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Siti Karlinah

Padjadjaran University, siti.karlinah@unpad.ac.id

Atwar Bajari

Padjadjaran University, atwarbajari@gmail.com

Wawan Setiawan

Padjadjaran University, w.setiawan@unpad.ac.id

Ika Merdekawati Kusmayadi

Padjadjaran University, i.m.kusmayadi@unpad.ac.id

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Implications of Digital Health Information on Therapeutic Communication: A Case Study in Bandung, Indonesia

SITI KARLINAH

Faculty of Communication Sciences
Universitas Padjadjaran, Bandung-Indonesia
siti.karlinah@unpad.ac.id

ATWAR BAJARI

Faculty of Communication Sciences
Universitas Padjadjaran, Bandung-Indonesia
atwarbajari@gmail.com

WAWAN SETIAWAN

Faculty of Communication Sciences
Universitas Padjadjaran, Bandung-Indonesia
w.setiawan@unpad.ac.id

IKA MERDEKAWATI KUSMAYADI

Faculty of Communication Sciences
Universitas Padjadjaran, Bandung-Indonesia
i.m.kusmayadi@unpad.ac.id

ABSTRACT

The current phenomenon, patients visiting doctors generally have health information from the internet. So the study aimed to reveal the implications of the patient's health knowledge on the therapeutic communication of the doctor with the patient. This research used an interpretive approach with a case study method. Data collection techniques used interviews with 13 specialist doctors, 66 patients, and three Health Media Online Managers. The study was conducted in the city of Bandung for six months. The results showed that **most patients obtained inaccurate health information from the Internet, so the doctor's attitude provides education. The doctor appreciated and supported patients who had accurate health information. The patient's health information from the Internet had positive and negative implications for the doctor-patient therapeutic communication.** Positive implications occur because effective therapeutic communication is transactional, in which doctors and patients are equally active as subjects who make joint decisions, especially medical treatment. On the other hand, doctors efficiently provide education, as patients are accommodative. Negative implications occur because patients have inaccurate health information and google too far. The patient makes an incorrect self-diagnosis so that the patient becomes frightened and over-worried. Thus, the therapeutic communication of doctors and overly worried patients become ineffective, making it difficult for doctors to provide education because patients are less accommodative.

Keywords: therapeutic communication, accommodative, credibility, confirmation, implications

INTRODUCTION

The Internet, as a new medium, presents a variety of information, including health information. The Internet is straightforward to access because it is available everywhere. In the era before the internet, people could obtain health information only from books, journals, and doctors. In this era, patients quickly obtain health information online, and patients have the hope to be consulted about various treatment options (Marcinkiewicz & Mahboobi, 2009, p.2). As stated by Shepperd, S., Charnock, D., Gann, B. (1999) as cited in Josefsson & Hanseth (2000), patients increasingly turn to the internet for various health information. People can now use the internet to find information about their complaints, and they can do this before going to a health consultation (De Oliveira, 2014, p. 334). The internet has also opened the door to information like never before. Patients visit doctors with presumptions based on internet information. Through internet access, patients can find out their health records without consulting a doctor first. This situation raises a new phenomenon that a patient visiting a doctor already has information about symptoms of illness, even "as if" already know the treatment. Thus, now the internet is often a person's first referral before visiting a doctor when he feels there are symptoms of illness. As stated by Josefsson & Hanseth (2000), through access to health information, patients can now build an information and knowledge base that was previously impossible. This condition is symptomatic in several countries, including in Indonesia, with evidence of access to health information on the internet, including those most often sought by the public. As indicated by McMullan (2006), health information is one of the most frequently searched topics on the internet, as increasing information from the internet can improve a person's or patient's understanding of their medical condition and self-care. Since health information has now become a basic need of most people, it is very natural that online health media is also a reference for the community and patients. Obregon & Waisbord (2012) also revealed that the public more access to health information through mass media than through doctors. To meet the needs of health information in Indonesia is marked by the emergence of online health media. Online health media in Indonesia that have emerged in succession include *klikdokter* launched in 2013, *Alodokter* 2014, *Halodoc*, and *Hellosehat*; both started in the same year, namely 2016. Based on data obtained from four online health media, Bandung is a city in West Java, where most people access health information. However, problems will arise when the public or patients perceive the available health information on Internet inaccurately. As stated by (Rothblum, 1999; Vargas & de Pyssler, 1999; Wilson & Blackhurst, 1999), that there is a possibility of health news coverage creating wrong perceptions and misleading the public

on many topics. The Indonesian Journalists Association (PWI) in 2017 (Fanani, 2017) conducted a study using a combination of qualitative and quantitative methodologies to one thousand news reports. It found that 27 percent were fake news about health. Health hoax news tends to spread due to public ignorance. The study is based on the phenomenon that patients generally access health information on the internet, and the assumption of the patient's misperception of health information, or even that information on the internet is inaccurate. Thus, the study focused on how the patient's knowledge of health information from the internet implicated in doctor-patient therapeutic communication? Thus, the objectives of this study were 1) to reveal the accuracy level of health information that patients had from the internet; 2) to reveal the doctor's attitude towards patients with different levels of health information, and 3) to reveal the implications of health information that patients had from the internet on doctor-patient therapeutic communication.

LITERATURE REVIEW

Research that links health information on the internet with the behavior of people who access health information is relatively extensive. Researchers have selected several studies relevant to the research conducted. Among them is De Oliveira's study (2014, pp. 327-329), which concluded that the widespread use of the internet as a source of health information has an impact on public health knowledge, attitudes, and practices as well as on doctor-patient relationships. Most searches on the internet are carried out by patients before meeting the doctor at the clinic, and patients directed to certain clinical conditions.

Similarly, according to Fox & Rainie (2002), with the arrival of the information age, patients are under the influence of the digital revolution. The immediate reaction is that belief in doctors replaces skepticism and despair. Blind trust replaces informed trust. Fox & Rainie's statement is strengthened by the study on 500 health information seekers, showing that 55% of them seek health information through online media before visiting a doctor.

Bianca Mitu conducted a study in 2015, in the UK with a survey method to 526 respondents who actively used the internet, which aims to measure eHealth literacy, online health information search strategies, as well as health information sources and evaluation criteria used by consumers (Mitu, 2016, pp. 148-151). The results show that all respondents have moderate or high health literacy because they use more than one source of information and various online search strategies and assess the information they receive from online media. A total of 81.48

percent of respondents state that the first thing they do is look at the internet. However, 49.06 percent of respondents do not depend at all on health information found online, when the information is considered much speculation, so it is better to go to the doctor. They also use online health information only to convince themselves or to find other people's stories, and never use it for self-diagnosis.

Other relevant research, conducted by Akerkar & Bichile (2004, pp.120-122), reports how much influence the internet has on decision making. The result is that web information has changed their decision about how to treat their disease (70%). Web information directs them to ask new questions or take a second opinion from other doctors (50%). Web information affects their decision to visit a doctor or not (28%). Web information improves the way to maintain their health (48%).

From the various studies presented, the author's study can enrich the repertoire of research about health information on the Internet, its implications for doctor-patient therapeutic communication.

Therapeutic Communication

In health communication, when a doctor, as a paramedic, communicates with the patient, therapeutic communication occurs. The concept of therapeutic communication refers to a process where the paramedic consciously influences the client/patient or helps the client to have a better understanding through verbal and nonverbal communication. As stated by (Sherko, Sotiri & Lika, 2013, p. 457), that : "Therapeutic communication involves the exchange of information on two verbal or nonverbal levels. The message is sent and received simultaneously." Mosby's Medical Dictionary (2012, p.1762), explains, "Therapeutic communication involves the use of specific strategies that encourage the patient to express feelings and ideas and convey acceptance and respect." Rosenberg (n.d., p. 75) argues that therapeutic communication is holistic, patient-centered, and involves the totality of the patient's environmental, spiritual, psychological, and physiological elements. Rosenberg added that therapeutic communication practices help form collaborative relationships that focus on health and reduce stress. The main goal is building trust to create healing exchanges between doctors and patients. Based on the explanation of therapeutic communication above, the communication process that occurs between the doctor and the patient is transactional. The

doctor and the patient are no longer two separate parties; the doctor and patient are two equal parties at the same time sharing information. According to Mulyana (2018, p. 6), in transactional therapeutic communication, patients are not just objects, but as subjects who have socio-cultural backgrounds, values, hopes, feelings, desires, worries, and also crave happiness.

RESEARCH METHODS

This research used an interpretive approach with a case study method. The study aimed to reveal the doctor's therapeutic communication with patients who already obtained health information through the internet. Research subjects were specialists as key informants while other informants were patients, managers of online health media, and a health communication expert. The determination of specialist doctors as key informants was carried out purposively, namely specialists in Bandung city who received positive responses on social media from their patients. With these criteria, there were thirteen specialist doctor informants, namely one oncologist, two obstetricians, two ENT (Ear, Nose, and Throat) specialists, two pediatricians, two internists, two ophthalmologists, and one public health doctor. While, the patient informants were patients from the thirteen specialists, who visited the selected places of practice, namely Hasan Sadikin Hospital (RSHS), St. Borromeus Hospital, LIMIJATI Mother and Child Hospital, MELINDA I. Hospital, and the ANAFISA Joint Practice. Data collection techniques were interviews with all informants, conducting observations, and a literature study that took six months. Profiles of specialist informants are illustrated in Table 1 as follows:

Table 1 Profile of Doctor-Informant

No	Name	Specialization	Gender	Age	Practice
1	TH	Obstetrics	F	64	RSHS
2	US	Obstetrics	M	68	RS LIMIJATI
3	PS	Internal Diseases	M	64	RSHS
4	EP	Internal Diseases	F	64	RSHS
5	DS	Oncology	M	68	MELINDA
6	RK	Radiology	F	64	RSHS
7	HR	Pediatrics	M	72	RS BORROMEUS
8	SS	Pediatrics	F	52	RS LIMIJATI
9	FC	Ophthalmology	F	64	RS CICENDO
10	BA	Ophthalmology	M	63	RS CICENDO
11	SM	ENT(Ear,Nose&Throat)	F	41	RS LIMIJATI
12	AR	ENT(Ear,Nose&Throat)	M	48	RSHS
13	TS	Public Health	F	63	ANAFISA Joint Practice

Source: Research Results, 2019

Table 1 shows that in terms of gender, the composition of female doctors and male doctors was 7 to six. The youngest age was 41 years (Ear, Nose, and Throat specialist), and the oldest age was 72 years (pediatrician).

Data on patient informants were collected through interviews with patients at the doctors' practice mentioned above. During the study period, it was found, out of 82 patients, 16 people or 19 percent of them never accessed health information from the internet. Thus the patient informants were 66 people (81 percent). In line with the research topic related to the internet, 81 percent of patient informants were divided into three categories, namely generation X, generation Y, and generation Z. Generation X were those born starting from 1960-1974, generation Y were those born in 1975-1989, and generation Z were those born from 1990-2000 (Levickaite, 2010, p. 172). The patient informant profiles are illustrated in Table 2.

Table 2 Patient Informant Data

No	Generation Category	Internet Access	Gender		Education		Occupation			
		YES	F	M	High School	Univ	Stud	Civil Serv	Private	IRT
1	Generation X	18%	12%	6%	10%	8%		4%	4%	10%
2	Generation Y	40%	30%	10%	20%	20%		10%	15%	15%
3	Generation Z	23%	16%	7%	3%	20%	8%		10 %	5%
	TOTAL	81%	58%	23%	33%	48%	8%	14%	29%	30%

Source: Research Results, 2019

The main point of the patient informant profile was that out of 81%, the number of female patients was 58%, and male patients were 23%. The level of education showed 48% were university graduates, while viewed from occupation, most were private workers and housewives 30%.

RESEARCH RESULTS

Patient Health Information from the Internet and its Accuracy Level

The statement of previous researchers in various countries confirmed that at present, some patients are googling before going to the doctor. It means, the patient already has health information on the symptoms he feels. It was also stated by all doctors in Bandung who were informants of this study.

Even though doctors did not have a personal record of the number of patients who had health information from the Internet, doctors could estimate the percentage of patients googling in advance. The doctors could identify patients googling in advance based on patient behavior when they arrived, directly confirmed their health information. As stated by doctor SM (ENT specialist): "Most patients directly asked about health information that he/she read on the Internet." Whereas, doctor AS (obstetrician) stated: "The patient came with a particular complaint and my compilation diagnosed it, the patient responded that my diagnosis was different from what he/she read on the Internet. The study results are shown in Table 3 below.

Table 3 Patients Percentage with Health Information from Internet and Accuracy Levels According to Doctors

NO	DOCTOR'S NAME	SPECIALIZATION	PERCENTAGE OF HEALTH INFO (%)	ACCURACY LEVEL	
				INACCURATE	ACCURATE
1	TH	OBSTETRICS	10%	7%	3%
2	US	OBSTETRICS	50%	40%	10%
3	PS	INTERNAL DISEASES	40%	35%	5%
4	EP	INTERNAL DISEASES/NUTRITION	30%	15%	15%
5	DS	ONCOLOGY	35%	30%	5%
6	RK	RADIOLOGY	12%	10%	2%
7	HR	PEDIATRICS	5%	3%	2%
8	SS	PEDIATRICS	16%	10%	6%
9	FC	OPHTHALMOLOGY	8%	6%	2%
10	BA	OPHTHALMOLOGY	5%	3%	2%
11	SM	ENT(EAR,NOSE&THROAT)	50%	40%	10%
12	AR	ENT(EAR,NOSE&THROAT)	60%	50%	10%
13	TS	PUBLIC HEALTH	10%	8%	2%

Source: Research Results, 2019

Table 3 shows that the percentage of patients who had health information from the Internet varied considerably. The smallest extreme difference (5%) occurred, namely in pediatricians and ophthalmologists, while the percentage of patients who had the most health information (60%) occurred, namely in two ENT doctors (AR & SM), and one obstetrician (US) 50%. The rest ranged from 10% to 35%. The doctor's identification of patients who had health information from the Internet was also from the patient's confirmation of self-diagnosis. As stated by doctor PS (an internist), a patient who came, directly said: "Doctor, I must be suffering from gout, because the symptoms are similar to what I read on the Internet."

Marcinkiewicz & Mahboobi (2009) revealed that not all information on the Internet is reliable for their accuracy. The patient's health information from the Internet, as well as the self-diagnosis, was also illustrated in Table 3. Based on the results of the interview, the doctors stated that the patient's health information from the Internet was generally in the inaccurate category. However, there was also accurate health information but only on an average of 2%. An example of inaccurate health information on the Internet was told by doctor TH (an obstetrician), a patient asked: "Doctor, I read on the internet that cervical cancer and breast cancer can be cured by wearing electric underpants and Bra, right?" Meanwhile, according to doctor AS (an obstetrician), a patient who was pregnant said: "Doctor, my pregnancy has blood spots, according to the Internet these blood spots are hazardous, and my pregnancy may end in miscarriage." Doctor EK (an internist) told, the patient confirmed that his head was constantly dizzy, due to blood clotting; the medicine was consuming much garlic. These examples were indicators that patients came to the doctor's practice to confirm the symptoms of their illness, even to verify their self-diagnosis. An example of accurate health information from the Internet stated by doctor FC (eye specialist), whose patient said, "Doctor, it seems like my eyes got floaters." After doctor FC examined the patient, it turned out that the patient's diagnosis was accurate as indeed, the patient had floaters. There was doctor PS's patient, who performed a self-diagnosis as the patient read a medical journal. However, according to doctor PS, the information from the journal was also inaccurate as it did not match the doctor's examination results.

Health information obtained by patients from the internet, according to the patient's version, can be seen in the following Table 4.

Table 4 Patient Health Information Access

No	Generation Category	Information Access Habits		Accessed Online Media		
		Habit	When Sick	Blog	Health Media Online	Both
1	Generation X	2%	16%		14%	4%
2	Generation Y	18%	22%	6%	20%	14%
3	Generation Z	16%	7%	4%	14%	5%
	TOTAL	36%	45%	10%	48%	23%

Source: Research Results, 2019

Table 4 shows that 45% of patients accessed health information on the Internet when sick, which was carried out by most of the X and Y generation, while those who had the habit of accessing health information were 36%, and generally done by the Z generation. The whole generation, in general, uses online health media searching for health information. In the X generation, no one can access the blog independently without being accompanied by online media. The most widely accessed online health media in a sequence is *klikdokter.com*, *halodoc*, *alodokter*, *HeloSehat.com*, and *SehatFresh.com*. These four health online media have different characteristics. *Klikdokter.com* is an online health media that initially focused more on content in the form of news, health articles, and health videos — now coupled with providing doctor consultation. *Halodoc.com* is a technology company engaged in the field of health, providing health services and facilitating doctors, hospitals, and pharmacists. *Alodokter* is an online health media that focuses on content and consultation, while *halosehat* is an online media that presents content without health consultation. The similarity of the four online media mentioned above is that all health information displayed is written by credible sources, namely doctors, or comes from reliable sources, namely the latest journal articles that are packaged in plain language so that lay readers can understand it.

Doctors' Attitudes toward Patients' Internet Use for Health Information

In Table 3, it is shown that relatively many patients had inaccurate health information; only a few had accurate information. Regarding patients with varying degrees of accuracy in understanding these health information, doctors would respond with attitudes by their authority as medical personnel. As stated by (Marcinkiewicz & Mahboobi, 2009, p. 2): "The clinician is still the most valued source of medical advice for most patients." Based on doctors' and patient's statements, the researchers divided the doctor's attitude into three categories, namely providing education, providing support, and giving appreciation. The doctors' attitudes towards these patients obtained after being confirmed with the patients were examples of the doctor's statements.

Doctors generally give education to patients who have inaccurate health information. An example of education is provided by doctor DS (Oncologist) to a patient who believes strongly in internet information but is incorrect: "... Googling on the internet must use common sense since, on the Internet, there is rubbish and gold information. The internet, especially writing on blogs, also has no filter. If there is a statement, the credibility of the source must be tracked; does a study support the statement? How is the method used?" In line with doctor DS education,

doctor TH (Ob-gyn) also educated his patients to select information and trace the credibility of information sources selectively. Likewise with doctor US (ob-gyn.) who provided education for pregnant women who have inaccurate health information: "You only read general symptoms, I do an examination, I use an ultrasound device, and the main one that is irreplaceable is the physical examination, i.e., when face to face, the doctor can see the face, eyes and other indicators." Doctor PS educated patients like the following: "... What is written on the internet is average, I do not speak average, because treating individuals there are certain specificities, case by case. For example, the persistent complaint of dizziness, then dizziness is a symptom, and the cause can be various. To find out about the prolonged dizziness, the patient may have to check the eyes, teeth, and blood pressure." A similar education was also carried out by doctor RK (radiologist) by explaining that "the same symptoms, for example, dizziness can be caused by various conditions." For patients who have accurate health information, keep educating, and patients should not diagnose and treat themselves without checking or consulting a doctor (BA). Besides, doctor SM educates patients who believe more in health information than in the doctor, countering that information in medical theories.

Examples of doctors' supports were performed by doctor EP (internist), doctor BA (Ophthalmologist), and doctor HR (pediatrician) to patients who had the habit of accessing health information with the right steps. Besides doctor PS also supported patients who completed their knowledge by reading medical journals concerning their complaints. While doctor FC gave the example of a doctor's appreciation to his patient, who made a self-diagnosis quite accurately about his eyes by saying: "... You are diligent in reading yes,... right, your eyes have floaters, but I still have to explain the details." While doctor TS stated: "I appreciate if there is accurate information that follows health science."

Implications of Patients' Health Information on Doctor-Patient Therapeutic Communication

The rise of health information available on the internet has provided opportunities for patients to choose and use health information, according to their needs. "The Internet has opened up the doors of information like never before. The many sites are ready to dish out detailed information about the patient's condition. Not just basic information, the e-patient also has easy access to the latest developments, various treatment modalities available for the conditions, and can then make an intelligent choice." (Akerkar & Bichile, 2004, p. 120).

Akerkar also suggested that the patient approached the doctor with presumptions based on information on the internet. Health knowledge possessed by the patient when visiting a doctor has now changed the patient's role that was formerly passive, only listening to the doctor's explanation, now the patient is an active subject. It means health information owned by patients from the internet has implications for doctor-patient communication, known as therapeutic communication. Implications are effects or consequences obtained when the object is treated intentionally or unintentionally, and this impact will be seen within a specified period (Hanif Islamy as cited in Utoyo, 2012, p.9). An implication is something that is suggested, or happens, indirectly Implications are the effects or consequences that may occur in the future (Vocabulary.com, 2019).

According to the doctors, from the facts on the field, patients who searched for health information on the Internet showed graded activities, namely patients who were very active, active, and less active. The patient activity category could be identified when patients communicated with doctors. Doctor SM (ENT specialist) argued patients who googled too much and too far hampered communication. When visiting the doctor, the patient asked too many questions for things that they did not need to know. When having surgery, many patients asked the technical surgery problems, for example: "Doctor, where will you slash? When stitched, what thread do you use? What type of thread? Is the thread pulled out again? What are the side effects?" Doctor SM called these patients "over-worried" patients, and dealing with these patient characters required unique energy. The experience of doctor AR (ENT specialist) reinforced doctor SM's statement: "Patients who are googling too much when visiting, already show anxiety due to the information read on the internet scares them." Doctor AR added: "... some patients are anxious and have trouble sleeping because they are very concerned about the googling results, so the patient is 80 percent psychosomatic, and 20 percent sick." According to doctor SM and doctor AR, patients with too much googling, as mentioned above, are tough to educate.

All doctors believe that patients who have proper health information will assist the therapeutic communication process. As stated by doctor BA (an Ophthalmologist): "For me, it is easier to communicate with patients who want to find information and have a desire to know their health status." Doctor TS said: "I am comfortable communicating with patients who have properly digested health information from the Internet." For doctor SS, "Patients who are diligent in searching health information (especially concerning child development) make it easier for me to communicate because patients quickly understand the advice that I give." Doctor FC stated:

"In the past, patients came with zero knowledge; now, some have read information, and at present, patients are generally more critical, but the question is natural." According to doctor US, "Patients, who search for health information on the Internet, have positive values because the information is used as a second opinion for them when the doctor gives a diagnosis." Furthermore, doctor RK indicated: "Patients, who have health information and digest that information correctly, can certainly help communication with doctors." Referring to the statements of the doctors mentioned above, it showed that the health information possessed by patients built positive therapeutic communication between doctors and patients.

DISCUSSION

A paradigm shift has occurred in doctors-patients therapeutic communication since health information is available on the internet. When the Internet has become a significant source of health, then patients present at the doctor's office already have health information. As also stated by McMullan (2006, p. 27): "The Internet has become a major source of health information. It can improve the patient's understanding of their medical conditions and their self-efficacy." This was proven in the field in this study that most patients accessed the internet before visiting a doctor. In general, they searched for health information when they felt symptoms of pain. Even a small number searched for health information on the internet as a habit. One characteristic that patients have health information due to using the internet is that they are more likely to ask more specific questions Akerkar & Bichile (2004). Data in the field showed that doctors could identify if their patients had health information from the internet; if patients directly confirmed to the doctor, some even confirmed their self-diagnosis instantly. Other means of identification that the patient had health information from the internet was when the doctor gave the diagnosis results to the patient. Still, the patient refused because the doctor's diagnosis results were not the same as those read on the internet. In case of differences in doctor's diagnosis with the patient's self-diagnosis based on health information on the Internet, it can be assumed that Internet information was inaccurate. This is in line with the opinion of Kim & Kim (2009), as cited in De Oliviera (2014, p.329) that there is a concern about the quality of the content it obtains and its impact on the doctor-patient relationship.

Meanwhile, according to Walker et al. (2008), unreliable information can lead to misdiagnosis. Likewise with the statement of Pereira & Bruaera (1998) as cited in Josefsson & Hanset (2000,

"Existing research on patients use of the internet") is the fact that there is a lot of misleading and low-quality information. This is one of the Internet weaknesses when used by patients, so patients do not get useful information, but instead, get wrong health information.

Data in the field also discussed that Internet facilities used by patients were online health media and blogs. Both types of media each had their own opinions about inaccurate messages before blogging. From the statements of doctors as key informants of this study, it was known, the health information that most patients had from the internet was inaccurate. Inaccurate health information that patients obtained from online media was generally due to errors in understanding messages. Furthermore, patients made a self-diagnosis based on symptoms they felt with health information read in online media. As disclosed by doctors' informants, health information, and diagnoses on online health media usually speak of average cases while doctors talked case by case. When face to face with the patient as well, the doctor could identify the patient's health from the laboratory results, physiological appearance, and assisted by various other medical equipment.

On the other hand, online health media managers claimed that the content they provided had a sufficient degree of accuracy. All information came from credible sources that could be accounted for, namely doctors and journals that were rewritten in plain language so that readers could understand them. All doctors, as key informants stated the inaccuracy of health information from the blog was due to the blog had no filter, so the source was not credible. The statements written on the blog do not necessarily have to be research results, and even if they claim to be research results, the research method needs to be questioned. It may also be a hoax that cannot be trusted automatically.

When not all health information from the internet is reliable, so that many patients misunderstand health information, doctors need to address this condition wisely. Broom A. stated (2005), as cited in Marcinkiewicz & Mahboobi (2009, p.4), that "The internet is an opportunity, rather than a challenge to medical authority." The doctors in this study dealt with patients who had health information from the internet according to their level of accuracy. Regarding patient informants with accurate information, doctors appreciated their efforts and provided support with special notes to be careful in selecting health information on the internet. Doctors generally provided education for patients who had inaccurate health information, including hoax news. Education provided by doctors to patients who have inaccurate health information is part of health literacy.

Health literacy is a person's ability to seek, process, and understand necessary health information and know the need for appropriate services in making decisions about his health .(Mayer & Villaire, 2011, pp. 59-60).

With the phenomenon of relatively many patients googling health information before visiting a doctor, the patient's knowledge of health information is no longer zero/blank. This situation has changed the doctor-patient therapeutic communication.”Traditionally, the relationship between doctors and patients is asymmetrical; that is, doctors have significantly more information about medical conditions than their patients." (Akerkar & Bichile, 2004). In other words, for a long time, the patient is medically dependent on the doctor. As, stated also by Mulyana, a Health Communication Specialist, in his interview, that in Indonesia, the community is paternalistic which considers doctors to have a unique position, and knows best about health problems. The public likes to listen and ask for advice from people who have a higher status, including doctors, so people are resigned to diagnosis and take medical treatment to cure illness. "Patients' use of the internet for medical information will influence the development of a new patient role in different respects. First, access to medical information will influence the doctor-patient relationship, for example, by patients becoming well-informed. Patients' ability to put several doctors' medical opinions against each other is also likely to affect the relationship." (Jadad, 1999; Coira, 1996 as cited in Josefsson & Hanseth, 2000, “The patient role”). This statement is supported by De Oliveira's opinion that the use of the internet by patients as a source of health and disease information has developed rapidly with a definite effect on the doctor-patient relationship (De Oliveira, 2014).

Related to this research, the opportunities and challenges of patients using the Internet for health information had different implications on doctor-patient therapeutic communication. With the patients' condition that had ample opportunities to use the internet in search of health information, the patient's role before the doctor changed. The patient who performed health literacy correctly, he/she became a doctor's "partner" in conducting health care. The implication was that the doctor-patient therapeutic communication transactional relationship occurred, where the patient acted as a subject, not an object. Patients who had sufficient and accurate information could understand the condition of their body, so they could more easily receive the doctor's input. Doctor-patient therapeutic communication was operating effectively.

On the other hand, when a patient searched for health information on the internet excessively, where the patient entered an area that was not his authority, then the patient obtained inaccurate health information. The impact was that the patient would make a false self-diagnosis that frightened the patient and had an excessive anxiety level/over-worried. The condition of patients seeking health information on the internet had extreme implications for therapeutic communication, with doctors becoming ineffective. Doctors had difficulty educating or correcting patients' understanding of incorrect health information because patients were not accommodative.

CONCLUSION

The increasing number of patients seeking health information online before visiting a doctor has changed the paradigm of the doctor-patient relationship. In this context, the role of patients who have traditionally been subordinate, under the control of doctors, now patients has an active role. However, the phenomena in the field have shown different conditions yet can complement the paradigm shift. Thus, patients who use health information from the internet can have implications for the doctors-patients therapeutic communication in two characters, namely effective and ineffective. Doctors-patients therapeutic communication will be useful if the health information patients have from the internet is accurate. The accuracy of this health information is obtained in the right way and also perceived correctly so that the health information has provided knowledge and understanding about basic health terms related to the symptoms felt by the patient. Patients have the opportunity to ask more specific questions medically. Patients become active in asking questions; thus, dialogical situations occur, that is, the communicators are "relatively" equal, resulting in "symmetrical" relationships. Doctor-patient therapeutic communication is transactional. The patient has information about the symptoms he/she feels, expressed verbally, and nonverbally. The doctor responds according to his authority, medically. This liquid situation makes it easier for doctors to diagnose and provide education as the patients are accommodative. Doctors also provide excellent support and appreciation for the patient's efforts. Doctors-patients therapeutic communication is ineffective if the patient searches for information excessively, including interventions to areas that are not his/her authority, or the patient perceives inaccurate health information, even makes incorrect self-diagnosis as well.

As a result, patients x As a result, patients experience excessive anxiety (over-worried). Regarding such patients, doctors encounter obstacles in providing education as patients are not accommodative.

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LIMITATION

There is difficulty in confirming the number of patients accessing the doctor's version of health information because doctors never make special notes for it. So the percentage of patients who have health information from the internet is only according to the doctor's estimate based on the doctor's identification in the doctor-patient therapeutic communication. However, this does not reduce the validity of the research data.

BIODATA

Siti Karlinah is a lecturer at the Faculty of Communication, Universitas Padjadjaran, specializing in journalism and active in the Center for Health Communication studies at the same faculty.

Atwar Bajari is a lecturer at the Faculty of Communication, Universitas Padjadjaran, specializing in Communication Management and Research Methods.

Wawan Setiawan is a lecturer at the Faculty of Communication, Universitas Padjadjaran, specializing in Public Relations and Population Communication.

Ika Merdekawati is a lecturer at the Faculty of Communication, Universitas Padjadjaran, specializing in journalism and active in the Center for Health Communication studies.

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