PERCEPTION OF POTENTIAL PATIENTS AND DOCTORS AGAINST DOCTORS BASED ONLINE CONSULTING SERVICES

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ABSTRACT
Health is one of the primary need of human beings. In the midst of rapid technological developments, doctor need to improve their service by using technology innovation. One of the innovation can be use is online medical consultation. Perception of the respective patient and doctors is important in choosing this kind of service. In this research, writer found that prospective doctors perception to online medical consultation is good but this technology can not replace face to face physician service, however this can be used as complementary of physician service such as a online booking or for follow-up. Prospective patient perception to online medical consultation is good if this service given by trustworthy agents.

Keywords : Online medical consultation, patient and doctor perception, telemedicine, doctor-patient communication.

INTRODUCTION
Technological developments become more complex day by day and internet users is also increasing everyday. According to Kemenkominfo (2015), explained that there were 82 million people using internet everyday in Indonesia. Internet usage is mostly for sending and receiving emails, social media, search for the latest news, looking information about goods or services, internet banking, for buying and selling goods or services, recruiting worker, video conferencing, etc. (Harian TI, 2013).

Doctors is one of the noble jobs that can provide health services for the society. When the body and the soul are healthy, people can work well. To provide more better health services, doctors should not be outdated, especially in the use of technology. Considering the number of doctors who are not much, 171,595 doctors (Konsil Kedokteran Indonesia, April 2016), and the number of people in Indonesia are 237,641,326 people (Badan Pusat Statistik, 2010), doctors need to utilize the online system to help provide services to the society without reducing standard of medical services. There are several webs and applications that have been trying to bring this doctor-patient relationship closer. Some of them are www.konsula.com and www.klikdokter.com. According to Gidwani et al.(2012), the used of information technology for diagnose, therapy and monitoring patient condition is referred to as telemedicine.

Online Medical Consultation (OMC) is a term used by Al-Mahdi, et al. (2015), to refer long distance medical consultation services. OMC is part of telemedicine which is a long-distance telecommunication consultation that is generally for diagnostic and treatment purpose. OMC makes the patient does not have to leave their home or places of work, sit in traffic then sit in the waiting room with other patient perhaps catch or cause infection meantime, and then go back home or where they came from. Few publication at US, according to Al-Mahdi et al. (2015), reported that e-Visits were very applicable with high satisfied levels on patient. Internet based video consultation also has been practiced in Australia in the field of psychiatry, emergency care and pediatrics.
Online Medical Consultation were also related to the doctor-patient communication relationship. According to Wahyuni et al. (2013), doctor-patient communication is a very important field of therapeutics in the hospital. The communication quality that occurs between the two sides will result in satisfaction within the patient. Patients that feel satisfied will return to the same doctor if their communication is good and effective. However, any effectiveness will apply if the doctor-patient communication relationship is performed online utilizing telemedicine, especially Online Medical Consultation? From that case, we raised a study that attempted to find the perception of potential patient and doctor on doctors based online consulting services.

Consumer Behavior
Consumer behavior is defined as a science that studies processes that influence when an individual or group chooses, buys, uses or discards a product or service, an idea or experience to satisfy a need or satisfy a desire (Solomon, 2012). Marketing stimuli include 4P, namely Product, Price, Place, and Promotion (Armstrong and Kotler, 2012, Schiffman and Kanuk, 2016). In addition, other stimuli that affect buyers are economics, technology, politics and culture.

Perception
Perception is a process done by an individual to select, organize, and interpret stimuli into meaningful and reasonable images of the world (Schiffman and Kanuk, 2016). Perception arises from a stimuli that gives rise to sensation. Stimuli are accepted through the five senses. Accepted stimuli are chosen based on consumer experience, expectations and motives on stimuli (Schiffman and Kanuk, 2016, Solomon, 2016). Knowledge is also influential in the perception process (Goldstein, 2010).

Perception of Service Quality
If the services received or perceived in accordance with the expected quality of services perceived good and satisfactory. If the service received exceeds the customer's expectations, then the service quality is perceived as the ideal service quality. Conversely, if the service received is lower than expected then the service quality is perceived poorly. Service quality dimensions include tangible, reliability, responsiveness, assurance, couteresy, empathy (Caha, 2007 and Kara, 2014 in Kayral, 2014).

Doctor-Patient Communication
Communication is a process of moving from one person or group of people to one or a group of others using certain symbols to give an effect. Doctor-Patient Communication affects the level of patient satisfaction (Wahyuni, et al., 2013). Doctor-patient communication is judged by confident, empathetic, humane, personal, frank, respectful, thorough (Bakic-Miric and Bakic, 2013). Step in success in doctor-patient communication is making positive first impression, course of the interview, patient response, collaboration with patient, how to end the conversation.

E-commerce
E-commerce is the exchange between individuals or between organizations and activities that facilitate such exchanges with the application of information technology (Cannon et al., 2008 in Gunawan and Wicaksono, 2013). E-commerce can be divided into 4 perspective, a communication perspective, a business perspective, a service perspective, and an online perspective (Kalakota and Whinston, 1997, in Gunawan and Wicaksono, 2013).
must have features that traditional service do not have, include always on, location-centric, convenience, customizeable, identifiability (Chen et al., 2011).

Online Serviscape
Online Serviscape is factors of online environment that appears during delivering service process (Harris and Goode, 2010). Online serviscape is divide into three dimension, Aesthetic appeal, online layout and functionality, and financial security.

Channel Strategy
Websites provide convenience and choice of how to purchase a product. A successful marketer now uses a multi-channel strategy that involves a quality website for electronic exchange. There are several factors influencing channel strategy, included commodity, conditions, competition, costs, coverage, competence, control, character of intermediaries (Peter and Olson, 2010).

Telemedicine and Online Medical Consultation.
According to Kay et al. (2010), telemedicine is a health service, where distance is a critical factor, by professional health service providers using information and communication technology for valid information exchange aimed at diagnosis, treatment and prevention of disease and injury, research and evaluation, and for continuation of education Healthcare providers, all for the betterment of the health of individuals and their communities. There are two types of telemedicine, the synchronized direct interaction and the interaction are not synchronized. Online Medical Consultation is part of telemedicine. Online Medical Consultation is a synchronized online doctor consulting service, between healthcare providers and patients, which is constructed with secure tissue in an electronic medical record and a medical history structured and computerized to help clinic workers at a distance and for non-medical cases Which can be overcome without direct physical examination (Gidwani et al., 2012)
### 1. Research Design

#### Backgrounds

Along with the development of the world of technology, the medical world has a so-called telemedicine and one of them is online medical consultation. This causes the need for doctors to know how the patient's perception of online-based consultation.

#### Rumusan Masalah

What are the perceptions of potential patients and doctors on online doctor-based consultation?

#### Basic Theory

1. Consumer behavior is the study of the influential process when an individual chooses, buys, uses / discards a product / service / idea / experience to meet the needs / satisfy the desires. (Solomon, 2016).
2. Perception is a process done to select, organize, and interpret stimuli into meaningful and reasonable images of the world. (Schiffman and Kanuk, 2016).
3. The Internet and many digital technologies have given businesses a new way to reach and serve customers. (Armstrong and Kotler, 2012)

#### Previous Research

1. Al-Mahdi, et al. (2015). Online Medical Consultation is a growing phenomenon introducing several modalities interactions, variations of health consultancy services, and accessible to consumers around the world.
2. Singh, et al. (2015). The role and application of telemedicine will continue to increase along with the development of technology and the evolution of health services.
3. Gunawan and Wicaksono (2013). Responden has a high level of perception of online servery website bakery especially photo products.

#### Interview

#### Data Analysis

#### Conclusions

Figure 3.1. Research Design

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**RESEARCH METHODS**

This study is a qualitative research. Qualitative research is data in the form of non-numeric or nominal, but more often in the form of statement sentence, a description or description that contains the meaning and certain values obtained through qualitative data mining instruments (Herdiansyah, 2013). Selection of sample by purposive
sampling method with judgmental method. Purposive sampling Method is chosen by respondents based on certain characteristics, with judgmental method, in which the respondent is selected based on the consideration of the researcher. Technique of data collecting is done by semi structured interview. Semi-structured interviews have characteristics in which the questions are open, but have boundaries of themes and flow of speech, predictable, flexible but controlled interview speed, interview guides, the purpose of the interview is to understand a phenomenon (Herdiansyah, 2013).

1.1. Data Collection

The interview were held on August-September 2016 at cafe or workplaces. Interview were conducted by using a digital voice-recorder and lasted around 60 minutes. The participant is three doctors, three patients and one online marketer. During the interviews, the researcher were asked the participant about doctors based online consulting methods. The research question included: How they used internet in the daily life? How they think about e-commerce? Can they explain about telemedicine? How they think if the doctors consulting methods given as online consulting methods?, etc.

1.2. Data analysis

The interviews were transcribed verbatim and read repeatedly by the first author. The data is reduced to matrix form to make it easier for researchers and readers to view the data systematically. No software for coding of data was used, but hand coded as a means to gain a deeper understanding of the data.

Credibility of research in this research by using triangulation technique. Triangulation is a validity test using more than one source, the source in question can be perspective, methodology, data collection techniques, etc. (Herdiansyah, 2012). In this study, we chose to use data triangulation. Data triangulation is the used of more than one method to collect data for a single case.

Results

1.3. Patient Perception

Patients argue that the internet is very important in everyday life and is often used to search for information and latest news, buying and selling transactions of goods and services, banking transactions and social media. E-commerce has proven to be frequently used by patients and is very convenient, save energy, time, effective and efficient. But when it comes to healthcare, patient’s perceptions are different, health care according to patient’s expectations are not a playful service.

Doctorized services selected by patients are professional and credible doctor services that can provide solutions for patients and make patients satisfied. When this health service is provided online, according to the patient, it is a new and unfamiliar thing but a good and interesting idea because abbreviate can shorten the time, but the concept of implementation should be considered and will cause pros and cons. Of particular concern is this can lead to miss communication between doctors-patients because doctors can not check the patient's body condition directly. In addition, confidence in physicians examining patients also affects this service. If the service is provided by a physician who can be trusted by the patient, then the patient's perception of the service will increase. In fact one of the respondents was quite often consulted online with friends who are also doctors by using social media.
such as line or whatsapp. In addition to a trusted doctor, the appearance of a doctor while consulting online will have an effect on the patient's trust.

This service is chosen by the patient because it is fast and time-saving, in addition to patient complaints can be explained in detail through e-mail writing vice versa. This service makes it easier to find a doctor. According to the patient, a suitable price for this service can be the same as face-to-face. This service may be provided as a follow-up of the patient's condition. When a patient has met a doctor who treats the patient, the patient's confidence in the doctor will be better and when the doctor provides follow-up services online, the patient is more likely to complain.

For system problems, in the patient's perception, a system that can be expected is an online physician consultation service and then the physician sends the drug home or sends a medical delivery service to the patient's home.

1.4. Doctor Perception

Doctors often use the Internet to search for research journals, latest treatment information and the latest news. E-commerce also facilitates doctors in the middle of busy, closer consumers and service providers and is often used for the purchase of goods and services. When associated with health services, good doctor service is a service that can provide subjective and objective satisfaction, in which patients and their families become satisfied. When this service is provided online, according to the doctor is a good idea and visionary which is often used in the doctor's practice just renewed, if used only using the phone, now using a smartphone but of course this service can not replace the traditional face-to-face medical services directly.

Online physician-based consulting services can not provide medical and prescription drug treatment services. Besides, doctors also can not examine the patient's body directly, although it is from the patient's anamnese or complaints, the doctor has been able to predict a lot of diagnosis. Constraints that may be encountered when consulting online is the poor connectivity that can disrupt the consultation.

According to doctors, a suitable price for this service is the same as face-to-face. The expected system is an online booking system and a consultation system with a medical record that can see the facial expression of the patient directly and the whole body. Online-based doctor services can also be a channel for new doctors who want to make their name better known.

1.5. Online Marketer Perception

Online marketers every day use the internet to live online business. E-commerce can be the answer to the problems of people in Indonesia. When the world of medicine penetrated the online world, according to this online marketer is an innovation in the medical world.

The limitation of online consultation is consultation using only the two senses ie the sense of sight and hearing but with the video call feature, it actually can improve service. This service is very time saving and whenever can be done. It just can not provide medical treatment and examination of the patient's condition directly.

The price that is suitable for this service is the same as face-to-face as the doctor must provide the equipment that supports the service. The recommended system can book online and consult with video call. Online system can be a channel
for doctors and doctors are advised to make videos about health to promote the services of doctors.

**Discussion**

From our study we found that doctors, patients and online marketers had similar perceptions in viewing this problem. They perceive that online doctor-based consultation is a new and visionary one. But they argue that to be realized, this needs a lot of consideration and things to watch out for. Starting from the system, the doctor, the type of service, the price, and many other factors must be considered.

The respondents thought that online-based physician services could be provided to complement the physician's services, but should be provided in a professional manner so that it can be accounted for and delivering the appropriate quality to the needs. The respondents also agreed that the service could not provide direct medical treatment, but only limited consultation. But do not rule out if in the future technology becomes more sophisticated and found special tools that can help doctors check patients from a distance.

Some of the systems perceived by respondents are video call services and e-mails that can clearly document the patient's complaint and the doctor's explanation or medical record from the doctor's side. Meanwhile, online booking system is also a service that can be imagined by respondents.

However, there are some methodological limitations in this study. Specifically, the generalizability of sampling is a limitations of this study. The study was conducted in Surabaya city and age limitation from 20 to 40 years old. It is important to note that the readers should be cautious when generalizing the results to different cultural context and age.

The study was done in-depth interview only with 3 doctors, 3 patients and 1 online marketer. The results should be confirmed with a reliable survey, more sample and different sector firms.

**Conclusion**

Online Medical Consulting service is a new and visionary, but this service can not exchange traditional method. This services can be used as a follow-up or first aid, but this service is only as far as consultation, can not give medical treatment. Online medical consultation can be a channel to connect communication between doctor and patient. This service involves two kinds of senses, namely the sense of sight and hearing. Ideally this service uses a webcam.

Based on the research that has been done then can be given suggestions as follows : for practical tips, it is recommended for doctors to work with information technology developers to collaborate on designing telemedicine. Telemedicine that can help doctors examine patients indirectly. Also, it is recommended for doctors to study communication techniques that can help the patient-patient communication indirectly to improve health services.

For academic suggestions, for further research can be examined the utilization of online consultation in checking the patient. Can also be feasibility study of online applications that have been developed.
REFERENCES


