# Optimization Normal Delivery through Birth Preparation Center with Enhancement Physical Readiness of Pregnant Women in Purwosari Village, Sayung District, Demak Regency

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## ABSTRACT

Pregnancy and childbirth are very memorable experiences for a woman. As many as 90% of pregnant women do not physically prepare to give birth normally, so the side effects that occur are that the mother is not strong enough, gets tired quickly, has no energy, so she decides to give birth by caesarean section faster. The number of pregnant women who had a gestational age of more than 20 weeks in the Purwosari Village Area is 25 people. Pregnant women did't have good knowledge about normal delivery and didn't have good physical readiness to give birth normally, due to lack of information. The solution to this problem aims to increase the knowledge and physical readiness of pregnant women so that they can give birth normally through the Birth Preparation Center. Implementation of activities with the application of science and technology which was carried out twice, on June 5, 2021 and July 6, 2021, with the target of pregnant women in Purwosari Village, Sayung District, Demak Regency. The form of transfer of science and technology begins with a pre-test and ends with a post-test, education is delivered in an easy-to-understand method, namely providing material about the physical readiness of pregnant women. All participants also immediately practiced pregnancy exercises at the time of implementation according to the instructions from the proposing team. In addition, fellow participants also discussed and exchanged experiences about their pregnancy. Participants' knowledge about normal delivery increased by 87%, participants felt more prepared to give birth vaginally. The most important thing in this activity is that the mother would teach other pregnant women.

Keywords: Birth Preparation Center, Normal delivery, Physical readiness

## INTRODUCTION

Pregnancy is the meeting of spermatozoa and ovum through the process of nidation or implantation. Pregnancy in progress for 40 weeks, and shared to 3 trimesters. First trimester starts beginning pregnancy until 12 weeks of pregnancy, second trimester of 13 weeks until 27 weeks of pregnancy, and third trimester lasts start age 28 weeks pregnant up to 40 weeks (Prawirohardjo, 2020; p. 213). Pregnancy are very memorable experience for women. This condition was a time of increasing vigilance and big change. Pregnancy and childbirth was something natural thing, but it was no means without risk. Pregnancy and childbirth give contribution against him the number of maternal mortality rates (MMR) and infant mortality rates (IMR).

According to World Health Organization (WHO), about 80.03 women died everyday due to pregnancy and childbirth. Almost 99% of all death occurs in developing countries. Death mother happened because complications in pregnancy and they did't get routine to have antenatal care. In 1990 to 2015 deaths mothers all over the world down around 44%, the target in 2016 to 2030 as one of the purpose development It is hoped that the global MMR will be 70/100,000 births life (World Health organization, 2019; p.5).

Women died from complications during pregnancy, childbirth and postpartum. Most of these complications developed during pregnancy. Other complications may be present before pregnancy but worsen during pregnancy. The main complications that cause 80% of maternal deaths are: severe bleeding (mostly bleeding after childbirth), infection (usually after delivery),

high blood pressure during pregnancy (preeclampsia and eclampsia), and unsafe abortion (WHO.int, 2019).

In 2018, an estimated 303,000 women died during pregnancy and childbirth. In 2019, maternal mortality was the second leading cause of death for women of reproductive age, after HIV/AIDS, and was the leading cause among women aged 15-29 years. Nearly all maternal deaths (95%) occur in low-income and lower-middle-income countries, and nearly two-thirds (65%) occur in developing countries. The risk of death from maternal causes is related to the pregnancy and the risk of complications and death during pregnancy, or within 42 days postpartum. In resource-poor settings, fertility rates are higher and the risk of death in childbirth is greater (WHO, 2019; p.18).

Several factors caused maternal and infant mortality rate still high in addition to the limited number of health personnel, starting from the unfavorable transportation system, social, economic and cultural situation of the community, inadequate health facilities and low knowledge of reproductive health. high MMR in Indonesia. Effort for lowering MMR can done with effort preventive and promotive with involve all element in community and do by Keep going continuous and consistent. Various program efforts lower Implemented MMR government to pregnant women did't optimal without existence change behavior from pregnant women. because of it is necessary existence empowerment community done for growing awareness, willing, and ability, as well as Becomes mover in reduce MMR. Empowerment Public done with equip it knowledge and skills not only to pregnant women but also to the husband. Empowerment efforts health based on community in rural areas already done although intensity not yet in accordance as expected (Kaban et al., 2019).

Based on the data obtained by the proposing team at the community service location, the problems found were the lack of knowledge of pregnant women and husbands about normal delivery, signs of childbirth, danger signs of childbirth, preparation of facilities and infrastructure during childbirth. With so many clients and the current Covid-19 pandemic situation, midwives don't have time to explain to patients about preparation for normal delivery (Ministry of Health, 2020). As a result, pregnant women seek information on social media or even move to other health facilities so that fewer patients give birth. Partners said that as many as 80% of pregnant women were afraid to give birth normally, various reasons were put forward but the biggest reason was fear of pain that would be experienced during childbirth. Many pregnant women have the mindset that giving birth must be painful, resulting in excessive anxiety and worry. The negative thinking inherent in 80% of pregnant women causes physical complaints and other problems.

Excessive anxiety and fear will cause several negative effects, such as emotional disturbances during pregnancy and childbirth, and even cesarean delivery. In addition, there is a relationship between prolonged labor and anxiety, the higher the anxiety level of the mother giving birth, the longer the delivery process will take. The feeling of anxiety and tension itself is caused by intense pain. As a result, the body produces more catecholamines which can reduce uterine contractions, causing a longer labor. If the pain is not handled properly it will cause other problems, namely increased anxiety due to lack of knowledge and lack of experience in maternity mothers (Setiani et al., 2020) (Ghiasi & Keramat, 2018; Janula Raju, 2014).

The problem that is no less important is that 90% of pregnant women do not physically prepare for normal delivery, so the side effects that occur are that the mother is not strong enough, tired quickly, has no energy, so that she decides to give birth by caesarean section faster (Qureshi, 2012).

Based on the information from the coordinating midwife, as many as 75% of pregnant women who could actually give birth normally, but eventually gave birth to a cesarean section due to their weak physical condition. Counseling given to pregnant women to do pregnancy exercise and light exercise is not carried out. In addition to factors from pregnant women, husbands also have an important role, because 90% of husbands do not motivate their wives to do physical activity and exercise during pregnancy.

Lack of physical activity during pregnancy further exacerbates problems and complaints during pregnancy, as many as 55% of pregnant women experience hip pain, back pain, and leg cramps during pregnancy (Hamdiah et al., 2017; Qureshi, 2012). Currently, pregnant women and their

husbands find it easier to choose a cesarean delivery, because the BPJS program covers the costs of operative delivery, while normal deliveries are not fully covered. So that pregnant women prefer to give birth in hospitals, especially if the midwife clinic does not make innovations, then maternity clients will decrease sharply which has an effect on the clinic's income.

Seeing how complex the problems faced by partners and the limitations of the science and technology implementation team are, it is necessary to prioritize the problems that will be overcome through this science and technology activity. Based on the needs analysis that has been carried out by discussing with the two partners and considering the ability of the science and technology implementation team, the priority issues to be addressed through science and technology activities, one of which is optimizing the Birth Preparation Center.

Birth Preparation Center is a program to reduce MMR implemented by the government for pregnant women which will not run optimally without changes in the behavior of pregnant women themselves. Therefore, it is necessary for community empowerment to be carried out to raise awareness, willingness, and ability, as well as to become a driving force in reducing MMR. Community empowerment is done by providing knowledge and skills not only to pregnant women but also to their husbands.

The objectives to be achieved from making this program are as follows:

- 1. Increased knowledge of pregnant women about normal delivery
- 2. Increasing the physical readiness of pregnant women

Expected Outcomes are scientific articles on community service.

#### METHOD

The steps to solve the problems faced by partners, the solution offered is to carry out activities to increase the physical readiness of pregnant women in facing normal deliveries through the Birth Preparation Center. This activity starts from:

1. Survey Stage

Determine the location of community service, including the problems faced by pregnant women in the area.

2. Partnership Agreement Stage

The next step after the location of the implementation is agreed, is to make an agreement with the local village midwife, asking for her willingness to be a partner to participate in the implementation of community service, namely the Birth Preparation Center to improve the physical readiness of pregnant women in preparing for normal delivery.

- 3. Prepare community service materials and equipment
- 4. Carry out community service activities

This Community Service activity was carried out for 2 times at the Purwosari Village, Sayung District, Demak Regency meeting hall.

#### RESULTS

This community service activity was attended by 25 3rd trimester pregnant women and carried out in twice, on 5 June 2021 and 3 July 2021 at Purwosari Village, Sayung District, Demak Regency meeting hall. From the results of data analysis, it was found that the average difference of knowledge before and after giving counseling was carried out. The test bivariate showed p<0.05, meaning that there was a difference of knowledge before being given counseling and after being given counseling.

Counseling about pregnancy was carried out using lecture, discussion, and Q & A methods. The evaluation results obtained almost 87% knowledge was increasing. This means that the pregnant women knew and understoot the material that has been delivered by the speaker.

#### DISCUSSION

Process and results meeting first : Community service activity started at 09.00 WIB at the Purwosari Village, Sayung District, Demak Regency meeting hall. At the beginning meeting started

with opening, explanation general birth preparation center, and introduction from midwife facilitators, speakers and students to pregnant women who was present and also pregnant women also introduced theirselves one by one. After that Students provided attendance lists, leaflets and share sheet for pre test to pregnant women for filled, mother the should signing the attendance list, giving sheet pretest aim for knowing how outlook or knowledge pregnant women before given counseling about normal delivery, especially readiness their phusical . Facilitator recommended pregnant women for taking a pee more formerly as well as if you sit down pregnant women recommended for straighten her feet to front so that mother feel more comfortable.

After providing the attendance list to pregnant women, speaker gave counseling about phusical readiness during pregnancy. Counselling is an activity of educating individuals or groups, providing knowledge, information, and various abilities to form attitudes and behaviour in life that should be. In essence, counselling is a non-formal activity to change society towards a better state as aspired Knowledge is the result of human sensing, or someone knowing about objects through their senses (eyes, nose, ears). Moreover, most of a person's knowledge obtaining through the sense of hearing (ears) and sight (eyes). A person's knowledge of objects has different intensities or levels. The knowledge is divide into six levels of knowledge (Harun et al., 2022). There were many counselling given in community service activity, such as: nutrition in pregnancy. Balanced nutritional intake will support good physical growth, especially hormonal, mental, cognitive, and positive behavior in adolescents. The balanced nutritional intake contains composition balanced nutrition, avoiding nutrients with the type and amount according to the body's needs, gender, age, and health status (Syabariyah et al., 2022). Counseling provided other nutrition were change and adaptation phusical of pregnant women, and also physical needs in pregnancy. After the speaker finished, pregnant women looked very understand with the counseling given, and before the moderator opened Q & A session, midwife facilitator gave a time for pregnant women who was present at the time for sharing experience with tell how their experience in pregnancy and giving birth. After pregnant women finished sharing experience, moderator opened Q & A session, ladies pregnant enthusiastic for asking to resource persons and midwives facilitator, everyone pregnant women brandish their hand for asking. After all question collected, speakers and midwives facilitator gave door prize to mother who has ask questions.

After session discussion finished done, speakers and midwife facilitator invited pregnant women for doing pregnancy exercises led by instructur, and they were very enthusiastic for do the exercise. The elderly tend to experience health problems caused by decreased body functions due to the aging process. In physiological changes, there is a decrease in the immune system in the face of disturbances from inside and outside the body. One of the most common health problems experienced by the elderly is the cardiovascular system. Physical exercise such as regular gymnastics also helps prevent chronic conditions or diseases, such as high blood pressure. The benefits of elderly exercise can increase the body's metabolic activity and oxygen demand (Noviati et al., 2022).

Finished the exercise means all community service activities were finish, and midwife facilitator closed activities and reminded to pregnant women in order to didn't forget for attending the community service activity next month.



Figure 1. Counseling Nutrition for Pregnant Women at the First Meeting

Second meeting process: procedure community service activity at the second meeting, same with the current process in first meeting, but, after counseling and Q & A sessions finished, next activity was share post test sheet to pregnant women, division post test mother aim for knowing again how insight and knowledge pregnant women after community service activity, were they can answer the questions better or same with pre test. In other words, the test aims for knowing was there change from outlook pregnant women with implementation community service activity. Based on results post test, there was an 87% increasing knowledge participant about normal delivery, and participants more ready by phusical for giving birth normally. Then at the end session, pregnant women and speaker took a picture together as Proof documentation implementation community service activity that has done



Figure 2. Pregnancy Gymnastics in Second Meeting

## CONCLUSIONS AND RECOMMENDATIONS

Birth Preparation Center very required pregnant women in prepare normal birth, especially in prepare physical readiness of pregnant women. It was hope that the sustainability of the transfer of science and technology will remain walk, so proposer ask to pregnant women for deliver materials and teach activities phusical During pregnancy that has been taught to other pregnant women who are in the Purwosari Village as well as pregnant women others that they know. Recommendations that can be given to the Purwosari Village is a Birth Preparation Center that is very beneficial for pregnant women, so it is hoped that the village can facilitate these activities on an ongoing basis and pregnant women are expected to be able to carry out physical preparations on a regular basis. And also better if the implementation is carried out in a wider room so that pregnant women are more flexible and comfortable to practice physical readiness, one of which is pregnancy exercise

## ACKNOWLEDGMENTS

We express our gratitude to Allah Subhanahu Wa Ta'ala, because for the facilities provided so that this Community Service can run smoothly. This community service can be carried out well with the support of (1) Head of Universitas Islam Sultan Agung Semarang (2) Head of LPPM Universitas Islam Sultan Agung Semarang (3) Head of Midwifery Program Study (4) Head of Purwosari Village and all community leaders, (5) Head of Sayung Health Center and all staff, (6) Village Midwives and Cadres of the Purwosari area. May Allah Subhanahu Wa Ta'ala reward you with the good you deserve. Aamiin.

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