

## Research Article

### The Role of Cadres in Improving the Health of Pregnant Women Regarding Drinking Compliance Fe Tablets and Folic Acid



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#### ABSTRACT

Pregnant women should consume Fe during pregnancy, in addition to consuming folic acid. The function of folic acid can increase the enzymes alanine aminotransferase (ALT), aspartate transaminase (AST), and glutamyl transpeptidase (GGT) which are important for metabolism in the liver. Design of the study used generic exploratory research design. This study investigated the role of cadres in improving the health of pregnant women regarding compliance with taking Fe and folic acid tablets. Method Data collection techniques used in-depth interviews with free questions than semi-structured interviews with in-depth interviews. Testing the validity of the interview guidelines using pilot interviews. Results were focus of cadre activities during posyandu and Factors influencing cadres to play an active role. In Conclusion, the role of health cadres is less effective. This is due to factors that influence the role of cadres, namely the lack of knowledge of cadres regarding the benefits and impacts of taking FE tablets and folic acid for pregnant women, the cadres are still waiting for instructions from the midwife.

#### Keywords

Role Of Cadres; Compliance; Fe Tablets; Folic Acid

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## INTRODUCTION

The Maternal Mortality Rate (MMR) in Indonesia is higher than in ASEAN countries. The 2012 Indonesian Demographic Health Survey (SKDI) recorded an average Maternal Mortality Rate (MMR) of 359 per 100,000 live births. Given the current conditions, it requires seriousness and hard work from all elements of society to realize the global target of SDGs (Sustainable Development Goals) 5, namely reducing the Maternal Mortality Rate (MMR) to 70 per 100,000 live births by 2030 (Arneti, 2024). Bleeding, kidney disorders, heart disease, tuberculosis, and prolonged labor cause the high Maternal Mortality Rate (MMR). According to the WHO, maternal deaths in developing countries are around 4% and are related to anemia during pregnancy, which can be caused by acute bleeding and lack of iron intake (Maryanto, 2021).

The need for iron during pregnancy is critical, especially in the second and third trimesters. Iron needs can be met by consuming food sources that contain iron or consuming iron tablets, 100 mg/day. (Novelani et al., 2021)

Although the government has set a minimum service standard of 90% coverage for Fe tablet provision during pregnancy, this target has yet to be fully achieved. In reality, many pregnant women still do not complete the recommended 90-tablet intake. According to the 2013 Riskesdas, while 89.1% of pregnant women reported receiving Fe tablets, only 33.3% actually consumed the full 90 tablets as advised — highlighting a significant gap between distribution and consistent intake (Fajrin, 2020).

In West Java, the coverage of pregnant women who received Fe tablets reached 95.51% of 979,472 pregnancies, while the prevalence of anemia was 41%. The benefits of Fe tablets are very large in preventing anemia in pregnant women. (Millah, 2019) Anemia is a condition where the quantity or size of red blood cells, or the concentration of hemoglobin, falls below normal levels,

leading to a reduced ability of the blood to carry oxygen effectively throughout the body (Indah et al., 2023).

Anemia in pregnant women contributes to increasing morbidity and mortality rates for mothers and their fetuses. Anemia in pregnant women has a significant impact on themselves and the growth process of the fetus and the baby to be born (Manuaba, 2014). Pregnant women who suffer from anemia have a high risk of death, Low Birth Weight (LBW) cases, infection of the fetus and mother, miscarriage, stillbirth, neonatal death, birth defects, and premature birth. Pregnant women with anemia are at risk of experiencing postpartum hemorrhage complications (Arneti, 2024).

One of the causes of anemia is consuming excessive amounts of junk food and low consumption of other nutrients. Food does have the potential to cause anemia, especially if it is not balanced with a balanced nutritional intake. This is caused by several factors, such as the content of Chili, which can irritate the digestive tract, and interfere with the absorption of iron, as well as the dominance of carbohydrates and fats in seblak (indigenous food), which are low in protein and iron.

Pregnant women should consume folic acid during pregnancy, in addition to consuming iron. Research by Li WenXing (2016) revealed that the function of folic acid can increase the enzymes alanine aminotransferase (ALT), aspartate transaminase (AST), and glutamyl transpeptidase (GGT), which are important for metabolism in the liver. (Astriningrum et al., 2017)

Folic acid is very important, especially in the early stages of pregnancy, because at that time the baby's nervous system is being formed. Folic acid will prevent birth defects such as neural tube defects, spina bifida, and anencephaly. Most women consume less folate than the requirement, which is 0.2 mg per day, with an increase of 33% (Kristiyansari, 2010). Lack of folic acid

consumption can result in the birth of babies with defects that have formed since two to four weeks of pregnancy (Sa'diya, 2015).

Folic acid is mainly found in plants such as legumes, green vegetables, nuts, seeds, and citrus juices. Animal sources of folic acid are also found in liver and milk. (Yuandry et al., 2023) One of the factors that influences pregnant women in consuming folic acid is the lack of motivation in consuming folic acid (Sa'diya, 2015).

Integrated Service Post (Posyandu) is an activity in the community as a form of participation in realizing a better level of health. Posyandu activities are managed by health cadres appointed from and by the community. One of the Posyandu activities in accordance with the Posyandu program is maternal and child health, which includes providing Fe and folic acid tablets to pregnant women and conducting monitoring related to high-risk pregnancies. Posyandu cadres are trained to be able to provide information related to the health of pregnant women (Kemenkes RI, 2015).

Pregnancy check-up (Antenatal Care Check-up) is a pregnancy check-up in the form of medical treatment, observation, and counseling for pregnant women who are expected to have a healthy pregnancy and safe preparation for childbirth. This check-up can be done at Independent Midwife Practices, Community Health Centers, clinics, or hospitals, and with the active role of Health cadres. (Afriani & Merlina, 2021)

Health cadres are volunteers who are selected by the community and are willing to become cadres. The cadres are tasked with helping to ensure smooth health services. Posyandu cadres play a vital role in delivering regular community health services. That's why a Posyandu cadre is expected to work voluntarily and wholeheartedly. More than just carrying out Posyandu activities, they should also have the ability and willingness to engage and encourage community members to actively

participate in these health initiatives. (Dian, 2023)

In addition to helping smooth health services, cadres motivate for pregnant women to comply and routinely check their pregnancies at the integrated health post. Compliance is described as the extent to which a person's behavior complies with the agreed recommendations of health experts and complies with all directions regarding treatment measures given by medical professionals, such as taking medication as directed. The accuracy of the number of pills taken, the accuracy of iron intake, and the frequency of daily consumption are used to assess iron and folic acid compliance. Individual variables, such as forgetfulness, dislike of the taste, and even feeling nauseous and unwell after taking Fe pills, contribute to non-compliance with the provision of Fe tablets. In addition, one of the reasons why pregnant women consume very few iron supplements is that they are unaware of the risks associated with anemia (Putri Febriyanti Ludin et al., 2023)

The role of cadres in assisting health workers in providing Fe tablets and folic acid. If pregnant women cannot visit the Posyandu, health cadres will make home visits and monitor the consumption of Fe tablets and folic acid. (Purwati & Noviyana, 2018)

## METHOD

This study uses a qualitative research type, with a generic exploratory research design. This study it investigates the role of cadres in improving the health of pregnant women regarding compliance with taking Fe and folic acid tablets in Nagrak village. The sample of this study was 3 Health cadres and 3 pregnant women in Nagrak Village who met the criteria as participants. The sampling technique in this study used an approach based on the characteristics set in the saturation target in the study conducted on cadre members. The data collection technique used in-depth

interviews with freer questions than semi-structured interviews with in-depth interviews. The validity test of the interview guidelines used a pilot interview (Ratnaningsih et al., 2024).

The research used a voice recorder on a mobile phone. After completion, the voice recording results will be transferred to a notebook, pen, and interview guide sheet containing a list of statements that have been made by the researcher regarding the role of cadres in improving the health of pregnant women regarding compliance with taking Fe and folic acid tablets in Nagrak village.

## RESULTS

Research on the role of cadres in improving the health of pregnant women regarding compliance in taking Fe and folic acid tablets in Nagrak village. Two themes emerged from the interview results. The themes are

Theme	Sub Theme
1. Focus on cadre activities during the implementation of integrated health posts	
2. Factors influencing cadres to play an active role	1. Lack of knowledge 2. Lack of independence

### 1. Theme 1: Focus of cadre activities during posyandu

The results of the study showed that the cadres only carried out the duties of the Posyandu. Cadres helped direct pregnant women to undergo examinations, provide additional nutrition, and provide counseling regarding the obligations of pregnant women to check their pregnancies. The following are details of the participants' statements:

*"So far, the cadres have only carried out Posyandu duties, ma'am, so when pregnant women come, the cadres only help direct them to carry out examinations of pregnant women and*

*check their blood pressure" (Mrs. M, 34 years old)*

*"The cadres provide counseling on foods that should and should not be eaten by pregnant women, such as not eating seblak, meatballs, and others too often" (Mrs. M, 40 years old)*

*"Every Posyandu, we cadres only wait for orders or directions from the local midwife" (Mrs. W, 45 years old)*

This is in line with research conducted by (Siregar, 2021) Cadres to help implement and assist the implementation of Posyandu, including motivating and socializing the community about the importance of coming to Posyandu. Health cadres also assist pregnant women in consuming Fe and Folic Acid tablets. In addition, the research conducted by (Wuwuh et al., n.d.). Pregnant women who receive assistance from cadres in taking Fe tablets, so that pregnant women are more obedient in taking Fe tablets.

Research (Mujiyati & Syahniati, 2022) : Posyandu activities can run smoothly if their cadres play an active role. Nagrak Posyandu cadres are active and selected cadres. Armed with the existing enthusiasm, these cadres are always present at every meeting, whether at Posyandu, Puskesmas, or in the Kelurahan. It can be concluded that this study supports previous studies related to the activities of Health cadres in helping to motivate and monitor pregnant women to consume Fe and Folic Acid tablets.

### 2. Theme: Factors influencing cadres to play an active role

#### Lack of knowledge

The results of in-depth interviews showed that not all cadres understood the importance of taking folic acid for pregnant women; the cadres only knew about giving Fe tablets to pregnant women. Without knowing the benefits and impacts of not consuming Fe tablets.

"I don't know, Ma'am, about giving folic acid to pregnant women. What I know is that pregnant women have to take medicine once a day, at night" (Mrs. M, 34 years old)

"I just distribute iron tablets to pregnant women, the midwife explains it" (Mrs. M, 40 years old)

"I don't understand the benefits and impacts of not taking folic acid" (Mrs. W, 45 years old)

This is by previous research conducted by(Rahmawaty & Nugrahani, 2024). The cadres' understanding of the implementation of integrated health posts is still low and does not comply with the applicable guidelines. According to (Damayanti et al., 2022). The lack of knowledge of cadres is due to the lack of information obtained, midwives only rely on information from midwives or health centers, in addition formal education can influence the level of knowledge of cadres in carrying out their roles in improving cadre knowledge, it is recommended that health training and education be held so that cadres can know and be more skilled (Dian, 2023). If community participation is high, they are aware of the benefits of integrated health posts and participate in programs run by the government; of course, integrated health posts activities will run smoothly. (Aisyah & Ahmat Harahap, 2023)

The results of this study are in line with the theory (Aulya & Dahlan, 2022), which says that iron is a very essential substance for the body. Iron is related to increasing the number of erythrocytes (increased maternal blood circulation and hemoglobin or Hb levels) which are needed to prevent or treat anemia. Consumption of iron in pregnant women is one of the efforts to overcome iron deficiency in pregnant women. Based on the results of community service activities that

have been carried out, (Aulya & Dahlan, 2022) it can be concluded that counseling on the importance of consuming iron tablets for pregnant women can be beneficial for pregnant women. Based on the results of the research conducted (Magfira & Purnamasari, 2021), the role of cadres as counselors has not been implemented due to the ability and skills of cadres, and the role of cadres as health monitors has not been implemented because there are no instructions from health workers. According to research conducted,(Damayanti et al., 2022) the longer the working period, the more the person's knowledge and activity will increase, so the challenges that can be developed and changes will also increase. Without experience, an individual will find it difficult to develop.

## CONCLUSION AND RECOMMENDATION

In this study, it can be concluded that the role of health cadres in Nagrak village is less effective. This is due to factors that influence the role of cadres, namely the lack of knowledge of cadres regarding the benefits and impacts of taking FE tablets and folic acid for pregnant women, and also the cadres only provide them, as the compliance of pregnant women in taking Fe tablets and folic acid is not evaluated. This is evidenced by the fact that cadres are still waiting for instructions from the midwife. The role of cadres, in addition to helping direct pregnant women, must monitor compliance with taking Fe tablets and folic acid.

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