Life Project demonstrate that 55% of the Internet user populations (fifty - two million adult Americans) have consulted the Internet for health information. In South Eastern Pennsylvania, the Internet has become a primary source of health information for one in seven adults. Albeit, that the majority (58.7% or 1,678,200 people) still rely on doctors or health care professionals as their primary source of health information. There were also some significant differences between races and genders. It seems the patient is becoming less dependent on the doctor. (8) However the impact of technology seems to be age dependent as was demonstrated in a study from 11 European countries. It concluded that people over 70 want to be 'actively' involved in their care. Although their definition of 'involvement' is more focus on the "caring relationship", "person-centered approach" and "receiving information" in comparison with the younger patients who favor more active participation in decision making.(9)

A pilot study conducted by Schultz al demonstrated that patients with back pain who had access to an internet support group had a decreased intensity of pain and were less likely to visit medical clinics. However, those who did not take part in the discussion group needed more support. (10) In another study the rate of depression and sensitivity to pain were also decreased among patients with breast cancer who joined an online support groups. (11) It has been shown elsewhere that women with breast cancer feel empowered by sharing knowledge and experience within the support group. The Internet is a means of finding ways of coping with breast cancer and internet support groups have important potential for the rehabilitation of cancer patients. (12) The literature also suggests that accessing information and/or support on-line can have a profound effect on men's experiences of prostate cancer, facilitating a sense of control over their disease and reducing embarrassment when discussing sensitive issues.(13) Factors shown to facilitate 'empowering' include: information exchange, emotional support, sharing experiences, helping others, and fun. Benefits experienced included being better informed, feeling confident in the relationship with their physician, their treatment and their social environment, improved acceptance of the disease, increased optimism and control, enhanced self-esteem and social well-being. A study by van Uden-Kraan concludes that participation in online support groups can make a valuable contribution to patient care. (14)

"Health seekers" are commonly looking for information on the prognosis and care options for specific diseases. Some also seek support and ideas on how to cope with their illness. Pregnant women and mothers of young children are noted to be particularly active consumers of on-line health information. Results of the study, on why and where mothers of young children look for on-line health information and how they determine if the information they receive is trustworthy, suggests that the main drivers for seeking health information included: wanting to learn more about diagnosing and treating specific pediatric health conditions and seeking advice and support on parenting issues and child development. In addition women reported that they sought social support on the Web from other pregnant women or mothers. For instance, one women said that "...I was so scared and I would go to this web site every day and just look at it (for) like ten minutes straight and I just found so much helpful information on it (about) being scared and not knowing what to expect." Another mother added "...I found so much information about how these things happen, which wasn't explained to me by my doctor. I found that very informative and felt like I knew as much or more than his pediatrician on the subject... And it has been very reassuring to me to know that... if I do a little work I can be much better informed about my children's health." Therefore women appear to be particularly active information seekers both during pregnancy and the first few years following delivery. (15) Empowering and educational initiatives have been shown to positively impact the quality of life of renal patients. This has relevance in the context of overall care, as empirical evidence has indicated that improved quality of life measures are associated with improved experiences in health care. Health Education is also been associated with better outcomes such as decreased utilization of medical services, the maintenance of employment, consumer satisfaction with care, and better outcomes.(16)

The Internet is an opportunity, rather than a challenge to medical authority .(17) It can facilitate genuine consultation, and promote partnerships with patients and empower people to deal with chronic, complex and life threatening illness.(18) To deal with this new era of information we need to develop a system of accreditation of Internet sites, to develop reliable sites and to collaborate with patient support groups.(19) Such changes may yield improved clinical decision-making, increased efficiency, and better communication between physicians and patients. Firstly, however, physicians and the organizations that support them must fully understand their role in the e-health revolution. Both must advance their awareness of the new consumers and their needs. (20) The medical consultation may be an excellent opportunity to educate patient about the varied quality of health information which are available on the Internet. In order to be in a position to respond to questions the physician should also be familiar with Internet-based health information. In that way, the "Net-friendly" clinician may be the first step to create a genuine partnership with patients and fundamentally improve the quality of health care.

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