Course	Master of Public Health	Name	Ayako Numazawa		
	Effect of COVID-19 on maternal and newborn health services: Experiences				
Thesis Title	of frontline healthcare providers in Pangkaiene dan Kepulauan distri				
	Indonesia				

Background: Corona virus 2019 (COVID-19) pandemic is an ongoing problem all over the world. Under the pandemic, the lack of preparedness including the protection of healthcare providers has caused the disruption of essential maternal and newborn health (MNH) services, and could cause the additional maternal and newborn deaths. It is crucial to investigate the effect of COVID-19 on MNH services in perspective of healthcare providers. However, there are few reports involved the healthcare providers in Indonesia.

Objective: The general objective is to know the effect of the COVID-19 on MNH care in Pangkep district, Indonesia. The specific objectives are to describe the effect of COVID-19 on the utilization of essential MNH services; and to describe the experiences of frontline MNH care providers facing the COVID-19 situation.

Method: This study was conducted in Pangkep district, Indonesia from June to July 2021. This study consists of two components: 1) utilization of health services was assessed, and 2) experiences of MNH care providers during the pandemic were described using a structured online questionnaire, and individual interview using a semi-structured questionnaire. Quantitative data and qualitative data were triangulated concurrently to understand better the findings.

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Information on MNH service utilization

The number of women accessing antenatal care (ANC), facility intrapartum care and family planning (FP) in 2019 and 2020 were obtained from district health office and analyzed on the changes in the utilization.

Online questionnaire to MNH care providers

The target population was MNH care providers in public primary level facility. We asked the closed-ended questions regarding respondents' background, work setting, preparedness for and response to COVID-19, and personal experiences. The quantitative data was collected and analyzed involving descriptive statistics.

Individual online interview with MNH care providers

The interview candidates were midwife coordinators in study site. We asked the effect of COVID-19 on ANC, facility intrapartum care, emergency obstetric and newborn care / referral system, postnatal care, FP and immunization services. The narrative data was analyzed thematically.

Result: According to official information, the utilization of ANC and facility intrapartum care decreased, and of FP increased. A total of 136 responses to online questionnaire (response rate: 76.4%), and a total of 15 participants with interview were included in this study. To keep the essential care during the pandemic, MNH care providers had complied the protocol, limited the operational way, cooperated with community, and routinized testing COVID-19 with pregnant women and referral cases. Behind those efforts, they had experienced fear of contracting the virus,

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lack and discomfort of PPE, the discrimination, lack of communication with women,					
and the delay of referral affected by the routine testing COVID-19.					
Conclusion: 1) sufficient PPE and screening capacity should be ensured to protect					
healthcare providers, 2) the level of PPE should be based on the degree of protection					
afforded, 3) further research is needed to investigate on existing and dissemination of					
mental support system in Indonesia, and to confirm the readiness in each level facilities					
to carry out the emergency care and the routine testing COVID-19. (498 words)					