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# Empowerment and Formation of Maternal and Child Health Cadres for Delivery Planning and Preparedness in the Face of Obstetric and Neonatal Complications in Bojonegoro, Indonesia

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**ABSTRACT** In Bojonegoro, the maternal mortality rate has tended to increase over the last 2 years, in 2017 there were 17 people distributed at 100.93 per 100,000 live births in 12 health centers. in 2017 as many as 17 people spread 100.93 per 100,000 live births in 12 health centres. While in 2018 reached 27 people 157.23 per 100,000 live births. To accelerate the reduction of MMR in Indonesia, the government has issued various policies, such as the planning of childbirth and prevention of complications with stickers (P4K) program. The program, which was issued by the Minister of Health in 2007, is a breakthrough effort in accelerating the reduction of maternal and newborn mortality through activities to improve access and quality of services, which at the same time is an activity that builds community potential, especially community awareness for preparation and follow-up in saving mothers and newborns. The Bojonegoro Midwifery D III Study Program carries out activities to empower and form maternal and child health cadres in the context of delivery planning and preparedness in the face of Obstetric and Neonatal Complications in Bendo Village, Kapas District, Bojonegoro. The purpose of this community service is to carry out empowerment activities and the formation of maternal and child health cadres in the context of planning childbirth and preparedness in the face of obstetric and neonatal complications in the village of Bendo Kec. Kapas Kab.Bojonegoro. The form of activities is the formation and training of maternal and child health cadres in the context of planning childbirth and preparedness in the face of obstetric and neonatal complications. The source of costs in this activity is charged to funds from DIPA Poltekkes Kemenkes Surabaya. The outputs of this activity are 1) the formation of maternal and child health cadres who have completed the training; 2) Increased knowledge and skills of Communication, Information, and Education (IEC) of maternal and child health cadres; 2) Maternal and child health cadres disseminate the ability of childbirth planning and preparedness in the face of obstetric and neonatal complications and to carry out counseling on the prevention of complications to pregnant women, fertile women and couples of childbearing age around their place of residence on an ongoing basis; 4) Decreased incidence of maternal mortality.

**INDEX TERMS** health cadres, empowerment and formation, delivery planning, obstetric and neonatal complications

## 1. INTRODUCTION

An indicator of improved maternal and child health in the Millennium Development Goals {MDGS} is a reduction in maternal mortality linked to an increase in those assisted by health workers {MDG 5a }. However, this effort alone is not enough, because reducing maternal mortality cannot be done only by addressing the direct causes of maternal mortality but must also address the indirect causes. Therefore, efforts to reduce maternal mortality must also be supported by other

reproductive health efforts including improving antenatal care, reducing teenage pregnancy, increasing the coverage of active family planning participants, and reducing the unmet need for family planning. In addition to improvements in health workers and facilities, there is also a need to empower the community. Families need to have an understanding that every pregnancy must be a pregnancy that is desired by the mother, including when the pregnancy is desired and how many children are desired. In addition, efforts need to be made

to improve the knowledge and attitudes of families and the community in general regarding the importance of understanding that every pregnancy is at risk of life-threatening complications, therefore it is necessary to plan for childbirth properly and plan to prevent and seek immediate help if complications occur (readiness for transportation, funds, and potential blood donors) in the family planning program.

The solution to the problem of high maternal and neonatal mortality rates[1][2][3] is to improve the knowledge and skills of health cadres through empowerment and formation of Maternal and Child Health Cadres on Delivery Planning and Preparedness in the face of Obstetric and Neonatal Complications, using the concepts of input, process, outcome, and impact[4][5][6][7][8].

The purpose of this community service is to increase the knowledge and skills of Health Cadres through the empowerment and formation of Maternal and Child Health cadres on planning and preparedness in the face of Obstetric and Neonatal Complications in Bendo Village, Kapas District, Bojonegoro Regency.

The specific objectives of this community service are: to improve the knowledge of Maternal and Child Health Cadres about planning and preparedness in the face of Obstetric and Neonatal Complications including pregnancy and childbirth at risk, safe delivery planning, and implementation of P4K stickers, safe postpartum family planning, readiness to face emergencies by providing village ambulances, blood donors, tubulin / dasolin in the village[5][9][10][11][12]. To improve the skills of maternal and child health cadres on communication, information, and education (IEC) on childbirth planning and preparedness for obstetric and neonatal complications in Bendo village, Kapas sub-district, Bojonegoro district[13][14][15][16]. To increase community empowerment through the establishment of Maternal and Child Health Cadres in planning for childbirth and preparedness for obstetric[17][18][19][20][21] and neonatal complications in Bendo Village, Kapas Sub-district, Bojonegoro District.

## II. METHOD

The methods used in the empowerment and formation of maternal and child health cadres on planning and preparedness in the face of Obstetric and Neonatal Complications are lectures and questions and answers, demonstrations, counseling practices, pre-tests and post-tests on P4K, Training is carried out offline for 3 days and a maximum of 3 hours of activity and carrying out according to health protocols, among others[22][23]:

1. Participants enter the training venue to the hand washing facilities that have been provided, are given a medical mask, and immediately wear it and check their body temperature using a thermal gun.
2. Participants' seats are 1 m apart
3. Participants are not allowed to eat on-site consumption.

## IV. IMPLEMENTATION

### A. PREPARATION

The activity began with a proposal in July 2019 and an announcement of the acceptance of the proposal in August 2019. Then the signing of a community service contract between the chief executive and the Director of the Poltekkes Kemenkes Surabaya.

### B. ACTIVITIES AND SCHEDULE

The place of training is in the Meeting Room of the Bojonegoro Midwifery D3 Study Program Campus Hall because the place is wider and safer during the COVID-19 Pandemic Strict Health Protocols, the implementation time is 24 August to 26 August 2020.

## V. RESULT

### A. ESTABLISHMENT OF MATERNAL AND CHILD HEALTH CADRES.

Maternal and Child Health Cadres were formed in Bendo Village in Bendo Village, Kapas District, Bojonegoro Regency, in August 2020 as many as 40 people All participants attended the 3-day training, Participant Attendance Rate: 100%.

### B. PARTICIPANTS' KNOWLEDGE

Evaluation of participants' knowledge using pretest and post-test.

Table 4.1

Pre-Test and Post-Test Knowledge Score				
No	Description	Pre Test	Post Test	Information
1	Score Lowest	20	70	Increased
2	Score Highest	75	100	Increasing
3	Score Average	51,75	82,88	Increasing

Table 4.2

Knowledge Post-Test Score Labour Planning			
No	Category	Frequency	%
1	Very good (79-100)	32	80,00
2	Good (68-78)	8	20,00
3	Fair (55-67)	0	0,00
Total		40	100,00

### C. PARTICIPANTS' IEC (COUNSELLING) SKILLS

Skills to provide mentoring to participants or individuals to make decisions best suited to their needs, values, and situations, [TABLE 4.3](#)

Table 4.3

Lowest, Highest, and Average Scores of Counselling Skills.

No	Description	Value
1	Lowest score	75
2	Highest score	90
3	Average score	84,38

Table 4.4

Category of scores for counseling skills on childbirth planning and preparedness for obstetric and neonatal complications in Bendo Village, Kapas District, Bojonegoro Regency, August 2020

No	Category	Frequency	%
1	Very good (79-100)	35	87,50
2	Good (68-78)	5	12,50
3	Fair (55-67)	0	0,00
	Total	40	100,00

Joint Commitment to Support and Make Successful the Childbirth Planning and Preparedness Activities in Facing Obstetric and Neonatal Complications in Bendo Village, Kapas District, Bojonegoro Regency, August 2020

This training resulted in a Joint Commitment to Support the Success of Childbirth Planning and Preparedness Activities in the Face of Obstetric and Neonatal Complications in Bendo Village, TanjungHarjo Health Centre Area, Kapas, Bojonegoro District, August 2020 in Bojonegoro District. This joint commitment was signed by the Head of Puskesmas Tanjung Harjo, Lecturer, Midwife Coordinator of Puskesmas Tanjung Harjo, and all training participants consisting of 40 Maternal and Child Health Cadres.

#### Follow-up Training

Monitoring and evaluation of the follow-up of this training was carried out on 14 September 2020 by the committee with the results being all training participants / Maternal and Child Health Cadres.

The 40 Maternal and Child Health Cadres in Bendo Village, Kapas Sub-district, Tanjung Harjo Health Centre area have conducted counseling on Childbirth Planning and Preparedness in Facing Obstetric and Neonatal Complications around their residence of 5 pregnant women, each cadre so that the total number of pregnant women given counseling is 200 people.

The results of the Participant Satisfaction Survey obtained 85% stated that they were very satisfied [24][25][19][26], details can be seen in the table below:

Table 4.5

Satisfaction Score of Participants in the Training on Empowerment and Formation of Maternal and Child Health Cadres for Delivery Planning and Preparedness in Facing Obstetric and Neonatal Complications

No	Satisfaction	Frequency (people)	%
1	Very Satisfied (80-100)	34	85,00
2	Satisfied (64-79)	6	15,00
3	Quite Satisfied (<64)	0	0,00
	Total	40	100,00

Skills in Counselling or IEC on Childbirth Planning and Preparedness in Facing Obstetric and Neonatal Complications After the trainees get the material and IEC techniques and IEC evaluation is carried out and by tables 4.3 and 4.4 obtained IEC on Childbirth Planning and Preparedness in Facing Obstetric and Neonatal Complications obtained the average value of IEC is 84.38 and the result is 87.5% very good results.

#### D. CONCLUSION

Based on the results of the implementation of the Empowerment and Formation of Maternal and Child Health Cadres in the Framework of Labour Planning and Preparedness in Facing Obstetric and Neonatal Complications in Bendo Village, Kapas, Bojonegoro Regency, the following conclusions can be found that there have been 40 Maternal and Child Health Cadres formed in Bendo Village, Tanjung Harjo Health Centre Area. The average score of participants' knowledge is 82.88 and 80% of trainees have very good scores (80-100). The average score of participants' skills in counseling was 84.38 (very good) and 87.5% of trainees had excellent counseling skills and all trainees (100%) were declared PASSED. A Joint Commitment was formed to support the empowerment and formation of Maternal and Child Health Cadres. This joint commitment was signed by the Head of Puskesmas Tanjung Harjo Village Head, the Midwife Coordinator of Puskesmas Tanjung Harjo, the Midwife of Bendo Village, the Lecturer, and all trainees consisting of 40 Maternal and Child Health Cadres. Maternal and Child Health Cadres have conducted counseling around their residence as many as 5 pregnant women, so the number of people given counseling is 200 people. The results of the Satisfaction Survey of participants showed that 85% were very satisfied. A Module on Labour Planning and Preparedness for Obstetric and Neonatal Complications was developed. There was an increase in knowledge obtained Pretest and Posttest scores obtained the average value of the Pre Test is 51.75 and the average Post test is 82.88, there is an increase in knowledge of 31.13% training participants, on Skills in Counseling or IEC on Childbirth Planning and Preparedness in Facing Obstetric and Neonatal Complications obtained The average value of IEC is 84.38 and the result is 87.5% very good results. The active role of families and communities in planning safe childbirth and preparing for complications and obstetric danger signs for mothers so that they give birth safely and give birth to healthy babies. Maternal and Child Health Cadres should disseminate the ability to prevent complications of pregnancy and childbirth, with pregnant women to the community. Complications of pregnancy and childbirth, with pregnant women to the community around the place.

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