

Review

Gynecological Examination in the Era of the COVID-19 Pandemic

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Abstract

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In early December 2019, an outbreak of coronavirus disease 2019 (COVID-19), caused by a novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), occurred in Wuhan City, Hubei Province, China, and was later declared as a global pandemic by World Health Organization. The signs and symptoms of Covid-19 are not specific and the focus in reducing the number of Covid-19 cases is to prevent the spread of the virus by implementing a health protocol to prevent the spread of Covid-19. The Covid-19 widespread has required healthcare systems to be creative and adaptable in response to an unprecedented crisis. In this paper, we aim to discuss how to adapt during the Covid-19 pandemic in maintaining women's reproductive health as well as the gynecological examinations needed to help diagnose diseases.

Keywords: Adaptation, Covid-19, Gynecological Examination

INTRODUCTION

On December 31st, 2019, China health authorities have provided data to the World Health Organization (WHO) regarding several cases of pneumonia with unknown causes originating from the city of Wuhan, Hubei Province, China. The cases have been reported since December 8th, 2019 and most of the patients came from the Huanan seafood market. On January 7th, the *novel coronavirus* was identified through a swab sample of the infected patient's throat. The pathogen was named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the disease was named Coronavirus Disease 2019 (Covid-19) by WHO (Harapan et al., 2020). According to WHO data in January 2021, there have been nearly 103 million cases in the world with a total death case of 2.2 million. Meanwhile, in January 2021 Indonesia was known to have 1,078,314 cases recorded with a total death of 29,998 people (Coronavirus Outbreak Worldometer, 2021).

Coronavirus transmission occurs through droplets or splashes when people cough or speak, this caused the

virus to be easily transmitted to other people. Unspecific signs and symptoms also make this viral infection difficult to recognize. Most cases of coronavirus infection have signs and symptoms similar to the flu, such as cough, runny nose, difficulty breathing, fever, diarrhea, and even severe shortness of breath can occur (Wu et al., 2020). Regarding these unspecific signs and symptoms, the focus of reducing the number of Covid-19 cases is through preventing the spread of Covid-19 by implementing the protocol to prevent the spread of Covid-19. Preventing covid-19 transmission is a charade among the community and the government.

Communities and non-governmental organizations can participate in various forms of volunteer services for disaster management and risk reduction. In Indonesia, the implementation of behavior changes during this pandemic began by wearing masks, maintaining distance, and washing hands. This behavior change aims to break the chain of transmission of COVID-19 and to protect individuals,

families, communities, institutions, or society (Satuan, 2020).

The implementation of safety protocols is also applied to health workers who have a very important role during this pandemic. Conditions such as the lack of Personal Protective Equipment (PPE), the lack of good quality screening in health facilities, fatigue of medical personnel due to the increasing number of cases, long working hours, and psychological stress have caused the health sector to become one of the main focuses during this pandemic. Some considerations for health workers and the health system that can be done in the Covid-19 era are complying with the guidelines for the use of Personal Protective Equipment (PPE), self-reporting awareness, and halting activities as health workers if they fall under the case criteria following applicable government official guidelines, limiting elective procedures electives, as well using telemedicine applications for triage and patient management whenever possible (Tim, 2020).

Women's reproductive health is one area that has experienced difficulties in consulting with doctors during the Covid-19 era due to the implementation of strict health protocols to prevent transmission. Various examinations that are usually carried out by doctors are hampered and require more attention, especially in dealing with patients, gynecological examinations are not an exception. Changes and adaptations to these new conditions are needed.

Adaptation among Health Workers

Health care providers are essential resources for every country. The health and safety of healthcare workers is an important issue not only for the continued and safe care of patients but also for controlling any outbreak. However, during the Covid-19 outbreak healthcare providers are under tremendous pressure due to long working hours, high risk of infection, stigmatization, shortages, and uncertainty and also comprehensive support is a high priority during the outbreak and beyond. This fatigue increases the risk of injury, worsens health conditions and also causing them to prone to infection, increased psychological distress, or decreased mental health that can affect the quality of life of health workers (Kannampallil et al., 2020).

Some efforts that could be made are starting from shifting work arrangements for health workers needs to be considered to reduce exposure to viruses and improve the quality of health services (Kluger et al., 2020). In addition, adaptation to psychosocial stress also needs to be done considering that stress can be triggered by various sources during a pandemic such as the need to work by following strict occupational health and safety procedures, communicating with large teams with different cultures and disciplines, activities physical condition that is aggravated by the use of PPE which is

often accompanied by heat stress, dehydration, and fatigue, and others. The next form of adaptation that can be carried out by health worker is changes in the aspect of social behavior which are carrying out health protocols in the community by wearing masks, maintaining distance, and washing hands. Actively educating the public about the importance of complying with health protocols and education regarding Covid-19 can also be done to increase public insight and community preparedness in living their daily lives. The use of PPE following the level of work-related risk is also part of behavioral changes that can be carried out by health workers (Cabarkapa et al., 2020; Tim, 2020).

Health Workers Personal Protection Equipment

Based on *Chinese Obstetricians and Gynecologists Association (COGA) guideline* named as *gynecologic universal and hierarchical precautions* extrapolated from standard or sterile aseptic techniques related to COVID-19, the principle of preventing the transmission of Covid 19 is issued for health workers in treating and examining gynecological.

Primary prevention includes health workers working in outpatient gynecological clinics or inpatient wards should wear a disposable head cap, medical surgical-masks, work clothes, and disposable latex gloves if necessary.

Secondary prevention includes health workers who interact with patients investigated for COVID 19 or caregivers who have had close contact with patients who are confirmed positive, health workers must wear a disposable headcap, glasses, or face shields, medical protective masks (N95), protective clothing or disposable waterproof insulating clothing, disposable latex hand gloves, and disposable shoe covers if necessary.

Tertiary prevention includes health workers on duty in isolation wards performing gynecological surgery, emergency gynecological care, invasive procedures on patients with suspected infection including sputum suction, lower respiratory tract sampling, tracheal intubation, and tracheotomy. Health workers must wear a disposable head cap, goggles or face shields, medical protective masks (N95), protective clothing, disposable latex hand gloves, and disposable shoe covers (Qiu et al., 2020).

Utilization of Telemedicine in the Field of Gynecology

WHO has recommended social distancing as one of the main prevention measures for SARS-CoV-2 transmissions (Sohrabi et al., 2020). During the pandemic, health practitioners utilize telemedicine as alternative health service aiming to provide optimal health services by reducing the risk of exposure to the SARS-CoV-2 virus towards doctors and patients. Telemedicine

is a term for a technology that connects health services and patients through web-based programs, video teleconferencing, or telephone consultations (DeNicola et al., 2020; Kasaven et al., 2020).

Preparation in the use of telemedicine is absolutely necessary. Health services must consider adequate hardware, software, and internet networks. Preparations made by health service providers should consider the access ability of recipients of telemedicine-based health services so that there are no obstacles that lead to malpractice (Grimes et al., 2020).

Health services provided to patients who come to health facilities usually include anamnesis, physical examination, and relevant supporting examinations. However, physical examinations on telemedicine services are certainly not possible. However, taking a comprehensive history, including a gynecological history, will provide additional information to determine which physical examination should be performed, including a pelvic examination (Lee and Hitt, 2020). Recent recommendations from the American College of Obstetricians and Gynecologists (ACOG) recommend that a pelvic examination should be performed only if there are any medical indications. A gynecological examination can only be carried out after consideration of the patient's medical condition and after a discussion about the risks and benefits of the examination that will be carried out by the doctor and patient. ACOG 2018 through a committee opinion on the annual well-woman examination recommends that routine examinations must include vital signs, body mass index (BMI), and assessment and management of the patient's health condition through screening, counseling, and immunization based on the patient's age and risk factors (ACOG Committee Opinion, 2018). Some of these standard examinations can be done by educating the patient about how to measure blood pressure and pulse rate independently, calculating capillary refill time with a stopwatch, and if possible and with consent, show the patient's body parts that are relevant to the medical condition (Grimes et al., 2020). If it is necessary to have further gynecological examinations, doctors and patients need to discuss the risks of exposure to the SARS-Cov-2 virus and provide further information on applicable health protocols based on policies in their related hospitals (DeNicola et al., 2020).

Based on the recommendation from the Indonesian Obstetrics and Gynecology Association, the applied telemedicine already refers to a clear legal basis. Cases that can be consulted through telemedicine are not obstetric and gynecological emergency cases and gynecological oncology cases (POGI, 2020).

In addition, in the current pandemic era, the risk of patients experiencing sexually transmitted infections increases. Health services are prioritized for patients who experience UTI symptoms, especially if accompanied by pain that raises concerns about pelvic inflammatory

disease. However, during the Covid-19 era, the Center for Disease Control and Prevention (CDC) encouraged the development of protocols for collecting laboratory specimens that were carried out and collected by patients themselves. Patients at risk for breast cancer may delay routine breast mammography until the pandemic conditions improve as recommended by expert guidance. Based on this recommendation, women with a Breast Imaging-Reporting and Data System (BI-RADS) 3 mammogram who were already scheduled for follow-up could also be deferred. Concerning cervical cancer screening, the American Society for Colposcopy and Cervical Pathology (ASCCP) has adopted guidelines for the management of cervical cancer screening tests in addition to the COVID-19 pandemic and the widespread suspension of elective procedures (Cohen et al., 2020).

Counseling, Information, and Education in Community

During the Covid-19 pandemic, global fear of visiting public places has increased, including health care centers. Apart from being afraid of the risk of exposure to the virus, the fear is also due to new regulations to not to travel to crowded places and the implementation of social distancing. The recommendations in each place should be followed as an effort to prevent the spread of coronavirus infection.

Patients who make regular health visits are advised to consult their doctor first about the risks and benefits of having a visit. The Indonesian Obstetrics and Gynecology Association (POGI) recommends that visits to hospitals or health facilities or obstetrics specialists are only permitted if there are obstetric emergencies and gynecological oncology cases.

In addition to these cases, doctors can recommend an alternative virtual/telemedicine visits as an effort to provide long-distance health services so that patients can consult without worrying about the risk of coronavirus transmission (Bindra, 2020). In addition to patient counseling regarding some obstetrics and gynecologic problems, the patients should also be given an understanding of the current situation of Covid-19 and the importance of following health protocols to end the pandemic period should education (Bindra, 2020). ACOG recommends all pregnant patients to continue the antenatal care visits following the agreement with the doctor, wash hands before and after handling anything, wear masks when working in public places, maintain a minimum distance of 2 meters, and reduce contact with other people (American College of Obstetricians and Gynecologists, 2019). This recommendation was adopted from WHO which is a recommendation for the general public to stop the Covid-19 pandemic.

CONCLUSION

The global Covid-19 pandemic requires significant restructuring of the health care system and several strategies implemented in response to the pandemic can be developed to facilitate the implementation of better approaches, especially in the field of gynecology such as the need for various adaptations, the use of PPE and the use of telemedicine. Although direct visits and physical examinations cannot be completely replaced, telemedicine can provide a safer option for patients during the Covid-19 pandemic. These strategies can play a role in infection prevention and continuity of care in providing good quality gynecological care during the pandemic.

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