

**Viewpoint****Reform of Maternal and Child Health Services during the Covid-19 Pandemic: Is it necessary?****Yuniar Wardani<sup>1,2\*</sup> and Ichtiarini Nurullita Santri<sup>2,3</sup>**<sup>1</sup> Special Branch of 'Aisyiyah Taiwan, Taipei Taiwan<sup>2</sup> Faculty of Public Health, Universitas Ahmad Dahlan, Yogyakarta, Indonesia<sup>3</sup> School of Public Health, College of Public Health, Taipei Medical University, Taipei, Taiwan**\* Correspondence:** yuniar.wardani@gmail.com. Phone: +886902327548

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**ABSTRACT**

The COVID-19 pandemic has impacted the health crisis and led to significant government policy changes with the maternal and child health care system. Long-term termination of essential services affects the risk of losing trust in the health system, decreasing services use. Health service reform is carried out to maintain the sustainability of health services. Priority services aim to ensure access to sexual and reproductive health, growth monitoring, screening for acute malnutrition in children, mothers, and pregnant women. Furthermore, implement a health information system to support maternal and child health and a robust system to monitor and respond to real-time data during COVID-19.

**Keywords:** Maternal; Child health; COVID-19; Health reform

The new coronavirus (SARS-CoV2) that causes COVID-19 has spread rapidly since emerging in late 2019 in Wuhan, China. COVID-19 data in Southeast Asia indicates more than 222,231 confirmed cases with 6,374 deaths (1, 2). As a result, the World Health Organization declared the disease a global pandemic on March 11, 2020 (3). The COVID-19 pandemic is causing a humanitarian crisis in every country globally that has claimed many lives and has threatened people's health, social and economic environment (4). Several countries in America and the Caribbean have imposed restrictions on international travel, bans on mass gatherings, recommendations for social distancing, non-essential commercial activities, curfews, and mandatory quarantine and national lockdowns (5, 6).

Pandemics also impact the health crisis and cause significant government policies regarding the health care system (7). Nepal is a country that does not know for sure the impact of a pandemic on access to maternal health (8). However, many allegations that the pandemic had a particular effect on maternal and child health care systems. The Ebola pandemic in West Africa might undermine maternal health services in standard resilience health systems (9). The Corona Virus (COVID-19) has caused women to face more barriers to accessing maternal health care, including restrictions, transportation challenges, and anxiety over the possibility of being exposed to the coronavirus. Women do not want to seek health care for fear of catching the virus or passing it on to their unborn baby (10).

### **Situation of the mother and child health service system in Indonesia**

The Indonesian Government has confirmed 257.388 cases of COVID-19 in 34 provinces, with 9,977 deaths reported. On April 13, 2020, the Indonesian Government declared COVID-19 a national non-natural disaster. Since May 29, 2020, the Government has managed the emergency response to the COVID-19 outbreak through Presidential Regulation No.11 of 2020 concerning establishing a Public Health Emergency for COVID-19. Hospitals must be adaptive and prepare to face changes in several maternal health services (11). This change in maternal and child care methods ultimately triggers anxiety and confusion for mothers and families accessing health services (1). Evidence has shown that poor quality of facility-based care for these women and newborns is one of the major contributing factors for their elevated morbidity and mortality rates (12).

The study conducted at RSUD Dr. Soetomo reported 110 cases of maternal referral of COVID-19, 63 rapid tests (+), and 23 COVID-19 cases confirmed by PCR. Furthermore, Universitas Airlangga Academic Hospital received about 47 cases of Covid-19 referral in mothers: 24 confirmed cases of COVID-19. Another report from the Universitas Airlangga Academic Hospital confirmed one baby with PCR + was born from the mother through a rapid test (+) (11). Health workers have reported disruption of health services at the community level due to physical distancing, with nearly 76% of village health posts (Posyandu) closed and more than 41% postponed home visits (13). Safe delivery and the care of the newborn are also likely to be compromised. Women and adolescents may not access sexual and reproductive health services such as contraception, and pregnant women may neglect antenatal care and even give birth unsupervised. Unwanted pregnancies increased, and the potential risk of sexual and reproductive health-related morbidity and mortality. As a result, there is a long-term termination of essential services and the population losing confidence in the health system, leading to decreased use of services. Finally, a continuing epidemic has possible adverse psychological impacts on vulnerable groups such as mothers and children (4). Even though midwives have become the leading health personnel in providing maternal and infant health services, it is not easy to maintain service quality (1). If you look at the current conditions, in the end, a question arises, is there a need to reform the maternal and child health service system during Covid-19?

Talking about reforming the health care system means talking about the components that exist in the system. One of them is about quality. Although it is not easy to define quality, particularly maternal and child care rate, one definition provides a helpful basis. The Institute of Medicine defines quality care as comprehensive. It includes three main components of quality: clinical (safe and effective), interpersonal (patient-centered), and contextual (timely, efficient, and fair) (14). A maternal and child, health care framework is needed to outline the needs at different health system levels leading to quality care delivery during the COVID-19 pandemic. Referring to the concept of mother and child care, Donabedian revealed the importance of three main components as parameters, namely structure, process, and outcome (15). In detail, it can be explained as follows:

#### **Structure**

Refers to the context in which health care is provided at the community, district, and facility health system levels. The separation of the structural components is used for decision-making to provide quality maternal health services at each level. A better understanding of the interactions between structural factors at the community, district, and health facility levels will

ensure better quality services. Ultimately, this will successfully implement interventions to improve maternal and child health status (16). Without the interaction between these three levels, it is difficult for Indonesia to facilitate quality services, considering that Indonesia has tens of provinces and hundreds of districts.

### **Process**

Refers to whether the medical practice is well followed and quality care such as clinical, interpersonal, and contextual. Timely, efficient, and fair treatment will mandate: without waiting, dangerous delays for those receiving or giving attention; and not wasting equipment (14). Services using modern technology such as telemedicine with cell phones are an alternative for providing timely assistance, especially for antenatal care, family planning, and immunization

### **Results**

Refer to the results of evaluations about positive user experiences (17), increased demand for services (16), and timely utilization of health services (18). Data on measures of maternal and child health is power during a pandemic. Data can reflect the strength and be used to improve global health (19).

The three keys that maintain maternally and child health services form the basis for the ministry of health in Indonesia to ensure health services' sustainability during the COVID 19 pandemic. Various strategies can be implemented, such as 1) capacity building to support health workers, especially for local health workers who are difficult to access and stay in a remote area; 2) increasing knowledge about health services; 3) involving the community to increase the utilization of maternal and child health which are essential services during the COVID-19 pandemic (13); and 4) Cross-sectoral cooperation to understand the collaboration between sectors, to carry out activities more efficiently, effectively and fairly and to ensure equality and differences across contexts (20).

Guarantee the sustainability of maternal and child health services can be done by prioritizing actions on:

1. Sexual and reproductive health, including optimal access to contraception, care during pregnancy, childbirth, postpartum and obstetric complications;
2. Growth monitoring, screening, and treatment of acute malnutrition in children, women, and pregnant women;
3. It is essential to introduce the new digital approaches to accelerate the access of health information and services for maternal health care and contraceptives such as telemedicine using mobile phones and social media (5).
4. Implement a robust health information system that tracks, monitors, and responds to real-time data collection during COVID-19, including a surveillance system for maternal and infant mortality and a surveillance and response system to collect data on pregnant women and children born with COVID-19.

Even though the minister of health has compiled a health protocol, the spike in Covid-19 in pregnant women and infants still occurs. Likewise, disruption services at the community level and posyandu will remain disrupted. However, the health service system's reform must be carried out to ensure maternal and child health services sustainability and achieve sustainable development goals.

## Author's Contribution

YW is the single author for this work; she is responsible thorough the content.

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## Conflict of Interest

There is no conflict of interest in this research.

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