The Use of Telemedicine in The Development of Professionalism in Areas of Obstetrics and Gynecology in Indonesia

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ABSTRACT

The utilization of medical information sent from one site to another via electronic communications to improve a patient's clinical health state is known as telemedicine. Indonesia is made up of several islands, and not every location has the same level of medical care. Therefore, telemedicine has considerable potential as an alternative in medical practice moreover in Obstetrics and Gynecology area, which need some routine and comparative approaches. In obstetrics and gynecology, telemedicine has been used for prenatal care, obstetric psychiatry, and monitoring chronic disease during pregnancy. Telemedicine brings many advantages and disadvantages to both patients and health professionals. Telemedicine can provide the basis for decision-making, encouraging patients, and promoting self-help once patients have gained such understanding. Therefore, the development of telemedicine in Indonesia.

Keywords: Advantage, disadvantage, obstetrics and gynecology, telemedicine.

I. INTRODUCTION

Nowadays, the rapid advancement of technology impacts telemedicine innovation and implementation. The utilization of medical information sent from one site to another via electronic communications to improve a patient's clinical health state is known as telemedicine. If telemedicine can deliver a similar level of service to in-person appointments while being more convenient and efficient for both the patient and the physician. "Store and forward" models, videoconferencing, messaging or e-mail, telephone or video calls, websites, or smartphone applications are all possible telemedicine implementations [1], [2].

Telemedicine has been utilized to deliver antenatal care, mental health care, genetic counseling, fetal echocardiography, monitoring of chronic medical conditions in pregnancy, colposcopy, and medical abortion in obstetrics and gynecology [1].

Indonesia is made up of several islands, and not every location has the same level of medical care. As a result, telemedicine has much promise as a medical practice alternative, especially in obstetrics and gynecology, which requires many routines and comparative approaches to improve professionalism in patient care aspects.

II. THE USE OF TELEMEDICINE IN AREAS OF OBSTETRICS AND GYNECOLOGY

Prenatal care, obstetric psychiatry, fetal heart rate monitoring, genetic counseling, and monitoring of pregnant women with chronic medical diseases are all areas where telemedicine is used. Telemedicine is used in the gynecological field for consultations and illness management [1].

A. Prenatal care

Virtual prenatal visits for low-risk pregnant women do not replace regular in-person prenatal appointments; instead, they are included within the standard prenatal care model. The patient and the doctor can choose whether traditional or virtual care is best for them. Suppose the patient opts for a virtual consultation. In that case, they will be given a package that contains a Doppler fetal heart rate monitor, urine dipsticks, blood pressure kit, instructions, and a journal to record their symptoms. Even if the visits are conducted digitally, the initial visit should be conducted in person. Traditional screening and laboratory testing, such as fetal anatomy ultrasound at 20 weeks and gestational diabetes screening at 28 weeks, are also recommended [3].

Between in-person appointments, telemedicine visits with a nurse are performed with a nurse. During that visit, the pregnant woman checks her blood pressure, weighs herself, and the nurse uses a Doppler to assess the fetal heart rate. Women who underwent virtual prenatal care appointments

DOI: http://dx.doi.org/10.24018/ejmed.2022.4.3.1347
and women who had all traditional in-person prenatal consultations had identical pregnancy outcomes [4].

B. Obstetric Psychiatry

Telemedicine is frequently employed in the field of psychiatry. Pregnant patients can receive mental health counseling and care coordination from obstetricians, psychiatrists, social workers, and nurses [5].

C. Monitoring Chronic Medical Conditions in Pregnancy

Chronic medical disorders such as chronic hypertension, diabetes, and asthma can be observed using telemedicine during pregnancy. The practitioner might digitally transmit recommendations for illness management modifications during the session [6].

Given et al. reported a randomized controlled trial comparing conventional care vs telemedicine for diabetes and hypertension monitoring. Patients provide information such as blood pressure, weight, and stored blood glucose levels and responses to queries about insulin, hypoglycemia, and other illnesses. Over the phone, the provider would follow up with the patient. Pregnancy outcomes were similar in both groups, but the women in the telemedicine group were more satisfied with the convenience of telemedicine meetings, had fewer unscheduled visits, and felt more closely watched. The cost-effectiveness of telemedicine care for diabetic pregnancies is unknown [7].

III. ADVANTAGES OF TELEMEDICINE

A. Patients

Telemedicine can be used to communicate with patients and the general public. Patients will be able to comprehend the nature of their ailment, prognosis, treatment effects, and the reasons for examinations thanks to telemedicine. Once patients have obtained such awareness, telemedicine can serve as a foundation for making decisions, supporting patients, and promoting self-help. Telemedicine can also offer information to people, schools, and healthcare facilities in health promotion or education [8].

Telemedicine typically enhances equality where health services are provided in less developed, rural places with fewer specialists, even subspecialists. The patient may have the opportunity to see a subspecialist who is unavailable in their area. As a result, many individuals are screened and diagnosed, allowing patients to receive proper therapy sooner [9].

The patient may receive a financial benefit by not having to travel significant distances to see a medical provider, as well as a personal gain from missing less work and having support from people close by [1].

B. Health Professionals

The usage of telemedicine by healthcare professionals was deemed satisfactory since it allowed them to communicate with patients and maintain a two-way conversation via video consultations. Video consultations also aided healthcare practitioners in communicating with patients and their families regularly and discussing future treatment options based on the meeting. Health experts could readily assess the patient's physical or mental changes over time through the video consultation [10].

IV. DISADVANTAGES OF TELEMEDICINE

A. Patients

Telemedicine has proven to have benefits, but it also has drawbacks. The deterioration of the patient-doctor connection cannot be overlooked. Patients with disabilities, such as impaired hearing or vision, may find it challenging to use telemedicine. Because the monitor is a one-way communication tool, elderly persons may not feel that the doctor observed and listened to them. This can make receiving a proper consultation difficult for the patient. Teleconsultation also prevents the doctor from completing a complete physical examination, giving the impression that the doctor is not performing one. There are also concerns about the collected data's privacy. Patients may stop responding to the interface if they utilize an online platform for a long time [8].

Telemedicine poses more dangers in terms of privacy and security than regular in-person sessions. Patients and health care providers must agree on some terms and conditions concerning confidentiality and security. Telemedicine providers (healthcare professionals) must be accountable for ensuring compliance, confidentiality, and security [11].

B. Health Professionals

When remote healthcare providers examine a case with an expert or subspecialist in a larger city, telemedicine may threaten their career or autonomy. Worse, they may be seen as a technician merely. There are also issues with the information that is available on the internet. Data might come from various sources, including persons and organizations with no clear scientific evidence. As a result, the content may be biased, inaccurate, or misleading [8].

As telemedicine becomes more popular, it becomes more vulnerable to fraud and misuse. During in-person consultations, the physician can directly write the prescription; however, this is not possible during teleconsultation. Without a legal drug that requires a face-to-face consultation, controlled substances cannot be prescribed, distributed, or delivered [11].

V. CONCLUSION

Telemedicine is evolving to deliver care for patients in very different ways from the usual face-to-face meeting between the patient and the healthcare professional. Both patients and health professionals’ benefit from telemedicine. The patient receives primary care at home to maintain privacy, safety, and money. In a distant place, the provider can give medical care to patients who do not have access to medical sub-specialists. On the other hand, telemedicine has drawbacks, one of which is the quality of the doctor-patient interaction. Non-optimal consultations originate from poor doctor-patient interaction.

REFERENCES


