

# How do Women Prepare for Pregnancy? Counseling and Giving Folic Acid in Woman of Reproductive Age

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## Abstract

**Background:** A healthy pregnancy requires physical and mental preparation from every mother. Healthy pregnancy planning should be done before pregnancy. A well-planned pregnancy process will have a positive impact on the condition of the fetus and the physical and psychological adaptation of the mother for the better. Folic acid is an essential nutrient required for DNA replication directed at cell proliferation. Folic acid is activated by the MTHFR gene through an enzymatic reaction. Folic acid can be found in foods as well as in supplements. The demand for folate increases during pregnancy because it is necessary for the growth and development of the fetus.. Pregnant women need extra folic acid about 0.4 mg per day in normal cases and high-risk (previously affected) pregnancies this dose is recommended for 1-3 months before conception.

**Objective:** The purpose of this service is to anticipate high-risk pregnancies by preparing women of reproductive age by providing counseling on healthy pregnancy preparation and giving folic acid tablets.

**Method:** The activity was held on April 18, 2013 at BPM I, Pondok Jaya Sub District, Cipayung District, Depok City.

**Result:** The implementation from the midwife went smoothly and received enthusiasm from the activity participants.

**Conclusion:** It is hoped that women of healthy reproductive age can get more knowledge related to preparing for a healthy pregnancy so that later they will be ready for their pregnancy and babies born healthy.

**Keywords:** Counseling, Folic acid, Healthy pregnancy, Women of reproductive age.

## Introduction

A healthy pregnancy requires preparation, both physical and mental preparation, therefore pregnancy planning must be done before pregnancy in order to have a positive impact on the mother's physical and psychological adaptation during pregnancy and good fetal condition.<sup>1</sup>

Based on WHO data (2013) 4 out of 10 women experience unplanned pregnancies, as a result of which women and their partners are late in getting essential

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health interventions during pregnancy up to 40%. Planning that can be done to improve the health of mothers and children is to conduct preconception screening. Preconception screening can identify several possible risk factors such as mothers who experience hemoglobin deficiency, folic acid deficiency, and behaviors that can interfere with maternal and fetal health during pregnancy.<sup>2</sup>

Maternal health during pregnancy has a very important role for the baby, because if the mother maintains her health before and during pregnancy it will give birth to the baby under normal circumstances and can prevent premature birth and low weight, thus giving the baby the opportunity to start a healthy life.<sup>3</sup>

Globally, an estimated 15% to 20% of all live births worldwide are low birthweight.<sup>4</sup> In Indonesia the prevalence of low weight in 2013 was 10.2%, the prevalence was lower than in 2010 which was 11.1%, but the decrease did not give much significant meaning to BBLR cases.<sup>5</sup> While for West Sumatra there was an increase in the incidence of low birth weight which was 1,812 (2.2%) cases in 2013 to 2,066 (2.2%) cases in 2014.<sup>6</sup>

The birth weight of the baby is one of the significant predictors to determine the health status of the newborn, if the birth weight is normal it will bring benefits such as good intellectual ability, but if the baby's weight is abnormal then the baby will be susceptible to cardiovascular disease, metabolic diseases as an adult and delays in growth and development.<sup>7</sup>

The Ministry of Health of the Republic of Indonesia (2010) defines that Women of Childbearing Age (WUS) are women who are in the age period between 15-49 years.<sup>8</sup> Premarital women are part of the WUS group need to prepare the adequacy of their body's nutrition, because as prospective mothers, optimal nutrition in premarital women will affect fetal growth and development, the health condition of the baby born and safety during the birthing process.<sup>9</sup>

To know or detect early the risk of fetal development can be known from antenatal care (ANC). The detection of risk factors during antenatal care will allow health workers to intervene and treat more quickly than the risk factors found with the aim of getting a normal baby birth.

## **Method**

This community service activity will be held on April 18, 2023 at 14.00 for Women of Reproductive Age on Jl.KH.Abdurrahman No.142, RT.2/RW.01. Pondok Jaya Village, Cipayung District, Depok. Activities are carried out through counseling and giving folic acid tablets. Before the previous activity was carried out, the chairman arranged permits for the regional coordinator midwife and the Head of RT, then asked for cadre assistance to gather participants during the activity. On the day of the activity, counseling and evaluation of activities were carried out.

## **Results**

This Community Service was carried out to 20 women of reproductive age by collecting them in BPM I. First, they were given an explanation of the purpose of this activity, followed by the delivery of material related to healthy pregnancy preparation and the provision of folic acid tablets as support for the preparation for pregnancy.

## **Discussion**

Pondok Jaya Village is included in the Depok City area and is directly adjacent to the Bogor Regency area. Kelurahan Pondok Jaya has a population of 2,905 people divided into 7 RWs and 57 RTs. The implementation of counseling and administration of folic acid tablets was carried out at RT 02 RW 01, targeting Women of Reproductive Age.

In accordance with the direction of the Ministry of Health of the Republic of Indonesia (2021), the target recipients / clients in the healthy pregnancy planning program are couples of childbearing age, brides-to-be and families with the aim of babies born healthy and mothers safe.<sup>10</sup>

According to the Indonesian Ministry of Health (2018), the bride and groom are couples who will hold a wedding.<sup>11</sup> The bride and groom can be said to be a couple who do not have a bond, either by religious or state law and the couple is proceeding towards marriage and the process of fulfilling the requirements in completing the data needed for marriage.<sup>12</sup>

The implementation of counseling uses material that has been prepared by service members and accompanied by a return sheet for planning a healthy pregnancy from the Ministry of Health of the Republic of Indonesia (2021), We must be considered

before planning a pregnancy are physical health (age, health conditions for a healthy pregnancy, good nutrition) and mental (mental readiness to be responsible parents and so that families avoid acts of domestic violence); Ease of reaching health care facilities and getting quality health services; Financial readiness (health insurance, transportation needs, and other basic needs); and the support of husband, family and community environment.<sup>10</sup>



Picture 1. Flipchart for Planning a Healthy Pregnancy

After being given an explanation, we conducted an evaluation by providing a question and answer session and asking several questions related to what was conveyed. Several questions arise from them such as how are the side effects if you do not prepare from a long time, what are the effects if pregnant women experience abnormalities in their fetus due to folic acid deficiency, and many other questions. But at the end of the session, participants felt satisfied and understood the explanation given. Then they receive and immediately take the folic acid tablets that we give.



## Picture 2. Implementation of Community Service

Based on research conducted by Lusyana (2019), it shows that of 30 premarital women, their knowledge before being given counseling the most is the sufficient category at 53.3% and the less category at 43.3% while the good category is only at 3.3%. After counseling, 70.0% of the sample had good category knowledge and only 3.3% of the sample had knowledge with less category.<sup>13</sup>

In line with the results of the study, it showed that 11 (36.7%) of the total 30 samples of premarital women in Batang Kuis District experienced SEZs with LILA measurement results of <23.5 cm. When compared with the prevalence of SEZs in WUS according to the 2013 Public Health Development Index (IPKM) nationally of 20.97% and North Sumatra of 17.61%, the prevalence of SEZs in WUS in Batang Kuis District is quite high. The impact of SEZs can among others cause anemia, death in mothers during childbirth (MMR), death in infants (AKB), low birth weight babies (BBLR), premature birth and birth defects.<sup>14</sup>

Some of these studies support the purpose of this service activity to be able to improve the attitude of women of childbearing age to be more aware of the importance of preparing for pregnancy, one of which is by consuming folic acid.

There was an increase in attitudes in 30 samples. Where before counseling was given, the average attitude score obtained by the sample was 23.70 with the lowest value of 18 and the highest value of 30 out of a total value of 30. And after counseling, the average attitude score obtained by the sample was 27.00 with the lowest value of 25 and the highest value of 30.<sup>13</sup>

### **Conclusion**

The implementation of the midwifery went smoothly and received enthusiasm from the activity participants. It is hoped that women of healthy reproductive age can get more knowledge related to preparing for a healthy pregnancy so that later they will be ready for their pregnancy and babies born healthy.

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