



## OPTIMIZING THE ROLE OF CADRES IN INCREASING COMPLIANCE OF PREGNANT WOMEN IN CONSUMING IRON TABLETS TO PREVENT ANEMIA

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### Abstract

**Introduction:** The prevalence of anemia in Indonesia is still high and pregnant women are very susceptible to iron deficiency anemia. If this is not treated it will result in complications of pregnancy, childbirth and the risk of stunting. Efforts to treat anemia include early detection and supplementation of Iron tablets, but compliance of pregnant women in consuming it is only 38.1%. Effective educational strategies are needed to increase maternal knowledge and compliance in consuming iron tablets. Cadres have an important role in accompanying pregnant women to increase knowledge and compliance in consuming Iron tablets.

**Objectives:** The aim of this partnership program is to increase the knowledge and skills of cadres to assist pregnant women in consuming Iron tablets as well as increasing knowledge and compliance in consuming Iron tablets.

**Method:** The community partnership program is a community service activity carried out in the work area of the Sukajadi Community Health Center, Bandung City from January to October 2023. The partners are 15 cadres and 15 pregnant women in the second and third trimesters. This partnership program is implemented in 14 activities. Cadres receive training about anemia and its prevention as well as skills material for providing education to pregnant women. The booklet "Anemia in Pregnant Women and its Prevention" is used as an educational medium for assisting pregnant women. Cadres who have been given training then provide education and assistance to pregnant women and monitor pregnant women's compliance in consuming Iron tablets. Evaluation of this activity is by measuring cadres' knowledge before and after training, observing cadres' skills in providing education to pregnant women and measuring pregnant women's knowledge and compliance with taking Iron tablets.

**Result:** The results of the activity showed an increase in cadre knowledge scores before and after the training. Cadres have skills in providing education to pregnant women. Apart from that, the knowledge of pregnant women about anemia and its prevention has increased and the compliance of pregnant women in taking blood supplement tablets for 1 month is 100%.

**Conclusion:** education and assistance to pregnant women in consuming blood supplement tablets is very important. Providing training to cadres about anemia and its prevention can increase knowledge of pregnant women and compliance of pregnant women in consuming Iron tablets.

**Keywords:** Anemia, Cadres, Pregnancy, Iron Tablets

### INTRODUCTION

The prevalence of anemia in Indonesia is still high, namely 48.9%, this has increased by 11.8% from 2013.<sup>(1)</sup> Pregnant women are very susceptible to iron deficiency anemia because during pregnancy the need for oxygen is higher, which triggers an increase in

erythropoietin production, so that plasma volume increases and red blood cells (erythrocytes) increase. The increase in plasma volume is greater compared to the increase in erythrocytes causing a decrease in hemoglobin (Hb) concentration due to hemodilution.(2,3) The condition of anemia in pregnant women will affect the fetus's metabolism to be less than optimal because there is a lack of hemoglobin levels to bind oxygen so that the fetus's adequate nutritional intake is low and this will impact the fetus's growth. The condition of babies born with low body weight and length is at risk of stunting, in line with research showing that the mother's anemia status is significantly related to the incidence of stunting and the mother's anemia status during pregnancy is at greatest risk of becoming stunted.(4)(5–7)

The government's effort to prevent anemia complications is to carry out early detection of anemia during pregnancy. Pregnant women with anemia will receive Iron supplementation and pregnancy nutrition counseling. Iron supplementation in Indonesia is called Blood Addition Tablets (TTD) which contain 60 mg of ferrous sulfate and 0.40 mg of folic acid according to the recommendations of the World Health Organization (WHO)(8). Compliance of pregnant women in consuming TTD for 90 days, only 38.1% of mothers who consume Iron Tablets for 90 days.(1)

One strategy to increase food intake and compliance with Iron tablet consumption in pregnant women is to provide education and health education to increase mothers' knowledge, motivation and skills in increasing food intake and compliance with Iron tablet consumption. Cadres play an important role in health services in the community. Cadres play a role in providing information on the health of pregnant women and newborns through counseling using an individual or group approach as well as conducting home visits to provide education. The role of cadres as companions aims to increase knowledge and positive attitudes of pregnant women, motivation to behave healthily so that it is hoped that they can reduce delays in making decisions to access maternal and child health services. Based on the research results, it shows that cadres still lack knowledge about caring for pregnant women.(9)

The Sukajadi Community Health Center working area has 52 posyandu facilities and 52 active cadres. Based on the results of observations, the implementation of posyandu activities carried out by cadres was limited to weighing and recording. The role of cadres in providing counseling and assistance to pregnant women is still not optimal and cadres are still very dependent on health workers. Based on this, we implemented a Community Partnership Program in the form of "Optimizing the Role of Cadres in Increasing Knowledge about anemia and Compliance with Pregnant Women in Taking Iron Tablets". The aim of this partnership program is to increase the knowledge and skills of cadres to assist pregnant women in consuming Iron tablets as well as increasing knowledge and compliance in consuming Iron tablets.

## RESULTS AND DISCUSSION

Community service activities were carried out in the Sukajadi Community Health Center area in January-October 2023. These activities were carried out starting from assessment, licensing, cadre training, assistance to pregnant women by cadres and evaluation. Cadre training was carried out in 3 meetings, namely a pretest activity and then delivering material about anemia and how to prevent it, including how to consume iron tablets. The second meeting held a posttest and delivered material on how to provide education to pregnant women and a demonstration on how to provide education to pregnant women and the cadres carried out a demonstration with fellow cadres. The third meeting was held to see cadres providing assistance to pregnant women providing education regarding anemia in pregnant women and its prevention accompanied by a team. Furthermore, activities to assist pregnant women are carried out in their respective work

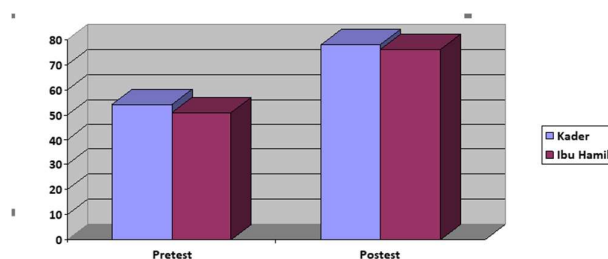
areas. Each cadre accompanies pregnant women in their area and monitors pregnant women's compliance in consuming iron tablets. Activities are carried out offline using interactive lecture methods, brain storming, demonstrations and role plays as well as direct practice for pregnant women. Partners are given various materials through booklets and power points as well as WhatsApp groups.

The activity preparation stages consist of preparing materials, modules, booklets and pretest and posttest questionnaires, cadre performance checklists in providing education to pregnant women, coordination and licensing to the Sukajadi Community Health Center, program outreach, recruitment of cadres and pregnant women.

Cadre training was carried out in three meetings. The first activity is a pretest followed by providing training material related to anemia and its prevention including understanding anemia, causes, risk factors, impact of anemia, prevention, smart ways to deal with anemia, Iron tablets, function, how they work, do's and don'ts when drinking Iron, nutrition which is good for preventing anemia. At the start of the second meeting, a posttest was carried out, then material on skills for providing education to pregnant women was given, followed by a demonstration and role play on techniques for providing education among fellow cadres. The posttest results of cadre knowledge have increased compared to the pretest results, the performance checklist for cadre skills in providing education in role play can be carried out very well.

The next activity is a cadre assistance activity for pregnant women. The pregnant women involved are pregnant women in the cadre area to facilitate follow-up. The first activity is to conduct a pretest to identify pregnant women's knowledge about anemia and its prevention, then provide cadres with the opportunity to provide education to pregnant women in one to one situations, according to pregnant women in their area. Next, the posttest was carried out again. Assistance and monitoring activities for pregnant women's compliance with consuming Iron tablets by cadres are carried out through home visits or WhatsApp groups for two months. Cadres remind pregnant women to drink Iron and document it by filling in the Iron consumption checklist. Reflect on cadre activities in providing assistance to pregnant women. The results of the reflection showed that cadres felt confident in providing education to pregnant women because they had knowledge and understanding about anemia and its prevention and this assistance would continue to be provided to pregnant women in their area.

After processing the data on the results of community service activities, the results showed that after measuring knowledge during the pre and posttest, it was found that cadres' knowledge of anemia in pregnant women and its prevention had increased, as explained in the following graph:



**Figure 1:** Average Knowledge of Cadres and Pregnant Women

Based on the graph above (figure 1), the average knowledge of cadres before being given training is 54 and the average knowledge of cadres after being given training is 78, there is an increase of 24 points. Meanwhile, the average knowledge of pregnant women before being given education and assistance by cadres was 51 and the average knowledge of cadres after being given training was 76. Training is one way to improve a person's knowledge and skills. This cadre training uses facilitative learning methods. This method

not only transfers knowledge but also transforms thought patterns and action patterns. Apart from that, it can increase learning creativity. This is in line with research results that the learning creativity of students in the Package C equality education program which uses a facilitative learning model is higher than the creativity of Package C students who do not use a facilitative learning model. With the learning creativity possessed by each learning member, learning will be less boring, more dynamic, attractive, challenging and fun(10). This learning process is also characterized by independent learning, empowerment, mentoring by cadres, social communication techniques and human learning. mature. Thus, to optimize the process of assisting pregnant women, cadre training is needed to improve, renew and reconstruct cadre knowledge.

Based on the results of community service activities, there was an increase in cadres' knowledge and skills in providing education about anemia and its prevention. Good knowledge and skills are the basic capital for cadres in providing assistance to pregnant women so that cadres will be more confident in carrying out their role. The role of cadres as companions aims to increase knowledge and positive attitudes of pregnant women, so that it is hoped that they can reduce delays in making decisions to access maternal and child health services.

## CONCLUSION

Cadre training in preventing anemia in pregnant women can increase cadres' knowledge about anemia and its prevention so that cadres have the provisions to accompany pregnant women to understand anemia and its prevention so that it can increase the compliance of pregnant women in consuming iron tablets in the context of preventing anemia in pregnant women. It is hoped that there will be regular training activities for cadres to improve cadres' abilities in accompanying pregnant women. Community empowerment in assisting pregnant women and providing education to pregnant women in consuming iron tablets can be carried out in other Community Health Center work areas.

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