Dealing with Doctor-Patient-Internet Online Relationship: a Doctor's Perspective

Tonang Dwi Ardyanto[1]

[1] Clinical Pathology Department, Faculty of Medicine, Sebelas Maret University, Indonesia

Abstract. *Internet has been unavoidably coming into the doctor-patient relationship. This emergence has put the doctors in the position to change in keeping their "traditional" roles and fulfilling the principles to gain optimal outcome for the sake of patient. An emerging consensus supports online communication between patients and doctors in an existing relationship to improve the quality, timeliness, and efficiency of medical care. Patients are also seeking medical care online from doctors they have never met. This calls for the doctor's new paradigm to stand on effectively in the fine line between online medical practice and online medical information. There were some models of doctor-patient relationships the doctors had been applying for years. There are also some suggested models for doctors to choose in handling the relationship with the new, well-informed, reasoning and demanding patients. Some guidelines and codes have been written that the doctors may base their choices on in "handling" the medical online information. Above of all, the face-to-face as well as verbal and non-verbal communication between doctor and patient is (and will be) still a fundamental and should always be kept for optimal outcome.*

Keywords. Doctor-patient relationship, internet, online communication.

1 Introduction

Interpersonal relationship and information are inter-twined as essential cornerstone of health care. There is a widespread belief that, once upon a time, patients trusted doctors uncritically and wholeheartedly. Whereas, in today's sophisticated society, trust has faded and been replaced by skepticism and wariness. The autonomous, empowered patients have good reasons, it is said, to take trust in the medical professional with a pinch of salt.

Until 19th century, doctors were usually represented in literature and on the stage as arrogant, avaricious, secretive and incompetent. In 17th century England, the celebrated diarist Samuel Pepys considered that "the person best place to understand his own complaints and safeguard his own health was generally himself". At that time, doctors were not able to do so much for patients. That was also reflected in their relationship.

During the 20th century, "Doctor knows best" was widely accepted by patients, most of whom knew little about health care, had few reliable sources of information, and were not expected to take an active role in their relationship with doctors. Vast improvement in sanitation and public health as well as *miracle drug* era (antibiotic era in 1935-1960) has transformed patients` respect for doctors who were now able to cure most infectious diseases. It was a historic high point of trust between patients and the medical profession.

Nowadays, in the modern health care, the trust is weakening. This can be attributed to dwindling personal rapport and frequent breaks in contact between individual doctor and his/her patients. The root cause is the conflict between rising health expectation by patients and energetic cost containment by health care payers. The emergence of internet is suggested to be one of the most influencing factors favoring the weakening trust. How then do the doctors have to stand in dealing with that?

2 Doctor-Patient Model of Relationship

Inline with the dynamic history of the doctor-patient trust, for years the relationship between both can be dynamically outlined into 4 models (Collste, 2002):

In *engineering-model*, the patient is an object for treatment, in relevant aspects similar to a broken car taken to the garage for repair. The doctor collects information in order to make a diagnosis and a decision on therapy. For some, this model is called "medical care from passing strangers" that human relationship might be in the least expectation.

In *healing relationship*, it is seen as an encounter between two persons, the doctor and the patient, which serves a specific purpose, that is mutual understanding. This model pays attention to the fact that a disease is in many cases not only a threat to the health of the patient but also to her existential balance.

Relationship can also be modeled as one of *trust* or fidelity. This trust is based on two pillars: competence and sympathy. The patient can trust the doctor knowing that she is competent and knowing that she cares. The latter pillar highlights the moral aspects of the clinical encounter. The relationship is similar to one between friends, however with the difference that doctor-patient relationship is asymmetric.

Finally, doctor-patient relationship can be modeled as a *contract*. Then the focus is on the rights and duties of the patient and the doctor, respectively. The professional ethical code of doctors can be seen as a framework for a formulation of the duties on the part of the doctor. However, the duties of the patient remain, so far, tacit. (For examples, does this contract model imply that it is the duty of patients to follow the recommendations of the doctor, or at least, a duty not to act intentionally contrary to the recommendations? Does it also imply that if the patient does not fulfill her duties, she can no longer count on the support of the doctor?)

The main question is then how this model of doctor-patient relationship will fit into the internet era.

3 Internet and e-Health

The birth of internet is one of the most important developments in the past 2 decades. It is a new medium, especially in the sense that the initiative is now rest on the information user, who is no longer just a receiver of information. In medical field, people use the internet for several reasons: to obtain information that they could not get from their doctors, to verify a medical opinion or treatment, or to overcome reticence in discussing personal issues (Woerkum, 2003).

The change brought by the emergence of the internet portends a dramatic shift for health care and the relationship of patients and doctors. The most immediate impact of the internet has been consumer's access to an extraordinary array of information online. Despite broad variation in the quality of information, the internet offers far-reaching potential to engage patients more full as partners in medical decision-making and in their course of treatment (Kassirer, 2000).

Regarding doctor-patient communication, the anonymous nature of internet is advantageous in that it allows users to ask awkward, sensitive or detailed questions without the risk of facing judgment, scrutiny or stigma, and to do so at their convenience. The other reason is freedom to discuss health problems in which face-to-face interaction with a doctor is considered embarrassing; especially for some problems linked with psychiatric or sexual-transmitted diseases.

On the other hand, the most expressed concern is on the matter of doctor-patients relationship. The anonymity of internet communication suggested to undermine the role of "traditional face-to-face" relationship between doctors and their patients (Miller et al., 2002). Some doctors believe that in the end, the undermining process will take us nowhere but distrust of patients upon their doctors.

Even with slow progress, internet has changed the paradigm of doctors. They are now becoming familiar with, and find the nature of internet as source of fast, real-time and updated medical information. These "new" medium offers way(s) for doctors in optimizing their role upon better therapeutic outcome as well as patient satisfaction (Magrabi et al. 2005). Nevertheless, the concern is also addressed to the trend of patients` self-effort by seeking health information through internet (online). There was, and to some points there is, a reasonable concern that patients could misunderstand or become lost in the complexity and amount of medical information (Woerkum, 2003).

These growing conditions has put the doctors to stand and decide their view not only in keeping their long time role in medical practice, but also hopefully in keeping with the changing behavior of their patient in relation with internet usage. The reluctance of doctor to actively discuss about what patients get from online sources will inhibit the advantages, while carelessly loosening control on the patients eager of this kind of information will also not be better choice.

4 Digital Divide and Different Expectation

Having reviewed the problems deeper, the burden on the doctors is not getting easier. Many patients are becoming better informed, reasoning and demanding by asking more questions. Guiding the patient aside from being misinformed, self-sufficient or self-assertive is one problem (especially to avoid the risk of *cyberchondria syndrome*). But there is indeed a greater differentiation among patients, precisely because of their different information-seeking pattern. Disparities in computer access and usage have been found within income, education, age and ethnic groups. This gap is commonly referred to as "digital divide" (Woerkum, 2003; Cotton et al., 2004). This difference in expectation is a real problem for the doctors to deal with. In coping with this inequality, the doctors can select among 3 approaches, each with associated cost and benefit:

First, the doctor can choose new position by restricting her/himself to the standard medical protocol of profession: diagnosis, treatment and advice. This could be called the *medical model*. The rational behind this professional strategy is clear: diagnosis, treatment and advice cannot be delivered via the internet, at least not at the same quality level. Verbal and non-verbal type of communication is very fundamental in the process of therapy that the online communication has a big handicap in. Also doctor holds the ethic reason to "first do no harm" (primum nil nocere). These doctors believe that the online communication might render upon the patients, and they should avoid it with appropriate measures.

Moreover, expending time on internet-savvy patients requires a great deal of energy, because these patients like to be addressed as a knowledgeable people and want to interact more often that other patients. It may not be possible to accommodate this increased interaction within normal daily practice. In addition, it is unfair to spend much more time with certain patients at the expense of other patients who are less active. It is rational that all patients deserve equal time in exchanges with their doctor.

The second strategy option, *patient-oriented model*, involves approaching the patient as a consumer with certain communication needs that have to be met according to a consumer-specified level. With this in mind, the satisfaction of the patient is the criterion. This strategy

can be maintained as long as internet-savvy patients remain a minority. Accordingly, in this model various patients can make the doctor useful in different ways. However, the idea of the equalization of information exposure is still unsolved. Beside, even it might be cynical or controversial, is it a reasonable idea to disparate the fee with this difference in services?

The last option is to equalize the opportunity for the patients. This is a serious attempt by the doctor to equalize the information activities of patients to improve their communicative context. Doctors can develop their own websites, with links to trustworthy sites. They can offer the opportunity for patients to contact them by email. Also, they can recommend websites and opportunities for internet interaction during their contact with patients who may not typically use the internet (Malpani, 2001). Practically, in this model, doctor plays role as a moderator, so it is called *educational model*. Of course, this model requires much time and energy. The question remains whether these time and energy are available (and feasible in the aspect of economical rewards). More discussions will be necessary to answer, and this paper would not fit that needs.

5 Online Practice and Online Information

The emergence of possible internet doctor-patient interaction also perpetuates a fine line between: medical online practice and medical online information. The previous explained *educational model* which offering email and internet interaction, suggested that doctor enters the room of online practice. Basically, in this practice, the online interaction is held in the context of previous, initial pre-existing "traditional" face-to-face setting, which for some reason proceeds to online interaction thereafter usually in variation with face-to-face sessions. To some points, this is actually the same with the interaction via telephone or text-messages to discuss the progress or any event in relation to the therapeutic process the patient is undertaking. Some called this as a *bonafide-relationship* (Eysenbach[a], 2000).

It is easy to accept that standard, procedure, legal-formal, and economical-effects were applicable in the online practice. Those things are interesting and many aspects have to be considered, but those are beyond the scope of this paper. The important thing is public must differentiate whether interact with the doctor as a patient (online practice) or a consumer (online information) (Miller et al., 2002).

In the author's opinion, doctor's role in medical information, has a more, wider and powerful effect not only on the individual patient, but also rather on the public health. This aspect is also included in the educational model as the doctor plays role as a moderator. Patient tends to do a specific-focus-narrow searching in internet, considering the medical problem they are suffering from. Doctors might not have much time as patients in searching, and much more things they need to find if time is available. But doctors do have skill and knowledge to analyze the information and assess the relevance to the particular patient.

With this view, doctors do not just hold the "first do no harm" principle but if possible do a good for and protect the patient. Even yet, this role is so challenging as well as sensitive and risky that doctors have to be careful to deal with. Therefore, any technical assistance from other professional might be necessary to maintain the safety of internet communication (Car et al., 2004).

5.1 Guidelines and Ethic on eHealth

To play a role as moderator, while keeping the nature of sensitivity and risk in mind, doctors should understand the principles of assessing the quality of a health sites. These are also applicable in the effort of building doctor's own health website. In 1998, some international

organizations in medical fields, wrote an agreement called as: Health on Net Code or HoN (Boyer et al., 1998). Any health website was encouraged to apply the code, to maintain the quality upon the advantages of the consumer. A HoN logo will be displayed in the site, which declared to agree on the principles of HoN. Briefly, these included 8 principles as follows:

1. *Authority*. Any medical advice provided and hosts on the site will only be given by medically trained and qualified professionals unless clear statement is made that a piece of advice offered is from a non-medically qualified individual/organization.
2. *Complementarity*. The information provided on the site is designed to support, not replace, the relationship that exists between a patient/site visitor and his/her existing doctors.
3. *Confidentiality*. Confidentiality of data relating to individual patients and visitors to a medical website, including their identity, is respected by the site. The website owners undertake to honor or exceed the legal requirements of medical information privacy that apply in the country and state where the website and mirror sites are located.
4. *Attribution*. Where appropriate, information contained on the site will be supported by clear references to source data and, where possible, have a specific HTML links to that data. The date when a clinical page was last modified will be clearly displayed.
5. *Justifiability*. Any claims relating to the benefits/performance of a specific treatment, commercial product or service will be supported by appropriate, balanced evidence in the manner outlined in principles (4).
6. *Transparency of authorships.* The designers of the site will seek to provide information in the clearest possible manner and provide contact addresses for visitors that seek further information or support. The webmaster will display his/her email address clearly throughout the site.
7. *Transparency of sponsorship*. Support for the site will be clearly identified, including the identities of commercial and non-commercial organizations that have contributed funding, services or material for the site.
8. *Honesty in advertising and editorial policy.* If advertising is a source of funding it will be clearly stated. A brief description of the advertising policy adopted by the site owners will be displayed on the site. Advertising and other promotional material will be presented to viewers in a manner and context that facilitates differentiation between it and the original matter created by the institution operating the site.

Displaying HoN logo was actually in a self-publishing suggestion according to the self-initiative of the site to follow the HoN principles. However, this suggestion might be a problematic, perhaps even counterproductive; even the quackery sites proudly displayed the logo and many consumers (and even the health professionals) misunderstand the HoN-logo as an “award” (Eysenbach[b], 2000).

Two years later, another guideline is written as the eHealth Code of Ethics (Rippen et al., 2000). The goal of this code is to ensure that people worldwide can confidently and with full understanding of known risk realize the potential of the internet in managing their own health and the health of those in their care. The codes briefly included:

1. *Candor*. Disclose information that if known by consumers would likely affect consumers understanding or use the site or purchase or use of a products or service. Sites must clearly indicate whether any financial interest, solely educational, sell health products or services, or offers personal medical care.

2. *Honesty*. Be truthful and no deceptive. Site should clearly distinguish content intended to promote or sell a product, service or organization from educational or scientific content.
3. *Quality*. Provide health information that is accurate, easy to understand, and up to date. Site should evaluate the information rigorously and fairly, including information used to describe products or services. Information must be easy for consumers to understand and use. Any qualified reference is preferable and should be optimally pursued wherever it is possible.
4. *Informed consent*. Respect users` right to determine whether or how their personal data may be collected, used or shared.
5. *Privacy*. Site should take reasonable steps to prevent unauthorized access to or use personal data.
6. *Professionalism in Online Health*. Respect fundamental ethical obligations to patients and clients. Inform and educate patients and clients about the limitations of online health care.
7. *Responsible Partnering*. Ensure that organizations and sites with which they affiliate are trustworthy.
8. *Accountability*. Provide meaningful opportunity for users to give feedback to the site and monitor its compliance with the eHealth Code of Ethics.

There are also efforts to sort and grant accreditation to health websites. One of those is Utilization Review Accreditation Commission or American Accreditation HealthCare Commission (www.urac.org). URAC, an independent, nonprofit organization, is well known as a leader in promoting health care quality through its accreditation and certification programs. The accreditation including for health sites, is based on the standards release by a Board of Expert and regularly updated every three years.

5.2 Dealing with unsolicited email

Once the doctors initiate the internet/online interaction, the most reported "disturbing" problem is dealing with unsolicited email. The concept of educational model begins with "pre-existing interaction" with a group of patients to whom the doctor has previously given and hopefully will continuously give the services in "real" world. But soon after the "internet world" was open, especially when the doctor builds a site, then the story of unsolicited email will begin.

In opposite to the bonafide relationship, these unsolicited emails usually come from the one that doctor has never met (in a sense of medical interaction). This is called "type A consultation" (*A*bsence of pre-existing patient-doctor relationship). While this type may also happen through other means (telephone, text-messages or letter), there are differences in internet-enabled consultations, mainly in the aspect of being informal, global and anonymous. This could happen in a group of mailing list or even in a form of private email.

The situation frequently puts the doctor in dilemma, considering the fine line between online practice and online information. There are 6 (with 3 of them as the main) suggested principles for giving type A teleadvice on the internet.

First, doctors responding to the patients` request on the internet should act within the limitations of telecommunication service and keep the global nature of the internet in mind. Do not make a specific diagnosis. If you do, always clearly indicate that it is just one of the range of possibilities. Do not judge the appropriateness of therapeutic interventions or challenge the diagnosis given by other doctors without knowing the case in detail.

Second, while diagnosis and treatment should not be attempted online, there is much that online health professionals can legitimately do. For example, answering questions about the side effects of medicines and about whether certain symptoms need to be investigated. Drug information is a good example. Other questions that could be answered mainly fall under the field of preventive medicine such as lifestyle counseling, nutrition advice, primary injury and disease intervention also regarding laboratory screening and health risk assessment.

Third, request for help, including unsolicited patient questions, should not be ignored, but dealt with in some appropriate manner. There is an ethical duty at least to try to help the patient to find more appropriate ways. The issue of specialties differences for example is a legitimate and ethical reason to suggest the patient to find other sources/doctors to get answer for the question.

The other three principles are that informed consent requires fair and honest labeling; the doctor should maintain confidentiality and the doctor should define the internal procedures to perform quality control measures.

5.3 Peer-to-peer Online Information

Another interesting story is the fast growing of virtual-communities (newsgroup, mailing-list or web-based discussion forum) where people with common interest gather virtually to share experiences, ask questions, or provide emotional support and self help. Presently, there are at least 25.000 electronic support (yahoo)groups in the health section.

In a side, there is a concern that online support group is risky in the dissemination of misleading information. Much of the guidance offered by the members is based on the personal experience and often lacks of critical perspective developed by health professionals. Thus, doctors or other health professionals are required to discriminate among resources to determine information quality (Cline et al., 2001). Another disadvantages are the quantity of daily mails and lack of physical contacts.

In other side, there are also advantages in the aspect of removal of geographical and transport barriers, anonymity and the ability of patient with rare disease to find peers online. These are also applied in the context of patient-doctor interaction in having opportunity to discuss with doctors who stay in other geographical location (Eysenbach[c] et al., 2004).

Having doctor(s) to supervise a mailing list would be better, but frequently this is very time and energy consuming. Beside, there is also a risk of “having false hope” that the doctors would be able to confirm all the information shared in the groups, which is in many cases are almost impossible in relation with specialties differences, heterogeneous aspects and range of control. That is one of the prominent reasons the doctors have to seriously consider before joining in such groups.

Conclusions

1. Doctors should not avoid the emergence of internet in health practice and doctor-patient relationship. Rather, doctors can and should play a role in an educational model to gain the optimal advantages while minimalize the potential drawbacks of internet.
2. Doctors should improve and build his/her own capability in assessing the online information quality and/or applicability in the sense of optimal utilization for the sake of the patient.

3. In every view or choice of doctor-relationship model in the internet era, the principles of maintaining the face-to-face as well as verbal and non-verbal relationship is fundamental and should always be kept.
4. The patient should be educated about the contract-model in which the doctors and the patient share their own rights and duties, to pursue an optimal relationship on both interest.

References

[1] Boyer, C., Selby, M., Scherrer, J.R. and Appel R.D. (1998). "The health on the net code of conduct for medical and health websites." *Computers in Biology and Medicine* 28, 603-610

[2] Car, J and Sheikh, A. (2004). "Email consultations in health care: 2-acceptability and safe application." *BMJ* 329, 439-442

[3] Cline, R. and Haynes, K. (2001). "Consumer health information seeking on the internet: the state of the art." *Health Education Research,* 16(6), 671-692

[4] Collste, G. (2002). "The internet doctor and medical ethics". *Medicine, Health Care and Philosophy* 5,121-125

[5] Cotton, S.R. and Gupta, S.S. (2004). "Characteristics of online and offline health information seekers and factors that discriminate between them." *Social Science & Medicine* 59, 1795-1806

[6] Eyesenbah[a], G. (2000). "Towards ethical guidelines for dealing with unsolicited patient emails and giving teleadvice in the absence of a pre-existing patient-doctors relationship – systematic review and expert survey." *J Med Internet Res* 2(1), e1

[7] Eysenbach[b], G. (2000). "Towards ethical guidelines for e-health: JMIR theme issue on eHealth topics." *J Med Internet Res* 2(1), e7

[8] Eysenbach[c], G., Powel, J., Englesakis, M., Rizo, C. and Stern, A. (2004). "Health related virtual communities and electronic support groups: systemic review of the effects of online peer-to-peer interactions." *BMJ* 328, 1166-1172

[9] Kassirer, J.P. (2000). "Patients, Doctors and the Internet." *Health Affairs* (Nov/Dec), 115-123

[10] Magrabi, F., Coiera, EW., Westbrook, JI., Gosling, AS. and Vickland, V. (2005). "General practitioners' use of online evidence during consultations." *Int J Med Inform.* 74(1),1-12

[11] Malpani, A. (2001). "Why should doctor have his/her own website." *J Postgrad Med* 47, 40-41

[12] Miller, T.E. and Derse, A.R. (2002). "Between strangers: the practice of medicine online." *Health Affairs* (July/August), 168-79

[13] Rippen, H. and Risk, A. (2000). "e-Health Code of Ethics." *J Med Internet Res* 2(2), e9

[14] Woerkum, C.M.J. (2003). "The internet and primary care doctors: coping with different expectations." *Am J Clin Nutr* 77(suppl), 1016S-8S