PERCEPTIONS, ATTITUDES, AND PRACTICES OF MIDWIVES TOWARDS THE USE OF TELEHEALTH

Persepsi, Sikap dan Praktik Bidan dalam Pemanfaatan Telehealth

*Avina Oktaviani Algifnita1, Budi Prasetyo2, Ivon Diah Wittiarika3
1Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia
2Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga, Indonesia
3Department of Obstetrics and Gynecology, Faculty of Medicine, Universitas Airlangga, Indonesia

Address: Jl. Prof. Dr. Moestopo No. 47 Surabaya, Indonesia, e-mail: avina.oktaviani.algifnita-2017@fk.unair.ac.id

Abstract

Background: The Covid-19 pandemic has led to the closure of health facilities and a decrease in the usage of contraceptives. Therefore, the government and professional organizations initiated telehealth services to improve the quality of health services and minimize the risk of Covid-19 transmission.

Aims: This study explored the perceptions, attitudes, and usage of telehealth by independent midwives during the Covid-19 pandemic in Surabaya.

Methods: This qualitative phenomenology study was conducted from March to April 2021, and it involved independent midwives in Surabaya. The purposive sampling technique was used to select informants, and it obtained seven informants that met the inclusion criteria. Primary data were retrieved through semi-structured in-depth interviews.

Results: This is due to the influence of their age, knowledge, the intensity of previous telehealth use, gaps in technology use, availability of facilities and infrastructure, self-motivation, social support, and efforts to find solutions through telehealth.

Conclusion: Five out of the seven midwives decided to continue using telehealth in their services after the pandemic because of its benefits and impacts. Midwives, professional organizations, and policymakers need to consider the use of telehealth to improve the future services

Keywords: Covid-19, decision making, health policy, telehealth.

Abstrak


Hasil: Terdapat pengaruh usia, pengetahuan, intensitas penggunaan telehealth sebelumnya, kesenjangan penggunaan teknologi, tersedianya sarana dan prasarana, motiva di, dukungan sosial serta upaya penyelesaian masalah dengan telehealth.

Kesimpulan: Terdapat lima dari tujuh bidan memutuskan untuk terus menggunakan telehealth dalam layanan mereka setelah pandemi karena manfaat dan dampaknya. Bidan, organisasi profesi serta pemangku kebijakan perlu mempertimbangkan telehealth untuk meningkatkan pelayanan di masa mendatang

Kata kunci: Covid-19, kebijakan kesehatan, pengambilan keputusan, telehealth.
Introduction

During the Covid-19 pandemic, Indonesia’s morbidity and mortality rates have drastically increased, and almost all health services in Indonesia have been limited due to their focus on Covid-19 services. Moreover, Indonesia’s maternal and child health services have also been negatively affected by the pandemic. Midwives, as independent practitioners, have the role of providing maternal and child health services by providing information, guidance, and motivation to mothers and their families (Ministry of Health RI, 2020b).

The National Population and Family Planning Board (Badan Kependudukan dan Keluarga Berencana Nasional or BKKBN) of East Java Province stated that there was an increase in the pregnancy rate by 10% since the start of the pandemic. It was predicted that the increase was due to work from home (WFH) policy that requires all workers to stay at home. East Java Province also had the highest pregnancy rate in the country (Sugiharto and Nurhartanto, 2020). Moreover, the Minister of Women Empowerment and Child Protection (Pemberdayaan Perempuan dan Perlindungan Anak or PPPA) explained that the Covid-19 pandemic has also affected women’s mental and emotional health where 57% of women experienced increased stress and anxiety due to increased burdens such as childcare, housework, job and income loss, and gender-based violence (MWECP, 2020).

The Indonesian Midwives Association (Ikatan Bidan Indonesia or IBI) has also issued service guidelines during the Covid-19 pandemic, which included the development of an information system application that bridges communication between health service facilities, health providers, and patients. In addition, this innovation becomes a platform for counseling, consultation, and education about reproductive health and family planning through smartphones (Indonesian Midwives Association, 2020).

(Galle et al., 2020) found that telehealth allows patients to connect with health providers without the risk of direct contact with Covid-19. Social media has also allowed mothers to gain information from health workers around the world despite the movement restrictions. Therefore, due to the rising use of telehealth, this study investigated the use of telehealth in Indonesia by independent midwives, as well as explored their perceptions, attitudes, and practices towards this innovation during the Covid-19 pandemic.

Method

This qualitative study used a phenomenological approach to gain an understanding of the midwives’ perceptions, values, events, norms, opinions, and beliefs (Martha and Kresno, 2016). It was conducted from March to April 2021. The informants were midwives who had independent practices in Surabaya, at least an associate degree, and an active midwife practice license (Surat Izin Praktik Bidan or SIPB), and used telemedicine in their services and consultations both in real-time and store-and-forward through social media in their services. The type of telehealth used by informants according to IBI guidelines by using smartphones and messaging applications that are already available such as Whatsapp. They were also selected through purposive sampling.

Primary data were obtained through direct, in-depth interviews that followed semi-structured interview guidelines and used recording devices and notes. The parameters observed were the midwives’ perceptions, attitudes, and practices
Table 1. Informants’ Data

<table>
<thead>
<tr>
<th>Code</th>
<th>Age</th>
<th>Work Period</th>
<th>Last Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF1</td>
<td>39 years old</td>
<td>14 years</td>
<td>Master degree</td>
</tr>
<tr>
<td>IF2</td>
<td>63 years old</td>
<td>39 years</td>
<td>Associate Degree III</td>
</tr>
<tr>
<td>IF3</td>
<td>65 years old</td>
<td>44 years</td>
<td>Associate Degree IV</td>
</tr>
<tr>
<td>IF4</td>
<td>65 years old</td>
<td>41 years</td>
<td>Associate Degree III</td>
</tr>
<tr>
<td>IF5</td>
<td>69 years old</td>
<td>43 years</td>
<td>Master degree</td>
</tr>
<tr>
<td>IF6</td>
<td>40 years old</td>
<td>20 years</td>
<td>Master degree</td>
</tr>
<tr>
<td>IF7</td>
<td>53 years old</td>
<td>23 years</td>
<td>Associate Degree III</td>
</tr>
</tbody>
</table>

toward the use of telehealth during the Covid-19 pandemic. The data obtained from the interviews were audio recordings that were converted into verbatim transcripts, which were then coded and labeled. The responses to interview questions were then categorized according to themes. Data analysis is done by selecting, focusing, simplifying, and transforming data, triangulating data, presenting data, and drawing conclusions.

The data of prospective informants was obtained from the search for pomegranate midwives, number phone and their addresses on Google Maps. The informant recruitment process was carried out by visiting almost all places and health service centers in Surabaya. Then the sample is selected based on more specific criteria that have been determined by the researcher in order to represent the perspective. A total of seven informants fit the criteria and are willing to conduct in-depth interviews.

This study has received research ethics approval from the Faculty of Medicine, Universitas Airlangga, No.46/KEPK/ FKUA/2021. The procedures carried out in stages 1) obtaining permission to collect research data from the Faculty of Medicine, Universitas Airlangga, East Java Indonesian Midwives Association (Ikatan Bidan Indonesia or IBI), public health office and primary healthcare centers, 2) research ethics permit, 3) and the list of prospective informants from several parties, 4) selecting prospective participants, 5) distributing informed consent forms with the study’s objectives, and providing time for questions and answers, 6) collecting the forms, and 7) scheduling in-depth interviews.

**Results and Discussion**

A total of seven informants met the research criteria. They ranged in age, education, and length of work. The results of this study were divided into three themes, namely, telehealth for midwives and the influence of telehealth towards midwife services during the Covid-19 pandemic.

All participants were independent midwives and had an average of more than 14 years of experience, and the longest was 44 years (Table 1). All midwives were also involved in Indonesian Midwives Association (Ikatan Bidan Indonesia or IBI) as administrators and members. Midwives coded IF5 and IF6 were the facilitators and supervisors of the Surabaya City Delima Midwife Center. Whereas the participants coded, IF6 worked as heads of study programs, lecturers, and writers. Overall, three themes emerged from the analysis, namely descriptions of midwives’ independent practices, decision-making factors that affect the usage of telemedicine, and attitudes and practices towards telemedicine use during the Covid-19 pandemic.
Theme 1: Services in the Midwives’ Independent Practices during the Covid-19 Pandemic

Theme 1 describes the midwives’ experiences during the Covid-19 pandemic and how the event had a major impact on them and the services provided in their independent practices. The midwives experienced anxiety and fear, and some factors that led to this result are their age, personal health problems such as comorbidities, family and client health, and financial concerns.

“For me, it was clear that it was stressful at first pandemic. Everyone’s stress levels were high, and there was an extraordinary fear. She wanted to close the practice but we already accepted the previous patient with antenatal care (ANC), so we had to keep it open, but with shortened work hours.” (IF4)

“... Making it difficult for the economy, who used to be able to meet children schools can’t be face-to-face, online, pregnant people who check up usually every month come and end up being pushed back due to financial problems. For the purposes of checking health alone, it is difficult, let alone to eat.” (IF5)

“... for during the pandemic I did not receive maternity assistance. It’s been this one year, there’s no partus. But still for the ANC, birth control and immunizations still remain.” (IF7)

The statement above indicates how the midwives felt stressed and were indecisive about providing their services during the pandemic. Therefore, they reduced their service hours, eliminated delivery services, and closed their practices at the beginning of the pandemic.

Midwives, as women and frontline health workers, are more vulnerable to mental health problems. Other health problems such as heart and hypertension or depression, genetics, relatives, and environmental factors can also affect their anxiety (Wari, Adiesti and Yuliani, 2020; Munir and Takov, 2021).

During the pandemic, midwives experienced a decrease in the number of client visits, especially for family planning services, as well as an increasing difficulty in the referral process to the nearest facility when complications occur. Hospitals or primary healthcare centers refuse the referral if patients are not accompanied with negative rapid or swab test results.

“In the past, there was a 40-year-old Gravida 4 mother, who came to us with a full opening. Then he helped us, didn’t advance. I finally referred the mother to the hospital and it turned out to be positive for Covid. Finally, all our midwives waited from 10am and just got home this morning. Five hospitals didn’t want to accept it, so I ended up calling the health care office. At that time, I was not ready to provide rapid tests. That’s all my experience at the beginning of the Covid pandemic, I am finally now providing for faster service” (IF2)

The pandemic causes a challenge for midwives to provide health services. Nevertheless, during the Covid-19 pandemic midwives continued providing their services as they put forward their social function in the society and were able to earn income. When a midwife carries out her duties, she must be responsible for the needs of clients, families, and communities (Sudra, 2021).

“We work because of the community’s needs, we have to provide contraceptives to the patients, if they don’t use it, they will get pregnant, right? Then also the ANC, if we don’t serve them, where
will they look? Many health centers will be locked down, closed." (IF3)

Midwives are aware of their limitations during midwifery care practices so as to improve their professional abilities, maintain their competence, and remain well informed about the development of science and technology in accordance with decisions (Ministry of Health RI, 2020a).

During the pandemic, midwives would upgrade their knowledge and skills through seminars, training, books, information from the internet, and organizations they joined. The more knowledge and experience midwives have, the more they are able to make better service decisions during the pandemic and in the future. Moreover, research has found that more work experience likely results in better social awareness (Carolan Olah, Kruger and Garvey Graham, 2015).

“…there is a sense of happiness, a sense of satisfaction from helping people. Especially when the mother and the baby are healthy." (IF4)

Success in providing services is one of the motivations for midwives to continue providing midwifery services during the pandemic. In contrast, bad experiences could be used as materials for service evaluation and improvement during the COVID-19 pandemic.

Theme 2: Decision-Making Factors for Utilizing Telehealth

Both internal and external factors could affect the decision-making process. Internal factors include age, length of work, knowledge, education, previous experience, motivation, and health. Meanwhile, external factors include government rules or policies, the environment, time, clients, and social support. The COVID-19 pandemic has changed the situation, and thus the government and the Ministry of Health of Indonesia created health policies to minimize the spread of Covid-19 in all maternal and child healthcare facilities. One of these policies requires midwives to provide consultation, educational counseling, and online remote health monitoring services (Muliati, 2020).

“It's a very good policy because it's profitable, it's also beneficial for me because it also reduces face-to-face contact, and beneficial for the patient too as the cost is cheaper. So, for the client, God willing, it will be more profitable. It is only possible for people who need therapy, it can be beneficial for us or it may not be.” (IF5)

The transformation due to the pandemic has caused midwives to decide to use telehealth to meet the needs of their clients.

“...we will continue to provide information to the client so that they can make more informed decisions. I can still provide information and counseling to clients, so there are many supporting factors (for using telehealth).” (IF6)

This is in line with the midwife’s duties and authority in making decisions and providing consulting services and/or referrals (Sudra, 2021).

Although telehealth services reduce face-to-face contact, midwives can still establish relationships with their clients and provide quality services (Ministry of Health RI, 2020b). Telehealth can be done anywhere at any time, and it reduces direct contact with patients. Midwifery services with telehealth during the pandemic have received a lot of positive responses and support from clients, their families, and community.

Social support likely becomes an effective and important support system for individuals when they deal with difficult situations and conditions (Labrague and De
los Santos, 2020). Therefore, positive support is needed for midwives so that they can improve their mental health and remain motivated and confident in carrying out their work during the pandemic.

“Fortunately, my network clinic and BPJS sent me medical device help. God... thanks! In my fear of this pandemic, they came to send aid and there was also help from the IBI, UNFPA that's what the Americans got 3 doses. At the end of the day, I've got help, the beginning time is a problem. Personal protective equipment is hard to come by.” (IF4)

Lack of personal protective equipment (PPE) is often associated with higher levels of anxiety and depression (Rodriguez et al., 2020). Therefore, the government and organizations provided and distributed PPE for midwives during the pandemic to reduce their anxieties about the supply of PPE. Thus, a lack of PPE would not be an obstacle for them to continue providing their services.

According to (Daemers et al., 2017), midwives would take into account various preferences and needs of clients. All of the midwives in this study provided telehealth services as they could limit face-to-face contact with the clients, giving them safe and comfortable feelings. Moreover, by using telehealth, midwives would be able to provide their services remotely to their clients and reduce their anxiety.

Additionally, some midwives may have high compliance and motivation in providing their services due to their high awareness of how important their service during the pandemic is (Ariyani et al., 2021).

Theme 3: Midwives’ Attitudes and Usage of Telehealth

As service providers and leaders, and midwives should be able to set a good example in their services. Midwives' perceptions, attitudes, and practices towards the use of telehealth may reflect their decision on midwifery services.

“First, I don't want to get infected and I don't want to transmit it. I want the pandemic to end quickly. This will happen sooner if we obey health protocols, yes, even if it's telehealth. Yes, we are trying to reduce the number of morbidity and mortality affected by a pandemic like this. We can end the pandemic if we take care of our health, the health of our patients, and the health of our families.” (IF4)

The purpose of providing midwives with telehealth is to ease their access to information, health consultations, health safety between midwives and clients, remote health monitoring, and good administration for an appointment. By implementing telehealth, midwives can spend their time more effectively and consult with their clients according to the time upon agreement (Purbaningsih and Hariyanti, 2020).

Midwives’ attitudes and practices regarding the use of telehealth are open behaviors that can be seen by others. This study found that the perceptions, attitudes, and practices of midwives were positive toward telehealth use during the pandemic. Midwives implemented telehealth services through WhatsApp before the pandemic. The type of telehealth used by the midwives was synchronous and asynchronous, depending on the needs and urgency of the service. In telehealth services, midwives often use media such as Whatsapp, Zoom, Google Meet, telephone, family planning learning applications, and websites as communication information systems to connect with their clients.
The challenges that midwives face when providing telehealth are a lack of infrastructure, digital illiteracy, limited remote monitoring, financial barriers, lack of non-verbal feedback, limited bonding, language barriers, and distrust of service providers (Galle et al., 2020). Three informants aged 65 years were baby boomers and over experienced time constraints and a lack of capabilities in using technology. Typically, they are hardworking, optimistic in nature, and work-oriented. Therefore, they are always looking for ways to make changes, are time-oriented, and are eager to learn new things so that their business can keep up with the next generation (Mulyanti, 2021). Moreover, when a new technology arises, they are more willing to accept it after realizing its convenience and potential benefits. Thus, it is important to convey the usefulness and advantages of the technology (Don et al., 2020).

The informants in this study had high enthusiasm, motivation, and desire to learn new things, for example, by utilizing telehealth in their services. However, they had issues with how to operate it; they would ask their work partner or closest person to them to teach them how to use the technology. Researchers have also found that midwives tended to have a leadership style oriented to human relations and compliance with regulations imposed by the government (Mulyanti, 2021).

“It is very beneficial for the patient and us. We can reduce encounters. The patient would also be quite satisfied, they can chat for quite a while without any disturbances. If they’re here to talk for a long time, someone would be waiting for them (next in line) ...” (IF2)

“First advantage is that the patient’s privacy is better maintained by online. Second, if the patient does not have time or does not have time, it is more effective if it is done with an online consultation as well.” (IF1)

It is believed that midwives tend to have positive responses towards telehealth in that the service has also been very profitable for them. It benefits both parties between patients and midwives, by reducing face-to-face contact and allowing them to provide optimal services at a safe distance (Hajesmaeel-Gohari and Bahaadinbeigy, 2021).

Furthermore, five of the seven midwives decided to continue using telehealth in their services after the pandemic due to its benefits and impacts. This statement indicates that midwives can make decisions responsibly with the ethical use of technology (Astuti, Tajmiati, and Suryani, 2016). Nevertheless, some of the older midwives preferred to return to normal midwifery services (direct services) in their practice after the pandemic.

“If we're back to how we used to be, no problem. So, for example, if things are normal, there's no problem with continuing direct services. I think it's just normal, like before when it was time for checks during pregnancy, they would come directly to us if there were complaints, check face-to-face.” (IF5)

The midwives that would not continue to use telehealth in the future stated that telehealth services would reduce their income. It is noted that they had trouble using the technology. Another midwife also said that telehealth has a mediocre effect and will only be used according to the future situation. Nevertheless, perceptions and attitudes are the main factors in decision making and practice, and they can change over time depending on supporting factors.
Conclusion

There are internal and external factors that influence the use of telehealth by midwives during the pandemic and in the future. The internal factors include age, knowledge, desire to renew abilities, self-motivation, the intensity of previous use of telehealth, gaps in technology literacy, availability of time, and problem-solving effort. In addition, the external factors include the availability of facilities and infrastructure, partner support, client and family support, and environmental support.

It is hoped that all midwives can be more active in finding information and knowledge and implementing telehealth services, professional responsibilities, and philosophy so that they are able to aid the development and advancement of tech-based midwifery services in Indonesia. The government and professional organizations should create a detailed policy about standard guidelines for telehealth use and provide communication and internet access tools evenly throughout Indonesia as telehealth facilities and infrastructure in all health facilities to aid the development of services, especially for maternal and child healthcare services. In addition, the government and professional organizations must provide training in the use of telehealth for midwives periodically in order to form new skills for midwives in the service. Further research regarding this topic needs to be conducted with further in-depth interviews.

Abbreviations

ANC: Antenatal Care; BKKBN: Badan Kependudukan dan Keluarga Berencana Nasional; PPE: Personal Protective Equipment; PPPA: Pemberdayaan Perempuan dan Perlindungan Anak; IBI: Ikatan Bidan Indonesia; SIPB : Surat Izin Praktik Bidan.

Declaration

Ethics Approval and Consent Participant
This study has received research ethics approval from the Faculty of Medicine, Universitas Airlangga No.46/KEPK/FKUA/2021.

Conflict of Interest
We declare that we do not conflict with anyone’s interest.

Availability of Data and Materials
The availability of data and materials can be accessed based on journal and reader request.

Authors’ Contribution
AOA conceptualized the study design and article writing and prepared the original draft. BP and IDW directed the preparation of article concepts and article writing.

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