Determination of attitudes of healthcare professionals regarding health information on the internet

Betül TOSUN (*), Serpil ÖZDEMİR (*), Uğur TOSUN (**), Ecenur ATAC (*), Gamze CEBECİ (*)

**SUMMARY**

Today individuals can easily access a wide range of information about their health status, disease or treatments by internet. The aim of the study is determination of perceptions and attitudes of healthcare professionals regarding health information on the internet. This descriptive study was conducted in January-March 2013 with 103 healthcare professionals. Data about participants' demographic features, perceptions and attitudes of healthcare professionals regarding health information on the internet. This descriptive study was conducted in January-March 2013 with 103 healthcare professionals. Data about participants' demographic features, perceptions and attitudes of healthcare professionals regarding health information on the internet were analyzed with SPSS 15.0. “Health information on internet positively influences individuals’ statement was agreed by 36.3%, “Health information on internet is generally accurate” statement was disagreed by 41.2% of participants. Leading intents of patients ask questions to participants about health information on internet were stated to be “Looking for an opinion about the information” (53.4%), “Looking for a more equiped physician” (34.0%), “Demanding tests to be done” (34.0%). More than half of the participants stated that they refused to do what patients demanded in the light of health information on internet. It is recommended that healthcare providers should give up-to-date and evidence based health information on their official websites in order to feed patients with accurate, understandable and reliable health information.

**Key Words:** Health Information, Healthcare Professional, Internet.

---

*Gülhane Tıp Derg 2015;57: 247 - 251

doi: 10.5455/gulhane.153605
Material and Methods

This cross-sectional survey was conducted with convenience sampling method between January and March 2013 in Ankara, Turkey. The participants were healthcare professionals comprised of physicians, nurses and medical technicians who work in a tertiary training and research university hospital. Volunteering healthcare professionals (n=103) were the sample of this study. Sample size was not determined for this study.

The questionnaire contained 39 questions to determine the healthcare professionals’ purpose of using the internet, their opinions on health information on the internet, and effect of questions originating from internet on the relationship between patients and health care professionals. The questionnaire form was prepared by researchers based on literature review.

There were five parts in the questionnaire; the first part was for identifying socio-demographic characteristics of participants, the second part was for internet availability and conditions of use, the third part was for the general opinions on health information on the internet, the fourth part was for their experiences with their patients on the health information on the internet, the fifth part was for their opinions on the effect of health information on the internet on patient and patient-health professional relationship. In our questionnaire, there were multi choice questions with exception of two questions on date of birth and recommended websites. Five point Likert scale (1= definitely disagree, 2=disagree, 3=don’t have an idea, 4=agree, 5=definitely agree) was only used in the third part of the questionnaire, which interrogates general opinions of participants on health information on the internet.

Questionnaire was asked for opinions of three different faculty members interested on the subject for consultation and the finalized form was achieved after recommended revisions.

Participants were given an oral introduction to the purpose of the study by the primary investigator and were given approximately 20 minutes to complete the questionnaire. Face to face interview technique was used in the study.

Data were evaluated with best fit statistical analysis using Statistical Package for the Social Sciences for Windows 15.0 software (SPSS Inc., Chicago, IL, USA.). As descriptive statistics, mean ± standard deviation and frequency distribution were used.

Ethical approval for the study protocol which agreed with the principles in the Declaration of Helsinki (20) was obtained from the Gulhane Military Medical Academy Ethical Committee prior to data collection. Participants were informed of the study before they became involved and could decline to participate in the study at any time. The questionnaire was completed anonymously and no personal identifiers were used.

Results

In our study, 52.4% (n=54) of participants were women, nearly half of the participants (46.6%) were nurses, 37.9% (n=39) were physicians and 15.5% (n=16) were technicians with the mean age 33.50±6.87 years (min: 23 years, max: 54 years). The mean years of being in service was 10.91±7.48 (min: 1 years, max: 30 years) and health care providers were facing with 40.46±58.90 patients per day. Descriptive statistics of healthcare professionals were shown in Table 1.

The majority of the participants (86.4%, n=89) had access to the internet in daily life and 74.8% of participants (n=77) stated daily internet usage time of 2 hours and less, 25.2% (n=26) more than two hours. The three leading purposes of internet usage were personal interests such as reading a newspaper or magazine, on-line shopping (91.3%, n=94), communication via email (81.6%, n=84), and search for medical information (71.8%, n=74). The participants’ main purposes in access to medical information on the internet were gathering information on a specific disease/etiology/diagnosis/therapy (72.8%, n=75), updating information on diseases/diagnosis/treatment/care (64.1%, n=66), gathering information on forms, administration and dosage of a particular drug (56.3%, n=58), following recent researches on a specific topic (50.5%, n=52) (Table 2).

As we look at the general opinions of participants on health information on the internet, “In general, health information on the internet has a positive effect on people” expression was definitely agreed and agreed by 48.5% of participants (n=50), “Health information on the internet causes an increase in health expenditures” expression was definitely agreed and agreed by 42.7% of participants (n=44), “Health information on the internet will result in an increase in anxiety and fear on the health status of patients” was definitely agreed or agreed by 80.6% of participants (n=83), “Health information on the internet result in patients to take more time of health care professionals” expression was definitely agreed or agreed by 58.2% of participants (n=60), “Health information on the internet result will in unnecessary patient visits to healthcare providers” expression was definitely agreed or agreed by 62.1% of participants (n=64), “Causes deterioration of the relationship between patients and health care professionals” expression was definitely disagreed or disagreed by 43.7% of participants (n=45). “Health information on the internet is generally accurate” expression was definitely agreed or agreed by only 29.1% of participants (n=30) (Table 3).
Three-fourths of participants (75.7%, n=78) have met patients asking questions about health information on internet in last six months and 51.5% (n=55) assessed the health information on internet accessed by patients to be “not entirely accurate”. The leading purposes of patients while asking questions about health information on the internet were stated to be “just wanted to get my view on the subject” (53.4%, n=55), “wanted me to suggest a more experienced physician in the field” (%34.0, n=35) and “wanted to have some medical tests” (%34.0, n=35) and “wanted to drug treatment” (%7.8, n=8) (Figure 1). More than half of the participants (57.8%, n=60) stated that they refused to fulfill the demands of patients, 46.6% (n=) did not allocate the patient enough time to discuss the topic and only 6.8% of participants were recommending patients a web page to get health information on internet.

Discussion

Despite the studies on health information conducted online or via facsimiles, our study was designed as face to face interviews (15, 17, 21, 22). The rationale in choosing this study design was to embrace the healthcare providers who do not have daily internet access, the expected low internet use and low response rates of non-face-to-face studies (22). Though the healthcare providers in our sample were using daily internet almost at the same rate compared to US physicians (21), the minority not having daily internet access and the ones using internet less than two hours to be three fourth of the healthcare providers, justified our expectation.

The Internet is becoming a very important means to gain medical information for health professionals (23). In our sample, medical information search as the purpose of internet use was the third in order and information search for a specific disease was the most common purpose of internet use related to medical information just like the US physicians’ strongest motivation on search for information to be a particular patient problem (21).

As the opinions of our participants on health information on the internet are interrogated in detail, both positive and negative responses are met. Nearly half of the participants were considering the internet to have positive impact on patients, enhance the compliance with recommendations and treatment, and flourish the understanding of health status. The results of a patient oriented study, that online information to change the way the patients think about their health and contribute to increased compliance, support our participants’ positive responses (24). Meanwhile more than four fifth of our healthcare providers spotted the internet to increase the anxiety and fear about health issues. In a study on patients with breast cancer, fibromyalgia and rheumatoid arthritis it is reported that patients who used the internet felt less informed, accepted their illness to a lesser degree, felt more helpless, and perceived less control of their illness (25).
The same hesitation is seen on the accuracy of the health information on the internet, that more than half of our sample found health information on the internet inaccurate. Despite the fact that dubiousness on the quality of information and advice on the internet is shared by many authors, first impression with visual appeal, a likeable character, easy, quick and 24-hour access to information comes before the credible content (6, 21, 26-30). However, the information retrieved through search engines should be evaluated or validated before use (22).

The leading hesitations of the participants on the health information on the internet were unnecessary healthcare utilization, more time consumption and increase in health expenditure. In parallel to these negative opinions, discouraging experiences with patients were reported. The majority of the participants in our sample reported that they have met patients asking view on health information retrieved on the internet, requesting tests or a more sophisticated treatment. Unfortunately, more than half of the participants reported that they did not fulfill the demands of patients and nearly half of them did not have enough time to discuss the issue. Prior to physician visit, patients often get online to assess the need for consultation, to decide who to see, and to prepare for consultation (31) but with the perception of physicians as authoritative health experts, internet use boosts questions and brings out unpleasant requests for inappropriate or unavailable testing or treatment and consequently increases the work burden of physicians (24). This may be a consequence of traditional patient-doctor relationship seen in Taiwan, which is also valid in Turkey, despite the cultural diversity between Taiwan and Turkey (23) and the effect of internet as a facilitator to minimize the information asymmetry between healthcare providers and patients (32).

Conclusion

The negative views of healthcare providers in our sample on online health information such as increased anxiety, unnecessary healthcare utilization, and increased health expenditures may be a consequence of an improper preconception that online health information is not credible and patients are not able to judge the accuracy of it. In order to overcome this barrier, as a first step it is recommended that healthcare providers, as an institution, give up-to-date and evidence based health information on their official websites to feed patients with accurate, understandable and reliable online health information. As the second step, healthcare providers in our institution should take educational programs on the benefits of online health information for both patients’ and their own interest.

Limitations

Several limitations should be acknowledged when interpreting the results. First, our sample size is not enough to be generalized neither to healthcare providers in Turkey nor to colleagues in university hospitals. A multicenter, large-scale study should be conducted in order to clarify the attitudes regarding the health information on the internet. Given the predominant role of physicians in healthcare system, stratifying the sample and increasing the portion of physicians in the sample may widen the scope of further studies.

References

6. Broom A. Virtually healthy: the impact of internet use on


