



DESAFIOS ÉTICOS NOS PROCEDIMENTOS DA CESÁRIANA COM INDICAÇÃO DE pelve contraída EM PACIENTES CONFIRMADOS COM COVID-19

ETHICAL CHALLENGES IN CESARIAN SECTION PROCEDURES TO INDICATION OF CONTRACTED PELVIS IN COVID-19 CONFIRMED PATIENTS

TANTANGAN ETIKA PADA PROSEDUR SEKSIO CESARIA ATAS INDIKASI KONTRAKSI PANGGUL PADA PASIEN TERKONFIRMASI COVID-19

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RESUMO

A pandemia COVID-19 apresentou vários desafios éticos para todo o pessoal médico. Todo médico sempre presta o melhor atendimento aos pacientes e segue o protocolo de saúde COVID-19 no atendimento aos pacientes. Questões éticas surgem quando os médicos se deparam com um dilema no tratamento de pacientes COVID-19 relacionado aos recursos humanos, instalações e infraestrutura limitadas no tratamento de pacientes no hospital regional, portanto, o paciente deve ser encaminhado. Relatamos um caso de obstetria: uma paciente de 24 anos apresentou a primeira gravidez, idade gestacional de 39-40 semanas com queixas de azia e manchas no canal de parto. A paciente foi encaminhada para um hospital regional, cuja cesariana eletiva estava planejada por indicar uma pelve contraída. No entanto, verificou-se que os resultados do teste de rastreamento rápido foram reativos ao COVID-19 e positivos no exame de RT-PCR. O procedimento médico realizado foi a interrupção imediata da gravidez por meio de cesariana, que exige preparo mental da paciente, da família e de equipe médica. A formação de uma equipe multidisciplinar de médicos, a preparação de instrumentos e locais para os cuidados pós-operatórios de mães e bebês, fornecer informações a pacientes e familiares, consentimento informado, necessidades especiais de mães e bebês é um desafio ético que precisa ser abordado com cautela. O desafio ético nos casos de interrupção da gravidez em pacientes com COVID-19 é o seu apelo, que deve encontrar uma solução a partir da teoria da ética clínica e do princípio básico da ética médica.

Palavras-chave: *Cesariana, pelve contraída, COVID-19, desafios éticos*

ABSTRACT

The COVID-19 pandemic has posed several ethical challenges for all medical personnel. Every doctor always provides the best service to patients and follows the COVID-19 health protocol in handling patients. Ethical issues arise when doctors are faced with a dilemma in handling COVID-19 patients related to human resources, limited facilities, and infrastructure in handling patients in the regional hospital, so the patient must be referred. It was reported an obstetrics case: a 24-year-old patient presented with the first pregnancy, gestational age 39-40 weeks with heartburn complaints, and spotting from the birth canal. The patient was a referral from a regional hospital whose elective cesarean section was planned due to the diagnosis of a contracted pelvis. However, it turns out that the rapid screening test results were reactive to COVID-19 and positive in RT-PCR examination. The medical procedure taken was the immediate termination of pregnancy by a cesarean section



that required mental preparation of the patient, family, and a team of doctors. The formation of a multidisciplinary team of doctors, the preparation of tools and places for postoperative care for mothers and babies, provide information to patients and families, informed consent, special needs of mothers and babies is an ethical challenge that needs to be addressed carefully. In cases of pregnancy termination in COVID-19 patients, the ethical challenge is its appeal, which should find a solution using clinical ethics theory and the basic principle of medical ethics.

Keywords: *Caesarean section, contracted pelvis, COVID-19, ethical challenges.*

ABSTRACT

Pandemi COVID-19 telah menimbulkan sejumlah tantangan etika bagi semua tenaga medis. Setiap dokter selalu memberikan pelayanan terbaik kepada pasiennya namun juga harus mengikuti protokol kesehatan COVID-19 dalam menangani pasien. Masalah etika muncul ketika dokter dihadapkan pada dilema dalam penanganan pasien COVID-19 terkait sumber daya manusia dan keterbatasan sarana dan prasarana penanganan pasien di rumah sakit daerah, sehingga pasien harus dirujuk. Kami melaporkan sebuah kasus obstetrik: pasien berusia 24 tahun, datang dengan keluhan hamil yang pertama, usia kehamilan 39-40 minggu dengan keluhan mulas, dan bercak dari jalan lahir. Pasien adalah pasien rujukan dari rumah sakit daerah yang direncanakan akan dilakukan operasi caesar elektif untuk indikasi adanya kontraksi panggul, namun ternyata hasil rapid screening test reaktif terhadap COVID-19 dan pada pemeriksaan RT-PCR hasilnya positif. Tindakan medis yang dilakukan adalah penghentian segera kehamilan dengan operasi caesar yang membutuhkan kesiapan mental dari pasien dan keluarga, serta tim dokter. Pembentukan tim dokter multidisiplin, penyiapan alat dan tempat perawatan pasca operasi ibu dan bayi, memberikan informasi kepada pasien dan keluarga, informed consent, kebutuhan khusus ibu dan bayi merupakan tantangan etis yang perlu ditangani dengan hati-hati. Tantangan etika dalam kasus terminasi kehamilan pada pasien COVID-19 memiliki daya tarik tersendiri, dan harus dapat dicari solusinya dengan menggunakan teori etika klinis dan prinsip dasar etika kedokteran.

Kata kunci: *Operasi caesar, kontraksi panggul, COVID-19, tantangan etika.*

1. INTRODUCTION:

The world is experiencing a pandemic that has killed many people quickly and changed all orders from all aspects, namely the novel coronavirus. This virus, a new type of coronavirus, was first identified in Wuhan, Hubei Province, China, at the end of December 2019 (Calda *et al.*, 2020). Initially, China reported a mysterious pneumonia case of unknown cause. The isolated sample from the patient was then studied and showed the results of the coronavirus infection, a new type of beta-coronavirus because it was discovered in 2019, named 2019 novel Coronavirus (2019-n-CoV-2) (Wu *et al.*, 2020). On February 11, 2020, the World Health Organization (WHO) provided the name of the new virus is Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and the name of the disease as Coronavirus disease 2019 (COVID-19) (Wang *et al.*, 2020; World Health Organization, 2020).

Viral transmission is known from animals to humans and from humans to humans through contact transmission, droplet transmission, fecal and oral routes, or contaminated surfaces (Wu *et al.*, 2020). Pregnant women are particularly susceptible to respiratory pathogens and severe pneumonia due to physiological changes in the

immune immunity and cardiopulmonary systems (for example, the elevation of the diaphragm, increased oxygen consumption, and edema of the respiratory tract mucosa), which can make them intolerant of hypoxia (United Nations, 2020; Yan *et al.*, 2020).

COVID-19 infection can cause mild, moderate, or severe symptoms. The main clinical symptoms are fever (temperature > 38 °C), cough, and difficulty breathing. It can also be accompanied by severe shortness of breath, fatigue, myalgia, and gastrointestinal symptoms such as diarrhea and other respiratory symptoms. Half of the patients developed shortness of breath within one week. In severe cases, deterioration rapidly and progressively, such as acute respiratory distress syndrome (ARDS), septic shock, intractable metabolic acidosis, and bleeding or dysfunction of the coagulation system within days. In some patients, the symptoms appear mild, even without fever. Most patients have a good prognosis, with a minority in critical condition, even dying (Hantoushzadeh *et al.*, 2020; Li *et al.*, 2020).

The spike in COVID-19 cases has overwhelmed health systems worldwide, including Indonesia. Indonesia declared the COVID-19 disease a national disaster on March 14, 2020. It was determined through Presidential

Decree number 12 of 2020 on April 13, 2020, concerning the Determination of non-natural disasters for the spread of Coronavirus disease 2019 (COVID-19). COVID-19 cases in Indonesia have continued to increase in recent months, including in the province of Aceh. There are 13 hospitals in Aceh that have been designated as referral hospitals for COVID-19 patients, but most of them do not have adequate facilities and infrastructure and limited human resources. So that in cases of COVID-19 patients who require a specific medical procedure, the patient was referred to Dr. Zainoel Abidin Regional Public Hospital (ZARPH) as the main referral hospital for Aceh province.

2. MATERIALS AND METHODS:

The method of this study was a case report. This case report discusses a 24-years-old woman 39-40 weeks pregnant with a contracted pelvis. The patient was a referral from a regional hospital, and a cesarean section was planned. Before being referred from a regional district hospital, the screening for COVID-19 was carried out first, and reactive results were obtained. Due to the limited availability of experts and surgery facilities on patients with COVID-19 infection, the patient was referred to the ZARPH in Banda Aceh. At the ZARPH in Banda Aceh, the patient was re-examined, physical examination, supporting examinations, and a reverse-transcription polymerase chain reaction (RT-PCR) test positive result of COVID-19 infection. Then by preparing and using the COVID-19 protocol and involving the handling of a related multidisciplinary team including obstetricians, pulmonologist, internist, anesthetists, bioethicist, medicolegal expert, midwives, neonatologists, neonatal nurses, psychiatrist, and psychologists, the patient was decided to terminate the pregnancy with a Caesarean section procedure, was born a baby boy, with a baby weight of 3300 grams. Appearance, Pulse, Grimace, Activity, and Respiration (APGAR) score 8/9, after which the baby was treated separately from the mother.

The handling of the COVID-19 pandemic has raised medical ethics issues that are of concern to all medical personnel (Montazeri, 2020). In this case report, we would like to discuss several ethical challenges related to the performance system for medical personnel, including how to provide information to patients and families, informed consent, special needs of mothers and babies, how to involve all aspects of

the COVID-19 pandemic, and how to reduce the psychological impact of medical personnel and patients (McGuire *et al.*, 2020; Munawar, 2019).

The ethical challenge in cases of pregnancy termination in COVID-19 patients has its appeal, which should find a solution using a combination between clinical ethics theory and the basic principle of medical ethics (Beauchamp and Childress, 2013; Jonsen *et al.*, 2010). The Federation International of Gynaecology and Obstetrics (FIGO) also explained the use of clinical ethics that makes it easier to face these ethical challenges (Suryadi *et al.*, 2020). In clinical ethics, it is always discussed the balance between medical indications, patient preferences, quality of life, and contextual features (Jonsen *et al.*, 2010).

3. RESULTS AND DISCUSSION:

3.1. Ethical challenges for medical personnel

Currently, the most significant ethical challenge in health services is how to break the chain of transmission by focusing on medical devices such as Personal Protective Equipment (PPE), masks, and hand sanitizers, which make health services more personal, even during a pandemic, quarantine, and physical distancing are needed (Xafis *et al.*, 2020). As the pandemic develops, placing health care providers is under more significant pressure because health care providers must remain professional. However, on the other hand, there are fewer personal health service providers due to restrictions on activities in a society, which will cause ethical problems. (British Medical Association, 2020; United Nations, 2020).

3.1.1. Reduce the psychological impact of medical personnel

Ethical challenges also occur for medical personnel in dealing with COVID-19 patients. Doctors must uphold the four basic principles of ethics in their practice: beneficence, non-maleficence, Justice, and autonomy (Beauchamp and Childress, 2013). Physicians must always balance the obligation to protect patients from morbidity (beneficence-non-maleficence) and respect for patients' reproductive rights and decisions (respect for autonomy). Using the principle of Justice, namely that there should be no differences and considerations other than the patient's health, is the doctor's primary concern.

However, still adhere to the COVID-19 health protocol.

When treating patients with complications of COVID-19, doctors must be careful and professional. In carrying out their duties, doctors always prioritize the interests of patients compared to their interests, which can be seen in the altruistic attitude of doctors. Doctors are aware that dealing with COVID-19 patients is also at risk of exposure, but doctors are also aware that patients need their profession. To reduce the psychological burden of doctors when dealing with COVID-19 patients, there are several experiences of doctors who take part in treating these patients, including doctors supporting each other to calm their colleagues who have just treated patients. The advice given by doctors to colleagues is always to use PPE while on duty, washing hands after taking medical procedure, take a multivitamin to maintain body immunity, and get adequate rest. The most important thing is that doctors must be open and honest. If they are not in mental and physical fitness, they should not take part in treating patients. One of the other professional attitudes of doctors is that doctors must take care of their health not to endanger themselves and their patients.

3.1.2. Provide information to patients and families

Making medical decisions in this case, not only immediately looks at the medical aspects but also includes aspects of clinical ethics how to explain information to patients and families for informed consent, a particular need for pregnant women with COVID-19 and newborns, how to involve multidisciplinary teams in decision-making, and how to reduce concerns of discrimination and the effects of mental health on medical personnel and patients in particular (McGuire *et al.*, 2020; Organización Mundial de la Salud, 2020; Suryadi and Kulsum, 2020; Wu *et al.*, 2020).

Pregnancy with COVID-19 is a case that has not been published much, so the lack of public knowledge about COVID-19, which considers COVID-19 is an embarrassing/disgraceful thing. Therefore there is a need for multidisciplinary knowledge that must work together both in terms of communication with patients and families by adhering to the ethical and humanities order, a psychological approach to getting consent for actions that the patient and family understand. Publication in social media and electronic media is also beneficial (British

Medical Association, 2020).

3.1.3. Informed consent

Informed consent is a method for sharing information between the doctor and the patient. It must be occurred collaboratively (cooperation) between doctors and patients and their families to obtain the best option for the patient's treatment (Afandi, 2018). In this case, it is not easy to provide the patients and their families to understand obstetric problems treatment, especially for a couple with COVID-19. In a complicated situation like this, the patient and their families do not have a long time understanding the contents of the information because the medical procedure must be taken immediately. Moreover, it is added if the patient and their families cannot consent, so a surrogate decision-maker is needed (McGuire *et al.*, 2020). Patients and their families may not understand information about postoperative care. For example, why patients should be treated separately from their babies, how patients give breastmilk for the baby, how long patients have to be treated, and why it has to wait for 10+3 days in isolation.

The information must also be conveyed if the patient's condition gets worst after surgery, along with the underlying disease of COVID-19. The doctor must explain the procedures of patients' COVID-19, such as respiratory failure. They must be treated in the Respiratory Intensive Care Unit (RICU), use of a ventilator, or Cardiopulmonary resuscitation (CPR) procedure (McGuire *et al.*, 2020). The ethical aspects of informed consent focus on autonomy, trust, self-determination, personal integrity, and non-dominance (Shaha *et al.*, 2013). The doctor should provide information that uses language that is easy to understand by patients and their families. When doctors provide information, doctors must also pay attention to the socio-cultural and emotional aspects of patients and their families. The essential thing in an informed consent procedure is respect for the patient's autonomy rights (Aldossari *et al.*, 2017).

3.2. Solution by using clinical ethics theory

Ethically, the basic values adopted by doctors are to seek a balance of benefit-risk by prioritizing greater clinical benefits for clinical harm to patients as a consequence of doctor's management (Suryadi *et al.*, 2020). According to the theory of clinical ethics, four quadrants can be

considered: medical indications, patient requests, quality of life, and contextual features. This theory is often called the four-box method (Jonsen *et al.*, 2010).

3.2.1. Medical indication

Determination of medical indications in patients with a contracted pelvis diagnosis accompanied by confirmed COVID-19 can be done using the ethical principles of beneficence and non-maleficence. The principle of beneficence means that therapy must provide medical benefits, while non-maleficence means not to harm the patient both medically and financially (Beauchamp and Childress, 2013; Jonsen *et al.*, 2010).

The patient was referred to ZARPH because the regional district hospital was still lacking human resources and facility for handling pregnant patients with COVID-19, where there will be many preparations, both in terms of multidisciplinary professional doctors to treat patients, RT-PCR examinations, unique COVID-19 rooms, and PPE, as well as post-delivery care rooms for patients and her baby.

Medical Indications, divided into 2, which are from the maternal and baby. In this case, the indication for termination of the patient was Caesarean section, in which the mother had a contracted pelvis, and was done immediately because there were already signs of delivery (British Medical Association, 2020). The contracted pelvis is an absolute indication for the Caesarean section (Cunningham *et al.*, 2018).

Obstetric indications can be handled at the regional district hospital, but because the patient is suspected of being infected with COVID-19, the patient is referred for comprehensive treatment. The reason patients were referred to ZARPH was due to limited facilities ranging from the absence of standard operating rooms for patients confirmed with COVID-19. These postoperative rooms were also not available for handling patients infected with COVID-19. The medical indication for baby, a particular room must be prepared for baby care, especially if an intensive neonatal room was needed.

Until now, there is no robust clinical evidence to recommend one way of delivery for pregnant women infected with COVID-19, so delivery is based on obstetric indications by

paying attention to the wishes of the mother and family, except for mothers with respiratory problems that require immediate delivery in the form of a Caesarean section or per-vaginal surgery (Calda *et al.*, 2020; Li *et al.*, 2020; Royal College of Obstetricians and Gynecologist, 2020; Yan *et al.*, 2020).

3.2.2. Patient preference

The patient preference or their families are served using the autonomy principle. Autonomy means that every medical procedure must have the consent of a competent patient (or her immediate family, if the patient is unable to give her consent) (Beauchamp and Childress, 2013; Jonsen *et al.*, 2010).

The patient preference from the pregnant women with COVID-19, there are ethical challenges, where the mother must be strong and sincere because in the delivery process, and giving birth cannot be accompanied by someone she loves, the family must also be encouraged to keep a distance from the patient. Patients cannot touch the baby who is born, and breastfeeding cannot be done directly. This is where the role of medical personnel, psychologists, and psychiatrists, especially in strengthening the mentality of patients, and their families, in understanding the conditions they are experiencing (McGuire *et al.*, 2020).

It is well known that the transmission of viruses from animals to humans and humans to humans through contact transmission, droplet transmission, faecal and oral routes, or contaminated surfaces (Breslin *et al.*, 2020; Kuhrt *et al.*, 2020; Patane *et al.*, 2020). Although there have been several reports where infants tested positive for the presence of the virus sometime after birth, this study needs further validation of this transmission, whether intrauterine or the postnatal period (Berghella *et al.*, 2020; Di Mascio *et al.*, 2020).

It is also unclear at this point whether COVID-19 infection can cross the trans-placental route to the baby. Pregnant women are particularly susceptible to respiratory pathogens and severe pneumonia, due to physiological changes in the immune immunity and cardiopulmonary system, for example, elevation of the diaphragm, increased oxygen consumption, and edema of the respiratory tract mucosa, which may make them intolerant of hypoxia (United Nations, 2020; Yan *et al.*, 2020).

For babies, the treatment is similar to cases of a cesarean section without COVID-19.

Initially, it was carried out as rooming-in. However, because the mother was not sure that she could maintain health protocols such as touching her baby often without washing her hands first due to difficulty mobilizing due to postoperative pain, there was a risk of transmitting the disease. However, recommendations from the Royal College of Obstetricians and Gynecologists and the Indonesian Association of Obstetrics and Gynecology allow direct breastfeeding as long as the mother can maintain health protocols related to COVID-19 (Indonesian Association of Obstetrics and Gynecology, 2020; Royal College of Obstetricians and Gynecologist, 2020).

Based on the research, breastmilk was harmful to COVID-19, but close touch with the baby can transmit and infected airborne droplets (Royal College of Obstetricians and Gynecologist 2020). Therefore, a doctor should discuss the risks and benefits of breastfeeding with the mother and families, especially about the virus COVID-19 transmit to the baby. In this case, the patient is not directly breastfeeding and does not join the mother. In this case, the baby has been tested for RT-PCR and got a negative result. Therefore, in this case, it is proved that there is no evidence of transmission of COVID-19 through the placenta.

3.2.3. Quality of life

Measurement of quality of life is determined using the principles of beneficence, non-maleficence, and autonomy. Quality of life is a form of satisfaction, statement of value, life experience in all aspects for the better or worse (Jonsen *et al.*, 2010).

Quality of life in pregnant patients with COVID-19 without symptoms can carry out self-isolation, up to 14 days after being diagnosed with COVID-19, then re-examination until the results are negative. Maintain health, exercise, nutritious and healthy food, multivitamins, and ensure good air circulation in the room and other COVID-19 protocols. In babies, in this case, it is done the same as healthy babies in general.

After being treated for three days after surgery at the hospital, because this patient was asymptomatic of COVID-19, the patient went home for outpatient treatment and was educated to return to control after 14 days for repeated RT-PCR examination. The repeated RT-PCR results were negative for COVID-19.

3.2.4. Contextual features

Contextual features are obtained using the principles of Justice and fairness. Although clinical ethics focuses more on medical indications, patient preference, and quality of life, medical decisions are not only made by doctors and patients. However, they must also consider other aspects such as socio-cultural, belief, religion, and financial (Jonsen *et al.*, 2010).

In this case, the contextual features are when the patient returns to her residence; the patient is not accepted in her social environment because the community still thinks that the patient can still transmit the disease. This is an ethical challenge in itself related to discrimination and stigmatization for patients with confirmed COVID-19. Health workers must provide education to patients, families, and the community to maintain health protocols in the form of wearing masks, washing hands, and social distance to reduce the risk of contracting COVID-19. Furthermore, until this article was written, the patient had been declared cured, and the baby was also healthy.

3.3. Solution by using principles base on ethics

Ethical concepts should guide obstetricians to reach clinical judgments that are ethically justified (Suryadi *et al.*, 2020). According to the base of the principle of ethics, four main principles can be considered in resolving ethical challenges in a clinical situation, namely beneficence, non-maleficence, Justice, and autonomy (Beauchamp and Childress, 2013; Gillon, 2015).

3.3.1. beneficence

The beneficence principle aims to provide maximum benefit for the patient and balancing benefits and risks (Afandi, 2017). In this case, the patient was referred to ZARPH due to a lack of facilities and insufficient availability of doctors. The purpose of the referral is to provide benefits for patients because the disease suffered by patients can be treated immediately with better facilities and reduce the risk of spreading COVID-19 infection.

The principle of beneficence is the golden rule, where every medical practice must be altruistic, full of kindness, compassion, respect for human dignity, and treat patients as they should commonly (Mappaware *et al.*, 2020).

The principle of beneficence can be carried out together with non-maleficence because a medical procedure aims to maximize benefits (the principle of maximum bonus) and minimize harm (the principle of minus malum) (Suryadi *et al.*, 2020).

3.3.2. Non-maleficence

The principle of non-maleficence is that any medical service must not harm the patient. In providing therapy, doctors must not have medical procedures that injure patients, for example, invasive measures such as cesarean section. In this case, the patient underwent a cesarean section not to injure the patient by cutting the stomach and opening the uterus. However, the purpose of this procedure was to take the fetus, which had to be done because the patient had a contracted pelvis that did not allow vaginal birth. This principle is called the double effect principle, in which good goals must be passed in a bad way (injuring) because it is the only way that must be done (Wholihan and Olson, 2017). So it can be stated that the double effect principle supports the principle of non-maleficence in ethical decision-making in dilemma cases (Suryadi *et al.*, 2020).

3.3.3. Justice

Equality is the essence of Justice, but Aristoteles argues that Justice is more than equality. Someone can feel that they are not treated properly even though they have been treated the same (Afandi, 2017). In this case, the patient received unfair treatment because of discrimination and stigmatization from the surrounding community. The solution to the ethical challenge here is to explain to the public that COVID-19 can affect anyone, and this disease is not a disgrace that society should stigmatize. In a COVID-19 pandemic like this, people should work hand in hand to reduce transmission risk by limiting activities outside the home, physical distance, wearing masks, and always washing hands with soap. Several efforts to control the spread of COVID-19 were carried out with social distancing and large-scale social restrictions, lockdowns, and travel restrictions (Xafis *et al.*, 2020).

Using the principle of Justice, the public will understand that discriminatory action against patients confirmed with COVID-19 will harm

themselves because they may become the next patient. So the principle of Justice here is to treat others as they want to be treated.

3.3.4. autonomy

Autonomy rights are rights to self-determination. In this case, the patient wants to care for the baby directly as usual in postnatal care. In ordinary conditions, this must be respected as a form of giving the highest possible autonomy rights. However, in cases like this, for the benefit of the patient, the patient's autonomy rights are limited, considering the risk of contracting COVID-19 to the baby. In a case like this applies the *prima facie* principle, which puts forward the higher and dominant interests. So the *prima facie* is that autonomy changes to non-maleficence or beneficence (Purwadianto, 2007).

Respect for autonomy is something that is only required if it does not contradict the other main principles of bioethics; for example: if an act of autonomy will harm himself or other humans, then the principle of respect for autonomy will contradict the principle of non-maleficence, then the principle must be decided (Afandi, 2017).

4. CONCLUSIONS:

This article concluded that the management of pregnant patients with contracted pelvis complications accompanied by COVID-19 infection poses quite complex ethical challenges. In this case, the problem is not only a medical problem but also related to the handling of COVID-19 suffered by patients. Ethical issues arise due to the lack of facilities and human resources in rural hospitals. After being referred to a provincial hospital, other ethical issues are the psychology of families affected by COVID-19, a surgery that requires special PPE, and postoperative separation of mothers and babies. In terms of medical personnel, the psychological aspects of medical personnel also need to be prepared because, on the one hand, medical personnel is also worried about contracting the COVID-19 infection. However, on the other hand, they must continue to carry out their duties professionally.

The responsibility of patients, families, and communities is also very helpful in breaking the chain of transmission of the COVID-19. It needs continuous education from health authorities to plan the COVID-19 pandemic towards a new normal life. Here the community is

required to continue to cultivate efforts to prevent COVID-19 infection through activities of wearing masks, washing hands, and physical distancing because this COVID-19 pandemic may continue for some time to come.

5. ETHICAL STATEMENT

This is a retrospective case report without the use of any samples from a human subject, so ethical approval can be waived. Consent to participate has been obtained from the relative was written.

6. COMPETING INTEREST

The authors declare that there are no competing interests related to the study

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