

# Indonesian Preference of Teleconsultation Modality: Qualitative Study

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## Abstract.

*Since the outbreak of the COVID-19 pandemic, telemedicine users throughout the world have increased, including in Indonesia. Since COVID-19 pandemic, telemedicine is a business platform in the health sector with increasing number of users. Minister of Health Regulation Number 20 of 2019, which is currently the basis for implementing telemedicine in Indonesia, does not regulate the use of teleconsultation media used for diagnosis on telemedicine platforms. This research aims to provide recommendations regarding the use of teleconsultation media on telemedicine platforms. In this study, data was obtained from interviews with thirty-three participants. In conclusion, the video call feature should be a mandatory modality for teleconsultation, but it is optional to use and with adjusted teleconsultation fees.*

**Keywords:** Telemedicine, teleconsultation media and video call.

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## I. INTRODUCTION

The COVID-19 pandemic has changed the way Indonesian patients visit hospitals and clinics; instead, they use telemedicine programs to consult with physicians and other health professionals remotely [1]. A study conducted by the Centers for Disease Control and Prevention (CDC) found that as from January to March 2020, the number of telemedicine consultations in the US had increased by 50% over that of 2019. A survey with 2,108 respondents was done in Indonesia, and the results showed that 44.1% more people used telemedicine services in 2022 than the year before [2]. The Minister of Health Regulation No. 20 of 2019 currently serves as the foundation for implementation in Indonesia and regulates the usage of telemedicine services between healthcare facilities.

This law only covers services that can be used to develop a systematic inter-professional diagnosis between the doctor requesting the teleconsultation and the doctor providing it. Since this law does not regulate teleconsultation media—a means of communication between physicians and patients—that is utilized for diagnosis on the telemedicine platform, diagnostic enforcement procedures cannot make reference to it [3]. Telephone or video call features are employed during teleconsultations in foreign nations, including America, Australia, France, Germany, and India, for the purposes of diagnosis, follow-up, and therapy [4-8]. In the meantime, emergency triage in Belgium, Canada, Qatar, and Spain is facilitated by teleconsultation by phone or video chat in addition to diagnosis and follow-up [9-12]. In Indonesia, the most common method of obtaining a diagnosis, prescription, and legal documents using telemedicine teleconsultation is the chat feature, which is limited to verbal history taking. More comprehensive and targeted restrictions about the use of teleconsultation media to enforce diagnoses on telemedicine platforms in Indonesia are needed in order to maximize health services for the general public.

## II. METHODS

This research looks at a number of teleconsultation-related points of view that scholars have proposed based on past literature reviews. Teleconsultations by phone or video are recommended. The sampling strategy employed in this study is purposive sampling. Further doctors and patients answered till the answers were full. The participants in the in-depth interviews included IDI administrators, telemedicine platform managers, telemedicine doctors, and telemedicine patients. Direct, succinct short message service to

ask interviewees to participate were sent to them. After the source confirmed their willingness to participate and agreed on the interview time via a brief message to the researcher, the interview was conducted.

Before the interview, a verbal explanation of the research is given, outlining its goals, the reason for the interview, a promise to protect the confidentiality of the data, and the rights and responsibilities of the resource person. Informed consent was given electronically, and the identity was kept apart from the outcomes of the interview. An interview guide that can adapt to the specifics of the interview is used for this in-depth discussion. At each source's location, the interview was done virtually via video conference. The interview took place in April - May of 2024. The length of these interviews ranged from ten to fifteen minutes, and the details of those conversations were captured by recording and verbatim transcription. Resource persons are rewarded with cellphone quotas in recognition of their contributions. The researcher safely saved the interview transcripts on a computer so that only the researcher could access them. The data collected is only utilized for publications. The Miles and Huberman model of data analysis was employed by researchers.

### III. RESULT AND DISCUSSION

In all, 33 individuals were questioned for this study. They are split up into four groups: patients utilizing teleconsultation services (n=15), physicians offering services on the platform (n=11), telemedicine platform managers (n=3), and Indonesian Doctors Association (IDA) administrators (n=4). The summary of all the demographic information about patients and doctors is listed in Table 1.

**Table 1.** Participant Characteristics

<b>Characteristics</b>	<b>Patient Participants (n=15)</b>	<b>Doctor Participants (n=11)</b>
<b>Age (y), mean (SE; range)</b>	33 (6,2; 24-47)	33,1 (1,4; 31-36)
<b>Sex, n%</b>		
Female	2 (13%)	5 (45%)
Male	13 (87%)	6 (55%)
<b>Province n%</b>		
Bali	(-)	1 (9%)
West Java	2 (14%)	(-)
East Java	3 (20%)	1 (9%)
Jakarta City	8 (52%)	6 (55%)
East Borneo	1 (7%)	(-)
South Sumatra	(-)	1 (9%)
Banten	1 (7%)	2 (18%)
<b>Specialization (doctor only)</b>		
General Practitioner (GP)	N/A	8 (73%)
Specialists	N/A	3 (27%)
<b>Telemedicine Platform</b>		
Alodokter	3 (20%)	4 (36%)
Doctor to Doctor	(-)	3 (27%)
Halodoc	10 (67%)	1 (9%)
Others (3)	2 (13%)	3 (27%)
<b>Period of working as a telemedicine doctor, n %</b>		
< 1	N/A	6 (55%)
>1	N/A	5 (45%)
<b>Period of using telemedicine as a patient, n%</b>		
<1	2 (13%)	N/A
>1	13 (87%)	N/A

(-): not available.

N/A: not applicable.

The majority of patients (73%) support the use of video calls in teleconsultations because they facilitate direct communication between the patient and the physician, which builds a more personal rapport and gives the patient greater flexibility to voice concerns. Accurate diagnosis and greater empathy for the patient's predicament are demanded of the physician.

*"Yes, I agree that video calls, like in-person visits at a doctor's office, allow doctors and patients to communicate directly. This makes the doctor-patient interaction more intimate, which helps the doctor better comprehend the patient's condition and offer the required emotional support."* (patient 7)

*"Agreed, it will increase diagnostic accuracy and make it easier for patients to explain symptoms."* (patient 15)

Regarding whether video calls are used for teleconsultations, some patients (26.7%) disagree. One patient feels that only individuals he knows well should receive video calls. Some people believe that talking about their problem through chat is sufficient. Some people prefer chat because it includes textual recordings, which allow patients to review their diagnosis, instructions, and doctor's prescriptions.

*"I disagree, because if you make a telephone or video call, there is no record, via chat, I can re-read the diagnosis and prescription."* (patient 1)

*"I disagree, I think video calls can only be made to people you know closely."* (patient 5)

The majority of physicians (63.6%) support the use of video calls because they allow medical professionals to educate patients via the use of instructional aids, improving doctor-patient contact.

*"Agreed, video conversations should be the minimum method of telemedicine utilized in Indonesia as they allow for direct observations regarding the patient's physical state. Moreover, physicians who counsel lactation can impart knowledge by using instructional tools."* (doctor 3)

*"Agree, so that the patient can visually show the part they are complaining about, and the doctor can understand the patient's expression, mimic, and emotions."* (doctor 4)

Conversely, as the doctors in Indonesia is mostly underpaid, Indonesian telemedicine platforms provide a way for physicians to make extra income. Due to their ability to see up to four patients concurrently, doctors (17%) feel more at ease in chat rooms where the payment for medical services is equal to that of an offline practice. The physician can only see one patient at a time if using a phone call or video call. As a result, during teleconsultations, medical incentives for video call services must be modified.

*"I disagree with telephone or video calls because usually at one time I can handle several patients at once by chat. So it's a bit difficult when making a telephone or video call."* (doctor 9)

*"Agree with the use of video calls, but need to consider the amount of incentives, because telemedicine is one source of income for doctors."* (doctor 8)

Chat feature is available on telemedicine platforms number 1 and 2. As they usually consult during work hours or during breaks, patients prefer to use chat, according to a survey that platform management conducted with patients. Additionally, because of the chat feature, clients have greater freedom to submit concerns and can pick freely what to wear to the teleconsultation. The doctor finds chat more comfortable since it can assist numerous patients at once.

*"The patient still prefers chat since they are occasionally consulted while working, during business hours, or during a break. We've attempted switching from chat to phone calls, but since most patients are employed, they don't want to. That's also the reason we first intended to create video calls, but it appears that due to certain habits and behaviours on the part of consumers, video calls aren't quite appropriate now." (telemedicine platform manager number 1)*

*"Since we don't have videos, everyone talks with the doctor via chat, which is how the consultation is conducted. Both the physicians and the patients were polled. First off, hardly 10% of patients desire to see a doctor via video call. Why don't you wish to make a video call to the doctor, we ask? First, uneasy. Secondly, the attire ought to be suitable first, am I correct? That can't be how you call a doctor on negligee, can it? The third is that occasionally, while I'm on a video call, I forget what I want to ask and what I want to say. It dawned on me after the video call ended. That is a concern for the patient, therefore. We also asked our doctors if they would be open to participating in video calls through a survey. How much is the fee, they inquire? because video calls are one-on-one only. You may serve three to four patients concurrently when doing teleconsultations via chat, right? When I go online, 180 thousand will be the result of four patients multiplied by 45 thousand. How much would you like to pay if this were a video call? Only one path is possible. Serving numerous patients at once with a video call is not possible. Thus, both physicians and patients have to deal with that. Consequently, we chose not to employ video calls." (telemedicine platform manager number 2).*

In the meantime, the platform telemedicine 3 is working on a video call feature that will include a booking system that requires reservations at least a day in advance and teleconsultation prices that are more than those that include chat functions.

*"At least one day in advance, a booking system for video calls for teleconsultations is being developed by us. We created this in response to numerous patient requests for the ability to videoconference with physicians. Patients claim that verbal consultations are all that can be done during a conversation. One benefit of a video call is that it allows you to see the disease's state. Second, the patient can receive a more thorough and extended explanation from the doctor. We are currently figuring out appropriate teleconsultation costs for the video call option; we will make changes later. The cost of the video call is obviously higher than that of the chat feature. We'll make adjustments later." (telemedicine platform manager number 3)*

As video calls allow doctors to observe the patient's expressions and body language, they are a superior teleconsultation tool than chat or the phone, according to the IDI managers. They can also verify whether the individual performing the teleconsultation is, in fact, the patient.

*"Use the best video so that the patient's grin and body language seem like that; it's called teleconsultation; it's professional, just like an in-person consultation at a polyclinic. Therefore, you are unable to view all of that if you utilize chat or the phone." (IDI administrator 1)*

*"Actually, chat and telephone are very limited because we know that if we do anamnesis, body language, expressions, and so on, it's beneficial; even if we don't even make a telephone call, we usually have to make a video call, because we have to be able to see the patient's expression, whether he provided correct information regarding his condition. So if we just chat and write, we don't know who is chatting. Then, if we call, we don't know whether it's really the patient and so on. So at least teleconsultation on the telemedicine platform should be a video call." (IDI administrator 4)*

<b>The use of chat as the sole modality for teleconsultation</b>	<b>Agree</b>	<b>Disagree</b>
Patient	11 (73.3%)	4 (26.7%)
Doctor	2 (17%)	9 (83%)
Telemedicine platform manager	3 (100%)	0
IDI administrator	0	3 (100%)
<b>The use of voice call as the sole modality for teleconsultation</b>	<b>Agree</b>	<b>Disagree</b>
Patient	4 (26.7%)	11 (73.3%)
Doctor	2 (18.2%)	9 (81.8%)
Telemedicine platform manager	1 (33.3%)	2 (66.7%)
IDI administrator	0	3 (100%)
<b>The use of video call as the sole modality for teleconsultation</b>	<b>Agree</b>	<b>Disagree</b>
Patient	11 (73.3%)	4 (26.7%)
Doctor	7 (63.6%)	4 (36.4%)
Telemedicine platform manager	1 (33.3%)	2 (66.7%)
IDI administrator	0	3 (100%)

**Tabel 2.** Preference of teleconsultation modalities

Regarding teleconsultation media, platform managers, IDA administrators, physicians, and patients have given conflicting answers (Table 2). Indonesian doctors and IDA administrators prefer the use of video call over chat and phone conversations. On the other hand, Indonesian patients prefer chat and video call as the modality of teleconsultation. The contradiction might be caused by multiple factors from both sides. From the doctor's side, the use of chats as the sole modality is potential to increase the work capacity for each doctor but limiting the capability of diagnosis. Besides, chat enables medical professionals to treat many patients simultaneously, allowing teleconsultations to deliver more medical advice that would otherwise impossible to be rendered offline. From the patient's side, the use of video call is not preferred because of privacy issues, although it is more convenient for the diagnosis capabilities of the doctor. During teleconsultations, most doctors and patients agree to communicate via video calls as opposed to phone conversations and chat.

Patients and physicians alike, though, can feel more at ease when they converse. Patients can review their past chat conversations with the doctor through chat. The platform managers tend to prefer chats as the sole modality due to operational cost reasons, because video calls and voice calls depend on bigger bandwidth. In order to maximize the capacity of consultation services, platform number two also encourages doctors to assist multiple patients at a time. Despite the traceability of a conversation history, physicians may not give each patient their full attention, which could result in near misses. The possibility of unfavorable outcomes can be decreased by regulations that make it easier to use video conversations and offer doctors who conduct teleconsultations via video calls extra compensation. Chat functionalities are available on all three telemedicine systems. This is based on a prior market survey that found that chat is more pleasant for both patients and doctors than phone or video calls. It is best to keep the video call capability available, even though it is optional, as IDI believes that a visual inspection is the most ideal thing for telemedicine doctors to perform. However, for physicians who agree to service through video call and platform revenue, the video call option can boost income. To facilitate the usage of video calls, the government should mandate an increase in internet capacity.

#### IV. CONCLUSION

On the telemedicine platform, the diagnostic teleconsultation medium is chat with an obligatory option of video call function that can be utilized in accordance with the arrangement and modification of teleconsultation costs for physicians who provide video call services.



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