

**PENINGKATAN *KNOWLEGDE* BIDAN SEBAGAI *CHAMPION*  
PELAKSANAAN PENCEGAHAN DAN PENANGANAN KASUS MATERNAL  
COVID DI JAWA TIMUR**

**KNOWLEDGE IMPROVEMENT AMONG MIDWIVES AS CHAMPIONS IN THE  
PREVENTION AND MANAGEMENT OF MATERNAL COVID CASES IN EAST  
JAVA**

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**Abstrak**

Tingginya angka kematian ibu disebabkan oleh masalah kualitas pelayanan kesehatan yang dipengaruhi oleh faktor organisasi, personal dan lingkungan (Kemenkes, 2018a; Mahmood et al., 2018). Pandemi Covid-19 di Indonesia terus berlanjut, dan kemungkinan akan menyebabkan peningkatan kematian ibu lebih lanjut, sehingga diperlukan kepemimpinan dan bantuan klinis. Metode yang digunakan dalam program pengabdian masyarakat ini adalah dengan memberikan pelatihan dan pendampingan kepada bidan dalam pencegahan dan penanganan kasus ibu hamil di rumah sakit. Pelatihan ini berhasil meningkatkan pengetahuan bidan tentang penanganan kasus covid ibu, pencegahan dan kepemimpinan bidan dalam pelayanan ibu sebesar 35%. Implikasi dari hasil pengabdian kepada masyarakat ini adalah perlu adanya pelatihan pengetahuan dan keterampilan bidan dalam penanganan kasus ibu covid pada masa pandemi dengan mempertimbangkan aspek kebijakan internal rumah sakit, alur pelayanan ibu, kompetensi petugas, APD, sarana dan prasarana rumah sakit, sehingga diperlukan berbagai metode pendekatan dalam melakukan intervensi kebidanan dalam asuhan ibu hamil dengan konfirmasi COVID-19.

**Kata Kunci :** Bidan, COVID-19, Maternal, Pengetahuan

**Abstract**

The high incidence of maternal mortality is caused by problems in the quality of health services which are influenced by organizational, personal, and environmental factors. The Covid-19 pandemic in Indonesia continues and is likely to lead to a further increase in maternal mortality, so clinical leadership and assistance are needed. The method used in this community service program was providing training and assistance to midwives in preventing and handling maternal COVID cases in hospitals. This training succeeded in increasing the knowledge of midwives about handling maternal covid cases, prevention, and midwives' leadership in maternal services by 35%. The implication of the results of this community service is the need for training on the knowledge and skills of midwives in handling maternal covid cases during the pandemic by considering aspects of hospital internal policies, maternal service flow, officer competence, PPE, hospital facilities and infrastructure, so we need various methods of approach in conducting midwifery interventions in the care of pregnant women with confirmed COVID-19.

**Keyword :** COVID-19, Knowledge, Midwife, Maternal

**INTRODUCTION**

The high incidence of maternal mortality is caused by problems in the quality of health services which are influenced by organizational, personal, and environmental factors (Ministry of Health, 2018a; Mahmood et al., 2018). A study on the evaluation of 10 hospitals that provided Comprehensive Emergency Neonatal Obstetrics Services in East Java found



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that almost all of the hospitals evaluated had problems in the aspects of quality management, patient safety and human resources. During this pandemic, there was a disruption to the health system and access to services. This will have an impact, either directly or indirectly, on maternal and external services. The increase in the number of maternal deaths is estimated to be up to 39%. Currently, the direct causes associated with maternal mortality are pregnancy, childbirth, and maternal complications that are not handled properly and on time (Prasetyo et al., 2020).

The Covid-19 pandemic in Indonesia continues and has the potential to accelerate the increase in maternal mortality further. The increase in maternal mortality in East Java is expected to be more than the national average as East Java has suffered a larger COVID-19 caseload, and the direct and indirect effects are expected to be higher. Restrictions on population mobility, people's fear of visiting health services, and some misinformation on social media are expected to have a negative impact on health services.

Clinical leadership is the driving force for developing a clinical service vision in hospitals. Scientific evidence shows that there is a significant relationship between good clinical leadership and a reduction in the incidence of death, medical errors, and nosocomial infections (Marcus et al., 2015). The dimensions of clinical leadership include the executor domain and the manager/head domain. The five domains for executor doctors are 1) self-quality 2) cooperation, 3) service management 4) service development and 5) capability). While the two domains for managerial doctors include 1) create a service program; and 2) develop strategies. The quality of patient safety in maternal services needs to be supported by three important aspects: clinical leadership and structured assistance in order to improve quality and patient safety, especially in maternal sector. Problems of communication, collaboration, service referrals, quality and patient safety are becoming more complex as a direct or indirect result of the Covid-19 pandemic.

## **COMMUNITY SERVICE METHODS**

The method used in this community service program is to provide training to midwives. The target in the service program is midwives in clinics, health centers and hospitals with a total of 120 midwives. This community service activity was carried out in June - July 2021 with three topics, each with a duration of 2 x 50 minutes. This activity was carried out virtually online using a zoom meeting, starting with a pre-test before training and post-test after training. Topics in this community service include: 1. Handling covid in pregnant and postpartum women, 2. The role of midwives in preventing and handling covid, and 3. Implementation of leadership in maternal services during the covid pandemic.

Community service activities were prepared in three stages, the preparation stage, the intervention stage, and the evaluation stage.

### **Preparation stage**

At this stage, the community service team conducted an initial survey related to maternal covid cases at Arafah Anwar Medika Sukodono Hospital, Sidoarjo, Indonesia, and Jombang General Hospital, Indonesia, and approached community service partners at the hospitals to obtain data and plan activities. Then the team compiled the things needed, including the facilities and materials used in the activity, and also took care of licensing.

### **Intervention stage**

This stage began with the provision of a pre-test measuring the knowledge of the midwife regarding the prevention and management of maternal covid cases during the

pandemic. This community service activity was in the form of education on managing maternal covid cases (referrals, near misses, confirmed pregnant women, self-isolation procedures, and maternal services in hospitals). In addition, education was provided by the community service team regarding the role of midwives in preventing Covid-19 and the importance of clinical leadership for midwives in service. The activity was carried out in 1 meeting with a time of 2.5 hours, made in a lecture and question and answer method. This activity was then carried out by participants independently with guidance of from Covid management module for pregnant and postpartum women. The target in this activity was 120 midwives from primary facilities (clinics and health centers) and several hospital midwives in East Java. The media used in this activity were virtual zoom meetings and educational modules.

### Evaluation Stage

The evaluation stage was conducted at the beginning and end of the training by carrying out pre- and post-tests on the same day with a questionnaire about knowledge in prevention and management of maternal covid cases during the pandemic.

## RESULTS AND DISCUSSION

Participants in this training were midwives with an average age of 31 years with a diploma in midwifery education (70%) (Table 1).

Table 1. Demographic data of trainee midwives

Characteristics	n	F (%)	Mean
Age			31
Level of Education			
Diploma	21	70	
Bachelor	8	26.4	
Master	1	3.3	

Table 2. Frequency distribution of the knowledge level of the trainee midwives

Level of knowledge	Pre-test		Post-test	
	n	%	n	%
Good	12	40	28	95
Poor	18	60	2	5

The level of knowledge of the participants before training about covid management in pregnant and postpartum women was less (60%) and good (40%). After participation in training on prevention and management of cases of maternal covid, pregnant and postpartum women during the Covid-19 pandemic, the level of knowledge increased to 95%. The results of the training could increase the knowledge of the midwives by up to 35% regarding the prevention and management of maternal covid cases during the pandemic. Midwives in hospitals should receive training on managing Covid-19 in pregnant and postpartum women (Tucker et al, 2008). The average score of the participants on the pre-test was 67.5 then increased to 93.8 on the post-test.

According to Notoadmodjo (2007), knowledge is related to formal education obtained by a person. The higher the level of education of a person, the wider his knowledge and his understanding of information is also better. Meliono (2007) writes that knowledge is

influenced by several factors, ie. education, media, and information exposure. The results of this training showed positive results related to staff development, where increasing knowledge and skills of midwives in managing maternal Covid cases is also expected to improve the quality of midwifery care provided to pregnant and postpartum women (Laksana et al, 2020).

Other training methods can be used, such as workshops, roleplay, leader teaching, and so on, to provide more effective training to midwives. This is very important because when caring for pregnant women who suffer from Covid, there are several things that are needed by midwives, including hospital internal policies, maternal service flow, officer competence, PPE, as well as hospital facilities and infrastructure. This shows that various approach methods are needed in conducting midwifery interventions in the care of pregnant women who are confirmed to have COVID.

The implication of this community service is the need for training related to the knowledge and skills of midwives in managing maternal covid and non-covid cases during the pandemic by considering aspects of government policies, professional organizations, and hospitals. In addition, support for maternal service facilities and infrastructure is also needed when receiving maternal covid patients.

## **CONCLUSION**

Training on prevention and management of maternal covid, pregnancy and post-partum cases to midwives during the Covid-19 pandemic can increase the knowledge of the midwives in East Java, both at primary level and advanced referral health facilities. Improving the knowledge and skills of midwives needs to be done in the prevention and management of maternal covid, pregnancy and post-partum cases during covid-19 pandemic through skill development training with various methods.

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