

Cadre's Assistance of the Integrated Health Service Post (Posyandu) Effectively Improves Adherence of Pregnant Women Taking Iron Supplements in West Sorong Health Center

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ARTICLE INFO

Article History:

Received: 2024-11-26

Accepted: 2025-06-02

Published: 2025-06-25

Keywords:

Assistance from
posyandu cadres;
The compliance of
pregnant women;
Iron Tablet.

ABSTRACT

Background: The leading cause of maternal death in Indonesia is postpartum hemorrhage resulting from uterine atony. This can be exacerbated if women experience anemia during pregnancy. Women experience anemia due to the body's lack of iron. This study was conducted to determine the effectiveness of cadre assistance's integrated health service post using a flip sheet on the compliance of pregnant women consuming iron supplement tablets at the West Sorong Health Center. **Method:** This study used quasi-experimental research with a Nonequivalent Control Group Design. The study sample consisted of 34 people, divided into two groups which are control and intervention groups. Statistical tests using Wilcoxon, Mann-Whitney, and N-Gain Score. **Results:** the final results of adherence to taking iron supplement tablets in the experimental group showed that the majority of pregnant women had a high level of compliance, characterized by P-Value = <0.001. On the other hand, the final results of the level of compliance in the control group, the majority of respondents were at a low level of compliance characterized by P-Value = 0.058. After going through the Mann-Whitney test, the P-Value = <0.001 (P-value <0.05) shows that the alternative Hypothesis is accepted. **Conclusion:** The conclusion in this study was that the assistance of integrated health service post cadres was carried out for 14 days 6 times in the intervention group using the flip sheet media, influenced the compliance of pregnant women in the intervention group of taking iron supplement tablets higher than in the control group with low compliance, the effectiveness of integrated health service post cadre assistance using flip sheets on the compliance of pregnant women taking blood supplement tablets at the West Sorong Health Center with moderate effectiveness.



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INTRODUCTION

The SDGs continue the MDGs, or Millennium Development Goals, which involved more developed, developing, or less developed countries. One of the strategies in applying the world of health is in the 3rd goal, which is "ensuring a healthy life and promoting welfare for all people of all ages" (Department of Economic and Social Affairs, 2023). To ensure healthy lives through the promotion of welfare at all age levels, especially at target point 3.1 to reduce maternal mortality globally to 70 per 100,000 live births by 2030, and target point 3.4 to reduce one-third of deaths caused

by non-transmitted diseases (United Nations, 2023).

The WHO in 2020 stated that nearly 800 women died from preventable causes related to pregnancy and childbirth 3. Indonesia ranks 3rd (three) in maternal mortality in Southeast Asian countries after Cambodia (218 deaths per 100,000 live births) and Myanmar (179 deaths per 100,000 live births) (Badan Pusat Statistik, 2023). The maternal mortality rate in West Papua and Southwest Papua in 2023 was 29 per 100,000 live births, with the most deaths due to bleeding, amounting to 9 (nine) or 31% (Dirjen Tenaga Kesehatan, 2023). One of the biggest causes of maternal death in Indonesia is postpartum hemorrhage due to uterine atony. This is exacerbated if, during pregnancy the mother experiences anemia, anemia itself occurs because the body lacks iron (Risnawatu, 2015).

Based on the results of research, anemia is caused by various factors. These factors are low iron intake, low iron absorption, and chronic energy (SEZ), gestational age, parity, nutritional status, consumption patterns, and the level of adherence to consuming blood tablets by pregnant women (Wahyuni, 2018). Seeing this, the quality of health services for pregnant women plays a key role in reducing maternal mortality and infant mortality rates. The government has implemented a program to provide blood supplement tablets that can be taken daily. Every pregnant woman who checks for pregnancy at health service facilities will get 90 (ninety) blood supplement tablets that can be consumed during pregnancy, which aims to prevent anemia due to iron deficiency in pregnant women (Kementerian Kesehatan RI., 2021).

Factors that affect pregnant women in taking blood supplement tablets are: knowledge about pregnant women, the desires of pregnant women, the role of the family, and the attitude of health workers. According to BKKBN, in 2012 (Wuwuh, Rahayu, & Wijayanti, 2016). Pregnant women's knowledge about their health, particularly regarding anemia, influences their behavior in preventing anemia. This is supported by the results of research conducted by Safitri, Gayatri, and Haerunnisa (2019), who researched knowledge factors affecting the compliance of pregnant women in consuming iron supplements (Safitri, Gayatri, & Haerunnisa, 2019). Pregnant women who have a low level of knowledge are on average, not compliant in consuming blood-boosting tablets. However, on the other hand, pregnant women who have a good level of knowledge, are obedient in consuming blood supplement tablets. Therefore, the knowledge and compliance of consuming blood supplement tablets have a meaningful relationship with the compliance of pregnant women consuming blood supplement tablets.

At the village and district levels, health services must work together to increase compliance with the consumption of blood supplement tablets. On the other hand, the lack of understanding of cadres regarding anemia in pregnant women is a problem in providing support to clients with anemia in pregnant women. Although counseling about anemia in pregnant women has not been fully socialized, both to health cadres and the community. Cadres need an update in their mentoring, which is explained by the results of Purwati, A.N.'s research in 2018 (Purwati & Noviyana, 2018). Refresh knowledge is needed for posyandu cadres so that cadres are motivated to monitor the consumption of iron supplements in pregnant women. Increasing the knowledge of health cadres about anemia prevention will cause positive things for pregnant women because the knowledge of health cadres will be transformed into pregnant women in their area. Therefore, cadre assistance is a form of reminder and motivator for pregnant women to consume iron supplements.

In enhancing respondents' knowledge and attitudes through education, flipchart media proves to be an effective and user-friendly tool. Designed in the form of hanging

sheets, flipcharts are easy to flip through during sessions. They present relevant educational material complemented by clear text, visually appealing designs, and varied colors that attract and maintain the viewer's attention. The creative layout and engaging appearance of flipcharts contribute to their effectiveness in delivering health education (Kostania, Kamila Mas'udah, & Suprpti, 2023).

Based on interviews conducted with the Head of the Maternal and Child Health/Family Planning (MCH/FP) Division of the Sorong City Health Office, data showed that in 2023, a total of 232 pregnant women with anemia were reported from 10 public health centers (puskesmas) in Sorong City. As of January to May 2024, 91 pregnant women have been reported with anemia. From January to early April 2024, three out of the ten health centers recorded an increase in anemia cases among pregnant women. The West Sorong Health Center ranked first, with 21 reported cases, followed by Sorong Health Center with 10 cases, and Malaisimsa Health Center with 8 cases.

Further interviews with the coordinating midwife of the MCH/FP unit at the West Sorong Health Center revealed that the center oversees 16 integrated health service posts (posyandu) with a total of 81 cadres. Each posyandu typically has five cadres, except for one with six cadres. It was also reported that these cadres do not accompany pregnant women in consuming iron supplement tablets (Fe tablets) due to the absence of financial incentives. Cadre-based assistance for pregnant women in taking iron tablets has only been implemented once, in collaboration with a previous research team, and has not been continued since. Additionally, the midwife noted that pregnant women's non-compliance with iron supplementation is largely due to a lack of understanding regarding its benefits.

Considering these challenges, flipchart (flipping sheet) media is seen as a potentially effective tool to support cadres in delivering health education and assisting pregnant women. Flipcharts are user-friendly, visually engaging, and can facilitate better communication between cadres and pregnant women. Therefore, this study aims to evaluate the effectiveness of cadre-assisted education using flipchart media on improving compliance with iron tablet consumption among pregnant women at the West Sorong Health Center.

METHODS

The type of quasi-experimental research with the Nonequivalent Control Group Design research design. The research sample of 34 people was divided into 2 control and intervention groups. The instruments used in this study are informed consent sheets, Morisky Medication Adherence Scale 8 items (MMAS-8) questionnaire sheets, observation sheets, flip sheet media, guidebooks using flip sheet educational media, so that they can minimize the occurrence of anemia in pregnant women by increasing the compliance of pregnant women consuming blood-boosting tablets accompanied by posyandu cadres using flip sheet media. Statistical tests used the Wilcoxon and Mann-Whitney. This research has met the requirements for research ethics with a research ethics number DM.03.05/003/075/2024.

Cadres make home visits with a frequency of 3 times a week, and every day are reminded through online media, namely WhatsApp. The researcher uses direct observation sheets in the assistance carried out by the cadres. The researcher created a WA group with pregnant women and a WA group of researchers with cadres, while a WA group of cadres with pregnant women. The cadre will remind pregnant women through WA twice a day, namely, at 08.00 WIT on that day, the cadre will remind pregnant women to consume blood supplement tablets at 19.00 WIT to remind

pregnant women to consume blood supplement tablets before going to bed. Cadres are equipped with flipchart so that education that is directed at the contribution of flip media in knowledge transfer through vision from eye to brain is estimated at 75-87% (Lailatul Barik, Purwaningtyas and Astuti, 2019), In using a flipchart. Cadres are given a guidebook. The flipchart can be accessed openly on the following website:https://www.academia.edu/128848703/Media_lembar_balik_anemia_pada_i_bu_hamil_berbasis_budaya?source=swp_share. Cadres who have a good post-test score will provide assistance to pregnant women, the measuring tool used is an observation sheet.

RESULT

This section presents the findings of the study, beginning with the demographic and obstetric characteristics of the respondents in both the intervention and control groups. The characteristics include age, level of education, occupation, and gestational age. These variables are important to describe the baseline comparability between the two groups prior to the intervention. The detailed distribution is presented in Table 1.

Table 1. Characteristics of respondents

Characteristic	Group				Total	
	Intervention		Control			
	n	%	n	%	n	%
Age						
<20 Year	3	17.6	1	5.9	4	11.8
20-35 Year	13	76.5	13	76.5	26	76.5
> 35 Year	1	5.9	3	17.6	4	11.8
Education						
Elementary	4	23.5	3	17.6	7	20.6
Junior-senior high school	10	58.8	14	82.4	24	70.6
college	3	17.6	0	0	3	8.8
Job						
Working	1	5.9	4	23.5	5	14.7
None	16	94.1	13	76.5	29	85.3
Age of gestation						
First trimester	2	11.8	2	11.8	4	11.8
Second trimester	11	64.7	12	70.6	23	67.6
Third trimester	4	23.5	3	17.6	7	20.6

Table 1 presents the demographic and obstetric characteristics of the respondents in both the intervention and control groups. The majority of respondents were aged 20–35 years (76.5%), which represents the typical reproductive age group. In terms of educational background, most respondents had completed junior or senior high school, accounting for 70.6% of the total sample. Regarding employment status, the majority of respondents were unemployed (85.3%), indicating a high proportion of housewives among the study participants. As for gestational age, most of the pregnant women were in their second trimester (67.6%), which is a critical period for iron supplementation to prevent anemia.

Table 2. Compliance with taking iron supplements among pregnant women before and after receiving cadre assistance using a flipchart in the control group.

Compliance with Iron Tablet Consumption	before		After		p-value
	n	%	n	%	
High	0	0	1	5.9	0.058
Medium	4	23.5	8	47.1	
Low	13	76.5	8	47.1	

Table 2 shows the level of compliance with iron supplement consumption among pregnant women in the control group before and after the observation period without any specific intervention (such as cadre assistance using flipchart media). Initially, the majority of respondents (76.5%) were categorized as having low compliance. After the observation period, a decrease in the number of respondents with low compliance was noted (47.1%), and there was a slight increase in the number of respondents with medium (47.1%) and high compliance (5.9%).

However, the result of the Wilcoxon signed-rank test yielded a p-value of 0.058, which is not statistically significant at the conventional 0.05 level. This indicates that the observed changes in compliance levels among the control group were not significant, and therefore, no meaningful improvement in iron supplement compliance occurred without the intervention.

Table 3. Compliance with taking iron supplements among pregnant women before and after receiving cadre assistance using a flipchart in the intervention group.

Compliance with Iron Tablet Consumption	Before		After		p-value
	n	%	n	%	
High	2	11.8	13	76.5	<0.001
Medium	4	23.5	3	17.6	
Low	11	64.7	1	5.9	

Table 3 presents the level of compliance with iron supplement consumption among pregnant women in the intervention group before and after receiving cadre assistance using flipchart media. Prior to the intervention, the majority of respondents (64.7%) exhibited low compliance. After receiving assistance from trained posyandu cadres utilizing flipchart media, a significant shift was observed, with 76.5% of respondents showing high compliance.

The results of the Wilcoxon signed-rank test indicated a p-value < 0.001, suggesting a statistically significant improvement in compliance levels after the intervention. This finding demonstrates that cadre assistance using flipchart media has a significant positive effect on pregnant women's adherence to iron supplement consumption.

Table 4. Analysis of the difference in adherence to taking iron supplements in pregnant women between the control and intervention groups

Mann-Whitney U	13.000
Wilcoxon W	166.000
Z	-4.615
Asymp. Sig. (2-tailed)	<.001
Exact Sig. [2*(1-tailed Sig.)]	<.001 ^b

Based on Table 4. Showing that the results of the different tests using the Mann-Whitney test obtained a P-Value of <0.001 , meaning that there was a significant difference in the compliance of pregnant women consuming tablets to increase blood who were assisted by cadres using a return sheet after treatment between pregnant women in the control and intervention groups. The intervention provided can improve the adherence of pregnant women to consuming blood supplement tablets.

Table 5. Analysis of the effectiveness of cadre assistance using a flip sheet on the compliance of pregnant women consuming blood-boosting tablets using the N-Gain Score test.

(n:17)	Experiment group
	N-Gain Score
Mean	0.485294118
Min	-1
Max	0.88

Based on the results of the statistical test of the N-Gain score, in the experimental class (cadre assistance using a flip sheet) it was shown that the average value of the N-Gain score for the experimental class was 0.5 or 48.5%, This is supported by the opinion of Hake, R. Richard, in 1998. Based on the classification of the effectiveness category, according to him, the value is included in the moderate effective category of 15. The minimum and maximum N-Gain score effectiveness values are -1 and 0.88, respectively.

DISCUSSION

The results of the study demonstrated that the compliance of pregnant women in consuming iron supplements improved after receiving assistance from health cadres using flipchart media. This finding is consistent with a study conducted by Rofi'ah (2020) at the Pejagoan Health Center, Kebumen Regency, which reported that support from trained health cadres can enhance pregnant women's adherence to taking iron tablets (Rofiah, 2020).

Health cadres play a crucial role in supporting primary healthcare programs, particularly in monitoring maternal and child health (Kartika, Setyoadi, Hayati, & Setiowati, 2024; Khairunisa, ., & Susanti, 2022; Zanuaria Fidy Husada, Atika, & Andriyanti, 2024). In this study, researchers provided educational sessions to cadres on the importance of accuracy and adherence in iron tablet consumption among pregnant women. Furthermore, role-play methods were employed during the training with the aim of enhancing the cadres' competence in promotive and preventive efforts to address anemia in pregnancy (Ernawati & Indrayanti, 2023; Erowati, Permata Sari, & Marlina, 2024; Sari, Renityas, & Noviasari, 2021).

Trained cadres who provide assistance using a flipchart can be facilitated if they know how to use flip media. Therefore, the researcher gave a pocketbook to the cadres. The goal is to make the flipchart easy to understand, clear, and visual so that readers do not get bored easily when reading the content of the media. This is in accordance with the results of a study conducted by Nurmi et al., in 2014 (Purnama Eka Sari et al., 2022). The results of the research stated that the use of pocket books can improve the knowledge and behavior of cadres.

Pregnant women who have been exposed to health information through trained cadres can increase their knowledge of pregnancy. In line with the results of research (Kamalah, Honaryati, and Tina, 2021), which states that knowledge can change a

person's attitude 12. Cadres provided assistance 6 times with the door-to-door method to deliver health education about consuming diverse foods to help the body absorb more iron. The body can increase the absorption of iron with animal protein, folic acid, vitamin A, vitamin C, and other micronutrients.

Iron requirement during the first trimester is ± 1 mg/day, with a basal loss of 0.8 mg/day, plus 30-40 mg for red blood cells and fetuses. During the second trimester, iron requirements increased by ± 5 mg/day, with a basal loss of 0.8 mg/day, plus red blood cell requirements of 300 mg and 115 mg. During the third trimester, iron requirements increased by ± 5 mg/day, with a basal loss of 0.8 mg/day and plus cell 18 requirements. Anemia in pregnant women can increase if posyandu cadres are not involved in giving Fe tablets. This is supported by the results of research conducted by Destiani, and Susan, Y. In 2017 that there was an effect of monitoring the consumption of blood supplement tablets by cadres on the incidence of increased hemoglobin levels in pregnant women in Cimanggung Village (Destiani & Susan, 2017).

Providing health education by cadres to increase awareness of pregnant women, such as providing information about the effects of anemia on mothers and fetuses, and helping pregnant women overcome the side effects of using iron tablets. Based on the results of research conducted by Shofiana, et al, in 2018, which stated that the compliance of pregnant women in consuming blood supplement tablets is influenced by the level of knowledge of pregnant women, pregnant women who have a good level of knowledge will increase compliance with the consumption of blood supplement tablets (Lailatul Barik, Purwaningtyas, & Astuti, 2019).

Knowledge is very important to determine compliance in consuming iron tablets because it affects the behavior of pregnant women in consuming blood supplement tablets regularly every day. Knowledge can be seen from a person's ability to mention, describe, define, state, and other things that can be used to measure the level of knowledge a person has about what they have learned. The more attention is paid to something, the longer the memory will be stored. This opinion is supported by research results which state that flip media to the transfer of knowledge through vision from the eyes to the brain is estimated at 75-87%, while the other 13-25% is channeled through other senses, this was conveyed by Susilowati, in 2016 (Lailatul Barik et al., 2019).

Then the research showed that the flipchart was effective in increasing respondents' knowledge. This is because the flipchart is easy to use because it is in the form of attractive sheets and is hung so that it is easy to flip. The flipchart in this study contains material about anemia that is explained concisely, and easy to learn as for the writing and pictures that are designed with color variations according to what can pamper the eyes, flipchartis designed creatively to look attractive and make readers not bored to keep staring at the content of the flip sheet media.

Seeing this, the researcher provided educational media in the form of flip sheet media. After conducting the statistical test stage of the N-Gain score of the effectiveness of cadre assistance using the media of the return sheet on the compliance of pregnant women consuming tablets to increase blood obtained an N-Gain score of 0.5 was obtained in the moderate effective category.

Based on the above, it can be concluded that posyandu cadres as individuals who are given training using flipchart and pocket books in supervising pregnant women are able to provide knowledge about the importance of consuming blood tablets, if a person has a sufficient knowledge base then it can change their attitude then it can increase compliance with the consumption of blood tablets, This is due to the ability of cadres who can influence the behavior of pregnant women in, on the other hand the media of flip sheets that are provided to effective cadres in the medium category. So

that cadre assistance using a flipchart is effective in increasing the compliance of pregnant women consuming blood-boosting tablets at the West Sorong Health Center.

The limitation in this study is that most pregnant women do not have mobile phones, so researchers have difficulty in reminding to consume tablets to increase blood or conducting evaluations. So for these two activities, the researcher asked for the help of the cadres. The research had limited funds and time. Cadre empowerment is a form of savings for future generations. The researcher sees a great opportunity if the government participates in running a national program to assist posyandu cadres using flip sheets as a form of preventive effort in anemia.

CONCLUSION AND SUGESTION

Assistance for posyandu cadres using flip sheets is effective in increasing the compliance of pregnant women in consuming blood supplement tablets. Therefore, this program can be integrated in a sustainable manner into the work program of the Puskesmas. This method can be applied in the KIA program and daily posyandu activities, and expanded to other posyandu assisted areas in Sorong City as one of the programs to support anemia prevention efforts in pregnant women. For future researchers, it is expected to conduct research with a randomized research design and a larger sample.

REFERENCES

- Badan Pusat Statistik. (2023). *Angka Kematian Ibu/AKI (Maternal Mortality Rate/MMR) Hasil Long Form SP2020 Menurut Provinsi, 2020*. Jakarta.
- Department of Economic and Social Affairs. (2023). *Sustainable Development*.
- Destiani, & Susan, Y. (2017). Pengaruh Pemberdayaan Kader Pemantau Minum Tablet Fe Terhadap Kejadian Anemia Pada Ibu Hamil Di Desa Cimanggung Tahun 2017. *Prosiding Seminar Nasional Kebidanan*.
- Dirjen Tenaga Kesehatan. (2023). *Capaian Transformasi Kesehatan Papua Barat*.
- Ernawati, M., & Indrayanti. (2023). Training Of Village Health Cadres On Prevention Of Anaemia Among Pregnant Women In Bojonegoro District. *Frontiers in Community Service and Empowerment*, 2(2), 33–39. <https://doi.org/10.35882/ficse.v2i2.34>
- Erowati, D., Permata Sari, S. I., & Marlina, Y. (2024). Training empowerment of cadres by using control cards to prevent anemia among pregnant women in desa ranah singkuang. *Diklat Review: Jurnal Manajemen Pendidikan Dan Pelatihan*, 8(1), 99–103. <https://doi.org/10.35446/diklatreview.v8i1.1661>
- Kartika, A. W., Setyoadi, S., Hayati, Y. S., & Setiowati, C. I. (2024). Roles and challenges of health cadres in handling stunting: a qualitative study. *Healthcare in Low-Resource Settings*. <https://doi.org/10.4081/hls.2024.13057>
- Kementerian Kesehatan RI. (2021). *Buku Pedoman Penatalaksanaan Pemberian Tablet Tambah Darah*. Jakarta: Kementerian Kesehatan RI.
- Khairunisa, D., . N., & Susanti, T. (2022). The Role of Integrated Healthcare Center (Posyandu) Cadres in Increasing Maternal and Child Health during COVID-19 Pandemic. *International Journal of Research and Review*, 9(2), 98–106. <https://doi.org/10.52403/ijrr.20220214>
- Kostania, G., Kamila Mas'udah, E., & Suprpti, S. (2023). Pengembangan Media Lembar Balik Kader Sahabat Ibu Hamil Dalam Pendampingan Kehamilan Oleh Kader. *Jurnal Kebidanan Indonesia*, 14(1). <https://doi.org/10.36419/jki.v14i1.764>
- Lailatul Barik, A., Purwaningtyas, R. A., & Astuti, D. (2019). The Effectiveness of Traditional Media (Leaflet and Poster) to Promote Health in a Community Setting in the Digital Era: A Systematic Review. *Jurnal Ners*, 14(3). [https://doi.org/10.20473/jn.v14i3\(si\).16988](https://doi.org/10.20473/jn.v14i3(si).16988)

- Purnama Eka Sari, W. I., Yusniarita, Y., Kurniyati, K., Susanti, E., Esmianti, F., & Utario, Y. (2022). Peran Kader Posyandu Dalam Upaya Optimalisasi Pelaksanaan Kelas Ibu Balita Di Wilayah Kecamatan Curup Timur Kabupaten Rejang Lebong Bengkulu. *GEMASSIKA: Jurnal Pengabdian Kepada Masyarakat*, 6(2), 163–175. <https://doi.org/10.30787/gemassika.v6i2.770>
- Purwati, & Noviyana, A. (2018). Keterlibatan Kader Posyandu Dalam Pemantauan Konsumsi Tablet Fe Pada Pencegahan Anemia Ibu Hamil Di Kabupaten Banyumas. *INFOKES*, 8(2), 2086–2628.
- Risnawatu, I. , dan H. A. (2015). Dampak Anemia Kehamilan Terhadap Perdarahan Postpartum . *Stikes Muhammad Kudus*, 6(3), 57.
- Rofiah, A. (2020). *Pendampingan Kader Terlatih Untuk Meningkatkan Kepatuhan Ibu Hamil Mengonsumsi Tablet Fe Di Puskesmas Pejagoan Kabupaten Kabumen*. Politeknik Kesehatan Semarang , Magelang.
- Safitri, A., Gayatri, W., & Haerunnisa, A. D. (2019). Penerbit :Fakultas Kedokteran Universitas Muslim Indonesia. *UMI Medical Journal: Jurnal Kedokteran*, 4(2).
- Sari, L. T., Renityas, N. N., & Noviasari, I. (2021). Empowering the Cadre of Pregnant Women Control Program to Prevent Anemia. *Journal of Community Service for Health*, 2(1), 010–014. <https://doi.org/10.26699/jcsh.v2i1.ART.p010-014>
- United Nations. (2023). *Ensure Healthy Lives and promote well-being for all at all ages*.
- Wahyuni, S. (2018). Efektifitas Pendampingan Minum Tablet Tambah Darah (Ttd) Oleh Kader Posyandu Terhadap Peningkatan Kadar Hb Ibu Hamil Di Puskesmas Kota Palangka Raya. *Jurnal Surya Medika*, 3(2).
- Wuwuh, S., Rahayu, S., & Wijayanti, K. (2016). *Pengaruh Pendampingan Kader Pada Ibu Hamil Terhadap Kepatuhan Minum Tablet Fe*. 1(3).
- Zanuarita Fidya Husada, Atika, & Andriyanti. (2024). Empowering health cadres: Factors influencing knowledge of high-risk pregnancy. *World Journal of Advanced Research and Reviews*, 22(3), 735–741. <https://doi.org/10.30574/wjarr.2024.22.3.1743>