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Iron Supplementation Program for Pregnant Women in Indonesia: Challenge and Barriers

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ABSTRACT

Indonesia has implemented the iron supplementation program for pregnant women as interventions to prevent stunting. Karawang Regency, West Java Province, Indonesia continues to encounter intricate issues associated with this, 8,285 pregnant women were affected by obstetric complications in 2021, resulting an increase in the number of infant mortalities and low birth weight. The objective of this research is to assess the challenge and barriers of the iron supplementation program for pregnant women in Karawang Regency which utilises the women empowerment paradigm based on Rowlands (1997). A mixed-method explanatory sequential design was performed in this study. Individually, many pregnant women do not have proper understanding about the importance of iron supplementation to indirectly prevent stunting. Financial constraints and time constraints due to work activities prevent women from prioritizing their health needs. From a relational aspect, pregnant women's health choices are strongly influenced by their social relationships, including family members, husbands, and health professionals. Collectively, the health service system and social infrastructure in Karawang Regency are not evenly distributed to meet the needs of pregnant women. Enhanced health education, better access to healthcare services, and more targeted support from family members and healthcare providers are necessary to improve adherence to iron supplementation during pregnancy.

KEYWORDS: Iron Supplementation, Maternal Health, Pregnancy, Public Health..

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INTRODUCTION

The initial 1000 days of a child's life are a critical factor that can lead to stunting Puspita, Umar, and Psiari (2022), This period encompasses the period from pregnancy (270 days) to the child's second birthday (730 days) (National Poverty Eradication Team, 2017; Sasube & Luntungan, 2017; Tim Ayo Sehat, 2020; Unicef, 2021). The government is cognisant of this, which is why pregnant women are one of the priority target groups to receive specific interventions in Presidential Regulation No. 72 of 2021(Ministry of State Secretariat of the Republic of Indonesia, 2021b).

Indonesia has implemented the iron supplementation program for pregnant women as one of the specific interventions in accordance with the presidential regulation. This study was conducted in Karawang Regency, West Java province, due to the fact that Karawang Regency continues to encounter intricate issues associated with this. The health profile of Karawang Regency in 2022 suggests that there are numerous issues that require consideration. Of the 41,424 pregnant women, 8,285 were affected by obstetric complications. In addition, the prevalence of chronic energy deficit (CED) among pregnant women is increasing, with a total of 2,859 pregnant women experiencing CED during that period. Additionally, there are 4,188 pregnant women who are anaemic, despite the fact that 99% of pregnant women have been provided with a minimum of 90 blood supplement tablets in 2021. This issue persists in Karawang Regency, resulting in an increase in the number of newborn fatalities. To be more precise, the figure rose from 136 per 1,000 live births in 2020 to 160 per 1,000 live births in 2021, and then again to 178 per 1,000 live births in2022. In addition, the number of births with low birth weight increased annually. The figure increased from 2.5 per 1000 live births in 2019 to 2.6 per 1000 live births in 2020, and subsequently to 2.8 per 1000 live births in 2021(Karawang Health Office, 2022). The objective of this research is to assess the dynamics of the iron supplementation program for pregnant women in Karawang Regency.

In a study conducted in seven countries in Southeast Asia, Nisar et al. (2020) identified research gaps in terms of evidence. The study concluded that the early and continuous supplementation of iron-folic acid during antenatal care can enhance child growth in South Asia and other low- and middle-income countries with high iron deficiency during pregnancy. The study has clinically proven the positive benefits of iron supplementation on stunting prevention, but it does not address the challenges.

The study quantitatively assessed the risk factors for anaemia in pregnant women who ingested iron tablets, revealing a gap in methodological aspects (Widodo et al., 2023). In the same vein, the quantitative study conducted by Wulandari and Iwan (2024) investigated the extent to which pregnant women in Indonesia adhere to iron supplementation.

Noptriani and Simbolon (2022) conducted a study on the compliance of iron supplementation tablets in Indonesia, utilising secondary data from the 2017 IDHS. This research implies that the challenges and impediments associated with iron

supplementation tablets in Indonesia require resolution due to the population divide. The data lacuna was identified in the study conducted by Kuntari and Supadmi (2024) on expectant mothers in Indonesia. The study employed secondary data from the 2018 Indonesian fundamental health research data.The investigation exclusively concentrated on pregnant women between the ages of 15 and 24. The study Zalfa et al. (2024) determined that there was no correlation between the use of iron supplementation tablets and the incidence of anaemia in pregnant women, thereby identifying a gap in practical knowledge. However, the investigation did not examine any viable solutions to this issue.

The theoretical aspect was identified as a lacuna in a study conducted by Permanasari et al. (2020), the policy triangle theory was employed to evaluate the implementation of a stunting prevention program in the study. Muh et al. (2024) conducted research in Indonesia that identified the knowledge deficit. The investigation demonstrated that pregnant women who ingested iron tablets in inadequate quantities were at an elevated risk of developing anaemia. As a result, a comprehensive intervention strategy was necessary to resolve this matter. However, the investigation did not offer a comprehensive account of the suitable strategies and interventions. A comprehensive examination of the iron tablet supplementation program for pregnant women was conducted in a multidimensional manner, integrating the theory of women's empowerment, to address the numerous deficiencies of prior research.

The socio-cultural aspects of Southeast Asian society are still heavily influenced by patriarchal values, which result in women being relegated to a lower status and position than men. This is also evident in the household, where men are held in higher regard than women (Miedema et al., 2018). One of the potential consequences of this condition is the health of Indonesian women. The profile data of Indonesian women indicates that health complaints are more prevalent in women than in men, with 51.99% of women experiencing them and 48.8% of men experiencing them (Fajriyah et al., 2020).

Therefore, the theory of Gender and Development is one of the theories that can be employed as an analytical instrument to investigate the dynamics of the implementation of stunting prevention during pregnancy, which is in direct contact with the lives of women.The analysis utilises the empowerment paradigm based on Rowlands (1997), this notion has three dimensions: personal (self-awareness), relational (negotiating skills), and collective (shared action). An investigation into the incorporation of women's empowerment theory into a irontablet supplementation program could be an intriguing investigation.
Materials and Methods:

MATERIAL AND METHODS

A. Research Design

This study utilised a mixed-method explanatory sequential design, commencing with quantitative research followed by qualitative research as a complement. To determine the prevalence of iron supplement tablet usage among pregnant women in Karawang Regency, descriptive quantitative research was conducted. Case studies were utilised to perform qualitative research, case studies can be used in a variety of fields, especially when the main goal is to assess programs, activities, processes, and individual situations in a research setting (Creswell & Creswell, 2023). Both Quantitative and Qualitative research was carried out in Citra Sari Husada Hospital, Karawang Indonesia.

B. Reseach Setting and Participant

Both Quantitative and Qualitative research was carried out in Citra Sari Husada Hospital, Karawang Indonesia. The population in this study consists of all postpartum mothers who gave birth during the period of September to December of 2024 and their babies. Data was collected from mothers in labour concerning their usage of iron supplement tablets throughout pregnancy and the condition of the newborn, according to WHO (2023) infants at risk of stunting are defined as those with low birth weight, small gestational age, and/or premature birth. Low birth weight refers to a birth weight of under 2500 grammes and a body length of less than 48 centimetres. Premature pertains to infants born alive prior to reaching a gestational age of 37 weeks. The sample includes the total population that met the inclusion criteria, namely mothers who gave birth in Karawang Regency, carrying a single live fetus, and whose newborns did not present with congenital anomalies or mortality. The quantitative study involved 364 mothers, while the qualitative study involved 24 mothers.

C. Data Collection and Analysis

Quantitative data was collected using survey methodologies, whereas qualitative data was collected from 24 respondents in this study through in-depth interviews. Quantitative data is handled by analysing study variables analytically using SPSS version 24 software. In addition, descriptive data will be provided in numerical form using the mean, median, and standard deviation, while categorical data will be stated as a percentage. Qualitative data analysis involves organising and preparing the data, conducting a thorough reading, coding the data, identifying themes, building an interpretative framework by combining themes, explaining the analytical structure, and ultimately interpreting the data (Creswell & Creswell, 2023).

The research instruments used in this study consist of a checklist for the quantitative component, and an interview guide for the qualitative component. The qualitative interview guide is developed based on the theoretical framework of women's empowerment.

Because this study did not use a questionnaire, the quantitative data was not evaluated for reliability or validity. Instead, it was gathered by means of a checklist paper. Recognising the subjectivity of qualitative research is a major difficulty because

researchers are the main tool used to gather and process data. This subjectivity may lead to biases that reduce the reliability and validity of the data, which suggests that a different research method is needed instead of quantitative research.
To resolve these concerns, a diverse array of methodologies have been developed to improve the reliability and validity of qualitative research. The scientific accuracy and reliability of the research findings in this study are verified through triangulation, peer debriefing, and member verification (Spiers et al., 2018).

D. Ethical Consideration

This study was approved by the Health Research Ethics Committee of Institute of Health Science Ganesha Husada Kediri. After undergoing various stages of ethical review, the study was deemed ethically feasible, as evidenced by the issuance of the Ethical Approval Letter No. 29/SGH.KEPK/IX/2024.

RESULTS

A. Respondents' Characteristics

Based on the results of the quantitative data collection, the characteristics of the respondents are as follows:

Table 1 Respondents' Characteristics for Quantitative Study

Characteristics	Total=364	%
Age		
Minimum	14	
Maximum	47	
Mean	28.4	
Last Education		
Elementary School	24	6.6
Primary School	69	19
Secondary School	236	64.8
Bachelor/Diploma	35	9.6
Job		
Housewife	255	70.1
Labourer	109	29.9
Parity		
Minimum	1	
Maximum	7	
Mean	2	

Table 1 indicates that this study comprised 364 participants, aged between 14 and 47 years, with a mean age of 28.4 years. Majority of the respondents were graduated from secondary school and working as housewife. The frequency of deliveries varied from 1 to 7, with a mean of 2 deliveries..

Subsequently, from the qualitative data collection, the characteristics of the participants are as follows:

Table 2 Participant's Characteristics for Qualitative Study

Characteristics	Frequency n=24	%
Last Education		
Elementary School	2	8,3
Primary School	4	16.7
Secondary School	15	62.5
Bachelor/Diploma	3	12.5
Job		
House Wife	12	50
Labourer	12	50
Age		
Minimum	21	
Maximum	45	
Mean	30	
Parity		
Minimum	1	
Maximum	3	
Mean	2	

The teble 2 indicates that most informants possess a high school education, are either housewives or factory workers, with the youngest being 21 years old and the oldest 45 years old; on average, mothers have given birth twice.

B. The Consumption of Iron Tablets During Pregnancy

To understand the pattern of iron tablet (Fe) consumption among pregnant women in Karawang Regency, a retrospective recall was conducted to determine the number of tablets consumed in each trimester of pregnancy. Iron tablet consumption is considered to meet the standard if the pregnant woman has taken at least 90 tablets throughout the pregnancy. Consumption below this threshold is categorized as not meeting the recommended standard.

Table 3 Iron Tablets Consumption During Pregnancy

Variable	Total=364	%
Iron Tablets Consumption		
<90 Tablets	85	23
>90 Tablets	279	77
Minimum	0 tablet	
Maximum	750 tablets	
Mean	164 tablets	
Baby birth		
Without Stunting Risk	290	79.7
With Stunting Risk	74	20.3

The table above shows that 23% of pregnant women have not consumed iron tablets (Fe) according to the recommended standard. Moreover, some pregnant women reported not taking any iron tablets at all during their pregnancy. In addition, the table shows that the number of babies born with stunting risk (birth weight <2500 grams and body length <48 cm) is relatively high, reaching approximately 20.3%.

Based on the quantitative data, in-depth interviews were subsequently conducted with mothers who did not consume iron tablets (Fe) according to the recommended standard and to the mother who delivered baby with risk of stunting. These interviews employed a women's empowerment approach to explore the underlying reasons and contextual barriers affecting adherence. The results of the interviews are as follows:

Table 4 Women Emporment Theory Integration into Iron Supplementation Problem Among Pregnant Women

Dimension	Researceh Question	Category	Supporting Statement
1. Personal	What is your perspective on the significance of iron supplements in the prevention of stunting? What is your understanding of anaemia during pregnancy and its effects on the health of both the mother and the child?	Careless	"Well, it won't go anywhere if it's just my luck. Why? If I'm not mistaken, how many times a day do I ask you to take your medication? I'm the laziest person. Yes, it is exhausting. Because I'm lazy and dislike taking medication, I prefer to give gratitude to Allah if I'm fortunate." Mrs. N
		Lazy	"Yes, I rarely drink it, hehehe." Mrs. A
		Uneducated	"don't understand, don't know what to do." Mrs. W
		Low Self Efficacy	"During pregnancy I didn't know what to do, never looked for information either, I didn't know I was pregnant, never took vitamins, never had a check-up, forgot what the midwife said to do." Mrs. E
		Misinformation	"Although I don't use iron supplement, I do take heart and high blood pressure medications on a regular basis. I hunt for herbal ones (K-Link), drop them, and drink them since I believe that taking medications from a doctor will impact your kidneys, therefore you should avoid taking them too frequently. I don't get lightheaded as frequently now that I've taken them." Mrs. S
2. Relational	To what extent do you feel you have enough support to access and consume iron tablets? How do pregnant women negotiate with their husbands, families, or medical personnel to overcome barriers to consuming iron tablets?	Unpresent Husband	"Sometimes 10 or 20 iron tablets were taken throughout a month, sometimes not every night, and occasionally not at all. My spouse didn't pay much attention because he was often far away, so perhaps I was thinking a lot too. The doctor also mentioned that it seemed like I was thinking a lot." Mrs. E.

			Unwell Informed	"Since this is my third pregnancy, I know what to do already. But occasionally I forget; perhaps the interval between pregnancies is too long. During my check-up, the midwife should have told me, "This is important for you to take," so I didn't take it lightly. "This is calcium, ma'am. Take it, that's all." "What's the point of iron tablets? I don't think I need them." Mrs. E
3.	Collective	How do pregnant women's groups or other communities help you in gaining access and ensuring compliance with taking iron tablets?	Low Access to Community Health Service	"From the time I was pregnant until I gave birth, I never went to a prenatal class. I was unaware that such an event existed; typically, when there is pregnancy exercise, your friend asks, "Why didn't you attend?" I'm not sure." Mrs. S
			Time Limitation	"I didn't attend the prenatal class since it was difficult to get permission to leave work, some people didn't let me, and I had to walk a considerable distance." Mrs. N
			Transportation Limitation	"I never checked with a doctor; I only went to the doctor when I was ready to give birth. I regularly went to the midwife and community service post once a month. However, I was always working and couldn't ride a motorbike, so I had to wait for my husband and didn't have time to visit the prenatal class." Mrs. R

The analytical results are presented in Table 4, which identifies ten themes that are linked to the determinants of women's empowerment: The personal component is represented by five themes, the relationship aspect by two themes, and the collective aspect by three themes. The individual factors include a lack of knowledge, illiteracy, and low self-efficacy among pregnant women, as well as indifference and apathy towards iron pill consumption. In terms of relationships, it was determined that mothers necessitate the support of their spouses to take iron tablets and the assistance of health personnel to obtain information. The Karawang district's pregnant women are collectively denied access to pregnancy-related activities and educational programs, predominantly as a result of their demanding work schedules and lack of transportation.

DISCUSSION

1) Personal Dimension

Since 2013, the Indonesian government has acknowledged that the first 1000 days of life constitute a phase of nutritional vulnerability, hence prioritising pregnant women for nutritional enhancement (President of The Republic of Indonesia, 2013). Indonesian National Development Planning Agency reported that Indonesia is not progressing adequately to achieve the global nutrition targets established during the UN Decade of Action on Nutrition 2016–2025, which adversely affects the quality of human resources in the country (National Development Planning Agency and Unicef, 2019). In 2022, the prevalence of stunting in Indonesia was 21.6%, placing Indonesia in the third highest stunting prevalence position in Southeast Asia and the twenty-fifth highest in the world (Ministry of State Secretariat of the Republic of Indonesia, 2021a; Unicef/WHO/World Bank, 2021; WHO et al., 2023; World Bank, 2021), in contrast, Indonesian population has the lowest average height in the world, as stated in the Global Population Review 2023 (Bhwana, 2024). Additionally, stunting has a detrimental impact on the country, as evidenced by the statement of Setiawan Wangsaatmaja (2021), who stated that the Indonesian government experienced a loss of IDR 260 trillion to IDR 390 trillion in 2017 as a result of stunting. The World Health Organisation (WHO) aims to lower the worldwide stunting rate to 104 million cases by 2025 and 87 million cases by 2030 (Unicef/WHO/World Bank, 2021). According to the 2018 Basic Health Research statistics (Figure 1), stunting is more common than 20% in all provinces of Indonesia.

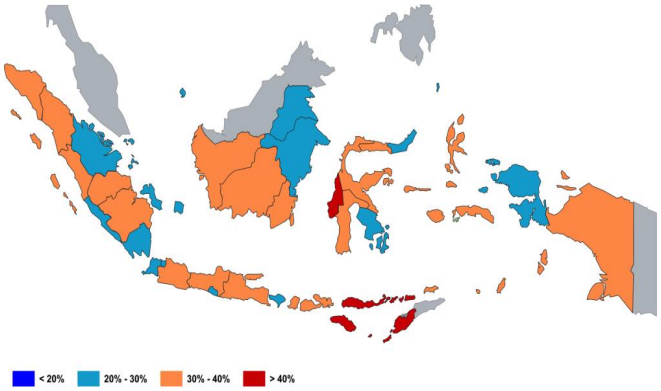

Figure 1 Stunting Prevalence in Indonesia

Source: The Indonesia Ministry of Health 2019(The Indonesia Ministry of Health, 2019)

Pregnant women are a critical target for reducing the prevalence of stunting by maintaining a healthy pregnancy process. However, the iron supplementation tablet program is confronted with challenges and obstacles associated with women's empowerment, as evidenced by the results of in-depth interviews with 24 mothers who gave birth in Karawang Regency. Pregnancy is a pivotal stage in a woman's life, characterised by major hormonal and physiological changes. These changes necessitate a special emphasis on maternal health and well-being, particularly during prenatal treatment, which includes iron and folic acid supplementation. These vitamins are vital for avoiding anaemia and promoting healthy foetal development. Empirical studies have found that various developing countries face challenges in terms of compliance of pregnant women in consuming iron and folic acid, because pregnant women tend to be careless and apathetic (Agegnehu et al., 2019; Armi et al., 2023; Assefa et al., 2019; Derso et al., 2018).

Iron and folic acid (IFA) supplementation compliance is defined as a daily intake of at least 60 mg of iron and 400 µg of folic acid for a minimum of 90 days during pregnancy (Tegodan et al., 2021). However, a study conducted by Derso et al. (2018) revealed that only approximately one-third of women adhered to the recommended dosage of supplements.

Table 2 lists the determinants of women's empowerment in individual aspects. The problems that contributed to the failure of iron supplementation were a sense of indifference, laziness, lack of comprehension, low self-efficacy, and misinformation. The in-depth interview findings demonstrated that many pregnant womens were unaware of the need of taking iron supplements on a regular basis and its benefit for their own and their newborns. This misinformation frequently leads women to underestimate iron supplements on both their own and their fetus's health.

Derso et al. (2018) conducted a study in Ethiopia that stated a strong correlation between compliance with iron and folic acid supplementation and the level of education of mothers and spouses, the number of family members, economic status, and early pregnancy visits. Consequently, effective strategies for preventing anaemia by enhancing compliance with iron and folic acid supplementation should encompass educational initiatives for pregnant women, the enhancement of economic conditions, and the expeditious scheduling of antenatal visits (Derso et al., 2018). Tegodan et al. (2021) further stated that compliance behaviour was linked to an understanding of anaemia, access to information, health problems, and amnesia. This indicates that enhancing the dissemination of information regarding supplements and establishing a reminder system is essential to augment maternal adherence to iron supplementation throughout pregnancy. Consistent with the research findings, an interview with a pregnant mother in a rural part of Karawang Regency, who has completed junior high school, revealed that she neglected to take iron tablets.

"Yes, I rarely drink it, hehehe." Mrs. A

Mekonnen et al. (2021) conducted a study involving 414 pregnant women, revealing that those with a strong perception of benefits (AOR = 2.72, 95% CI: 1.25–5.90) and elevated self-efficacy (AOR = 2.91, 95% CI: 1.40–6.04) were 2.72 times and 2.91 times more likely, respectively, to adhere to folic acid supplementation and iron tablets compared to mothers lacking such perceptions and self-efficacy. Moreover, the individual dimension of women's empowerment becomes particularly complex when questioning moms living in extreme poverty with just elementary school education. When enquired about measures to prevent stunting in their newborns, the mothers expressed uncertainty.

“I don’t understand, I don’t know what to do.” Mrs. W

The subsequent concern is health misinformation, which is the adoption of inaccurate information as fact. This phenomenon frequently occurs in complex situations, where the brain processes a variety of information, resulting in the disregard of accurate knowledge, which ultimately leads to misleading conclusions (Linden et al., 2023).

Adherence to iron supplement consumption may be impeded by inadequate access to reliable health information, pregnant women may be unaware of the impact of iron deficiency anaemia on their health and the well-being of the foetus, resulting in non-compliance with the ingestion of iron tablets (Assefa et al., 2019; Talegawkar et al., 2021).

This illness will have dire repercussions when it develops in pregnant women, as they are particularly vulnerable to anaemia and other difficulties associated with pregnancy. Health misinformation during pregnancy can adversely affect both the mother and the foetus, as exemplified by misconceptions regarding anaemia, which may lead to detrimental outcomes if not addressed (Afwandi et al., 2021).

The findings from a comprehensive interview with a mother who recently gave birth to her second child, while managing comorbidities such as hypertension and heart disease during pregnancy, reveal that the first child is at an age necessitating additional care. The mother's health condition mandates consistent hospital check-ups, her husband is employed, there is no childcare provision, and the family's financial circumstances are constrained. The Public Health Center's examination results indicated that the pregnant woman's condition required referral for additional care at the hospital. Health misinformation was disclosed during the interview, as the mother, who had a history of heart disease, was under the impression that she had consumed an excessive quantity of medication. As a result, she expressed apprehension that the renal function could be negatively impacted by the consumption of supplementary medications, such as iron supplement tablets. This apprehension led the mother to prefer herbal therapy as an alternative and illustrated her reluctance to use iron supplement during her pregnancy.
"I regularly take high blood pressure medication and heart disease medication. If I take that medication, I shouldn't take it too often. I'm afraid of kidney disease, as the doctor said. I don't take iron tablets anymore, so I'm looking for herbal medicine (K-Link). I feel better, so I don't get dizzy as often." Mrs. S

Of course, in the circumstances, the mother must not only comprehend her pregnancy condition, but also the disease from which she is enduring. Health misinformation can also result from the overlapping of information in the brain. The brain retains old information, and when new information is presented, the brain responds by accepting the most rational information as true. One of the reasons for the occurrence of health misinformation is that individuals are psychologically inclined to believe information that aligns with their needs, particularly if it is provided by a trusted source, a member of their social group, or a member of their environment. Additionally, the repetition of the dissemination of inaccurate information can lead to its acceptance as truth (Linden et al., 2023).

The utilisation and accessibility of health information by pregnant women are critical components of the provision of high-quality prenatal care (Ghiasi, 2019). The knowledge and attitudes of pregnant women are influenced by health literacy, information-seeking behaviour, and barriers to accessing health information (Burleson et al., 2020; Ghiasi, 2019; Javanmardi et al., 2018; Shieh et al., 2009).

“Since this is my third pregnancy, I know what to do already. But occasionally I forget; perhaps the interval between pregnancies is too long. During my check-up, the midwife should have told me, This is important for you to take, so I didn't take it lightly.” Mrs. N

The healthcare system and the quality of healthcare professionals have difficulties in conveying health information to clients, especially in the digital age, when misinformation can spread swiftly within seconds (Linden et al., 2023). Moreover, the attitudes and knowledge of pregnant women are significantly shaped by healthcare practitioners, family, acquaintances, and the internet, which are commonly consulted sources of information. However, their access to accurate information may be hindered by obstacles such as language barriers, lack of understanding, negative attitudes from healthcare providers, financial limitations, cultural beliefs that shape views and practices about prenatal care, and restricted access to health providers (Ghiasi, 2019; Taheri et al., 2021).

2) Relasional Dimension

In-depth interviews with pregnant women in Karawang Regency regarding women's empowerment in relational aspects related to iron supplementation tablets showed that a strong husband-wife relationship and direct assistance from husband can increase pregnant women's compliance with iron consumption. Based on the results of interviews with mothers who live far from their husbands, there is non-compliance with iron consumption.

“Sometimes 10 or 20 iron tablets were taken throughout a month, sometimes not every night, and occasionally not at all. My spouse didn't pay much attention because he was often far away, so perhaps I was thinking a lot too. The doctor also mentioned that it seemed like I was thinking a lot.” Mrs. E.

These findings indicate that, in addition to the importance of support from the social environment during pregnancy, empowerment of pregnant women and increasing their awareness of their needs is an equally important aspect.

Compliance with iron and folic acid (IFA) supplementation during pregnancy is essential to maintaining maternal health and promoting optimal fetal development (García-Casal et al., 2018). García-Casal et al. (2018) emphasized in their publication that the challenges in obtaining timely iron and folic acid (IFA) supplementation in many middle- and low-income countries are related to support from husbands and/or mothers-in-law. Elly et al. (2021) conducted a study showing that cadres also contributed significantly to the effectiveness of iron tablet consumption by pregnant women. This study implemented a three monts cadre mentoring program for eleven pregnant women in the third trimester. This program had a positive impact on maternal nutritional awareness during pregnancy, which resulted in 81.12% of participants consuming iron tablets every day. In addition, compliance can be improved by prenting social support, family support, and involvement with health professionals (Kubuga et al., 2020; Mbhenyane & Cherane, 2017). Research shows that active involvement of partners in care during pregnancy can significantly improve pregnant women's compliance with iron tablet consumption (Assefa et al., 2019;

Mekonnen et al., 2021). Conversely, maternal health outcomes and compliance can be negatively affected by inadequate support or negative attitudes from the family (Asmare, 2019; Mabuza et al., 2021).

An effective strategy to overcome compliance difficulties is through the active involvments of the family, especially the husband. Family-centered programs can help pregnant women maximize the benefits of iron and folic acid supplementation, thereby improving maternal and neonatal health outcomes. Samanta (2020) evaluated women's self-love through observation. The Indian Human Development Survey (IHSD) questionnaire, published in 2011, was used in this study. This questionnaire contains 18 variables that are used as indicators of women's empowerment. The study findings showed that women's empowerment was influenced by education level, marital status, caste, and prenatal care. Samari (2019) reported in her study conducted in Egypt that individual characteristics, partner attributes, and household circumstances were closely related to decision-making behavior.

3) Collective Dimension

Karawang Regency is known as one of the main industrial areas in Indonesia, however community access to quality health services is still uneven. In the workplace, pregnant women still face obstacles in accessing health services, some workplaces do not provide adequate health facilities or health education facilities. In organisations predominantly staffed by female employees, the corporation has occasionally provided educational programs for pregnant women; however, many pregnant women are unable to participate due to a lack of information.

“From the time I was pregnant until I gave birth, I never went to a prenatal class. I was unaware that such an event existed; typically, when there is pregnancy exercise, your friend asks, why didn't you attend? I'm not sure.” Mrs. S

Another pregnant woman indicated that this was associated with targets in the manufacturing department. Team leaders frequently deny pregnant women permission to participate in health education events that provided in the workplace.

“I didn't attend the prenatal class since it was difficult to get permission to leave work, some people didn't let me, and I had to walk a considerable distance.” Mrs. N

A significant problem encountered by employed pregnant women is allocating time for the prenatal appointments, which typically occur four to eight times throughout pregnancy (Zangmo et al., 2020). This challenge arises from demanding work schedules or insufficient workplace flexibility, potentially resulting in delays in care or missed appointments entirely (Islam & Masud, 2018).

Insufficient access to proper prenatal care might result in significant repercussions. Studies indicate that women lacking prenatal care during the first trimester are fivefold more susceptible to issues that may result in pregnancy-related mortality (Crandall, 2021). This underscores the necessity of providing working pregnant women with adequate time and support to prioritise their antenatal care without compromising their employment or financial security (Weldemariam et al., 2018).

Derso et al. (2018) indicated that maternal and paternal education levels, family size, economic status, and early prenatal visits were significantly connected with adherence to iron and folic acid supplementation. Consequently, attempts to avert anaemia by enhancing compliance with iron and folic acid supplements should encompass educational initiatives for pregnant women, the enhancement of economic conditions, and timely antenatal care (ANC).

In this setting, the roles of employers and policymakers are crucial. The implementation of supportive workplace practices, such as the allocation time for antenatal consultations or the provision of flexible work schedules for pregnant women, can help them overcome the obstacles they face. These policies alleviate the burden on pregnant women and guarantee that their healthcare requirements are fulfilled without imposing economic strain (Zangmo et al., 2020). Furthermore, healthcare professionals might enhance the accessibility of antenatal care for employed pregnant women through extended service hours or telemedicine options, facilitating easier and more flexible access to healthcare for pregnant women, so allowing them to maintain their employment obligations (Jinga et al., 2019). These joint initiatives can foster a more supportive atmosphere for employed pregnant women, enabling them to experience healthy and well-structured pregnancies.

4) The implications of iron supplementation tablets for the Sustainable Development Goals

The failure to meet the iron supplementation target for pregnant women in Indonesia could have severe consequences for the attainment of numerous Sustainable Development Goals (SDGs), particularly those that pertain to health, women's well-being, and the reduction of social inequality.

The aim of SDG 3 is to guarantee optimal health and well-being for all individuals (National Development Planning Agency, 2017). The prevalence of anaemia in pregnant women might increase due to the failure to supplement with iron, presenting a considerable health risk for both the mother and the infant (Heesemann et al., 2021; Oaks et al., 2019). This includes increased risk of maternal death and preterm birth (Pinheiro et al., 2015; Taneja et al., 2020). The long-term effects of iron supplementation failure can also worsen neonatal malnutrition, increase the risk of stunted growth, and inhibit children’s brain development, thereby hampering their cognitive and physical growth (Rahman et al., 2016; Taneja et al., 2020; Yisak et al., 2015). Thus, achievement of SDG 3, which focuses on reducing maternal and infant mortality and increasing access to good health care, may be hampered by non-adherence of pregnant women to iron supplementation.

The health of pregnant women is strongly affected by the lack of iron supplementation (Islam Khan, 2013; Rahman et al., 2016). This is an element of the initiative to mitigate gender inequities in health in alignment with SDG 5, which aims to achieve gender equality. Pregnant women who are anaemic are at an increased risk of experiencing health issues that can diminish their quality of life (Heesemann et al., 2021; Wegmüller et al., 2020). The opportunity to completely contribute to society is also diminished by the impact of poor maternal health on their ability to participate in economic, social, and political activities. The lack of iron supplementation for women hinders gender equity in access to adequate health, which is essential for sustainable development. Iron supplementation is a facet of efforts to alleviate malnutrition in pregnant women. A significant nutritional difficulty faced by pregnant women is iron deficiency anaemia. If supplementing fails, achieving SDG 2, Zero Hunger, aimed at alleviating malnutrition and hunger, will become increasingly difficult. Insufficient iron intake in pregnant women can exacerbate malnutrition in babies and children, as well as elevate stunting rates, hence increasing the probability of delivering low birth weight infants. This will undoubtedly impede the attainment of SDG 2 (Bhutta et al., 2008; Chandra et al., 2021).

Pregnant women with low socio-economic status, who have limited access to adequate health services, are more likely to fail to comply with iron supplementation tablets (Mason et al., 2014; Oaks et al., 2019; Wirth et al., 2022). This results in health disparities between affluent and impoverished segments of society, which is one of the objectives of SDG 10, which is to mitigate social and economic inequality. The failure to meet supplementation objectives can exacerbate social inequalities, as pregnant women in remote or resource-limited areas are more likely to encounter challenges in obtaining adequate health services. Indonesia will face significant challenges in reducing inequality in society, a key goal of SDG 10, if these issues are not addressed.

Mothers' ability to effectively educate and care for their children can be hampered by their poor health. Mothers with anemia-related health problems are less likely to have the time and energy needed to provide optimal care for their children. Ultimately, this can impact the quality of children's education, as they are raised in an environment that is less supportive of their health and well-being (Chauhan et al., 2022; Heesemann et al., 2021; Ojha et al., 2020). Learning disabilities and developmental delays are more prevalent among children from unfit families. Therefore, the attainment of SDG 4, which is dedicated to enhancing the quality of education for all, may be jeopardised if pregnant women do not receive adequate nutrition, as they are a component of the family environment that encourages their children's education (Chauhan et al., 2022; Heesemann et al., 2021; Ojha et al., 2020)..

CONCLUSION

In the case of iron supplementation, pregnant women in Karawang Regency still face a major issue related to the empowerment aspect of women. These obstacles are the result of complex interactions between individual, relational, and collective elements. Individually, many pregnant women do not have proper understanding about the importance of iron supplementation to prevent anemia which is often caused by limited access to pregnancy education and information, as well as a lack of clear and relevant advice regarding iron supplementation during pregnancy. Financial constraints and time constraints due to work also prevent women from prioritizing their health needs. From a relational aspect, pregnant women's health choices are strongly influenced by their social relationships, including family members, husbands, and health professionals. In addition, a lack of effective communication and assistance from family members, husbands, and health professionals can make women unsure about the importance of this supplementation. Collectively, the health service system and social infrastructure in Karawang Regency are not evenly distributed to meet the needs of pregnant women. As a result, many pregnant women do not receive timely antenatal care, which is essential for detecting and treating anemia at an early stage.

The interactions between individual, relational, and collective burdens together regarding women iron supplementation during pregnancy, may result in untreated maternal anaemia. This may increase the risk of complications during pregnancy and childbirth, which resulted preterm birth, low birth weight, and maternal death, and hinders the achievement of the SDG's target of reducing stunting in children nationally or globally.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest associated with this research.

AVAILABILITY OF DATA AND MATERIALS

The datasets and materials used in this study are available upon reasonable request to the corresponding author.

REFERENCES

1. Afwandi, Afwandi, Sugito Sugito, Nurliana Nurliana, Rinidar Rinidar, and Teuku Reza Ferasyi. 2021. "The Relationship Between the Adequacy of Iron Tablet Supplementation and Hemoglobin Level in Pregnant Women." Atlantis Press. doi: 10.2991/absr.k.210420.028.
2. Agegnehu, Gashaw, Azeb Atenafu, Henok Dagne, and Baye Dagnew. 2019. "Adherence to Iron and Folic Acid Supplement and Its Associated Factors among Antenatal Care Attendant Mothers in Lay Armachiho Health Centers, Northwest, Ethiopia, 2017." Hindawi Publishing Corporation 2019:1–9. doi: 10.1155/2019/5863737.
3. Armi, Widdefrita, Novelasari, Eka Rahmiati, and Nindy Audia Nadira. 2023. "Effectivity of Pregnancy Paper Fan and Android Notification System Toward Knowledge, Attitude, and Adherence of Pregnant Women on Iron Supplements Consumption." Airlangga University 11(1SI):26–32. doi: 10.20473/jpk.v11.i1si.2023.26-32.
4. Asmare, Wondwossen Niguse. 2019. "Adherence Rate to Iron Folic Acid Supplementation among Pregnant Women." Cold Spring Harbor Laboratory.

5. Assefa, Habtamu, Solomon Mekonnen Abebe, and Mekonnen Sisay. 2019. "Magnitude and Factors Associated with Adherence to Iron and Folic Acid Supplementation among Pregnant Women in Aykel Town, Northwest Ethiopia." BioMed Central 19(1). doi: 10.1186/s12884-019-2422-4.
6. Bhwana, Petir Garda. 2024. "Countries with the Highest and Shortest Average Height in the World." Tempo, January 21.
7. Burleson, Grace, Mustafa Naseem, and Kentaro Toyama. 2020. "An Exploration of African-American Pregnant Women's Information-Seeking Behavior in Detroit." 1–12. doi: 10.1145/3392561.3394647.
8. Crandall, Katherine. 2021. "Pregnancy-Related Death Disparities in Non-Hispanic Black Women." SAGE Publishing 17. doi: 10.1177/17455065211019888.
9. Creswell, John W., and J. David Creswell. 2023. Research Design. 6th ed. New York: SAGE Publications, Inc.
10. Derso, Henok Dagne, Gashaw Agegnehu, Azeb Atenafu, and Baye Dagnew. 2018. "Adherence to Iron and Folic Acid Supplement and Associated Factors among Antenatal Care Attendant Mothers In Lay Armachiho Health Centers, Northwest, Ethiopia, 2017." Cold Spring Harbor Laboratory.
11. Elly, Nur, Asmawati Asmawati, Kheli Fitria Annuril, Rahma Annisa, Betty Yosephin Simanjuntak, and Anang Wahyudi. 2021. "Pendampingan Ibu Hamil Dalam Self Care Nutrition Management (SNM) Dalam Upaya Pencegahan Risiko Stunting Di Kecamatan Air Periukan Seluma." 3(1):48–58. doi: 10.37012/jpkmht.v3i1.551.
12. Fajriyah, Iklilah Muzayyanah Dini, Yuliana Mahdiah, Eva Fahmadia, and Indah Lukitasari. 2020. "Profil Perempuan Indonesia Tahun 2019." Kementerian Pemberdayaan Perempuan Dan Perlindungan Anak.
13. García-Casal, Maria Nieves, Diana Estevez, and Luz María De-Regil. 2018. "Multiple Micronutrient Supplements in Pregnancy: Implementation Considerations for Integration as Part of Quality Services in Routine Antenatal Care. Objectives, Results, and Conclusions of the Meeting." Wiley 14(S5).
14. Ghiasi, Ashraf. 2019. "Health Information Needs, Sources of Information, and Barriers to Accessing Health Information among Pregnant Women: A Systematic Review of Research." Informa 34(8):1320–30.
15. Islam, M. Mazharul, and Mohammad Shahed Masud. 2018. "Determinants of Frequency and Contents of Antenatal Care Visits in Bangladesh: Assessing the Extent of Compliance with the WHO Recommendations." Public Library of Science 13(9):e0204752–e0204752. doi: 10.1371/journal.pone.0204752.
16. Javanmardi, Marzieh, Mahnaz Noroozi, Firoozeh Mostafavi, and Hasan Ashrafi-rizi. 2018. "Internet Usage among Pregnant Women for Seeking Health Information: A Review Article." Medknow 23(2):79.
17. Jinga, Nelly, Constance Mongwenyana, Aneesa Moolla, Given Malete, and Dorina Onoya. 2019. "Reasons for Late Presentation for Antenatal Care, Healthcare Providers' Perspective." BioMed Central 19(1). doi: 10.1186/s12913-019-4855-x.
18. Karawang Health Office. 2022. Karawang Regency Health Profile Year 2022. Karawang.
19. Kubuga, Clement Kubreziga, Jeremiah Asangalisa, Caroline Boahen, Sawudatu Mohammed, Eugenia Akoto-Mensah, Fatimah Mahama, Bernard Ofosu, Isaac Tetteh Kobla, Regina Asanga, and Won O. Song. 2020. "Motivators and Barriers to Prenatal Supplement Use Among Women in Northern Ghana." Elsevier BV 4:nzaa043_071-nzaa043_071. doi: 10.1093/cdn/nzaa043_071.
20. Kuntari, Titik, and Sri Supadmi. 2024. "Anemia in Young Pregnant Women: A Cross-Sectional Study in Indonesia." Jurnal Kedokteran Dan Kesehatan Indonesia 15(October):147–61. doi: 10.20885/jkki.vol15.iss2.art3.
21. Linden, Sander van der, Dolores Albarracín, Lisa Fazio, Deen Freelon, Jon Roozenbeek, Briony Swire-Thompson, and Jay Van Bavel. 2023. "Using Psychological Science to Understand and Fight Health Misinformation." APA Consensus Statement (November).
22. Mabuza, Gugulethu N., Alexander Waits, Owen Nkoka, and Li-Yin Chien. 2021. "Prevalence of Iron and Folic Acid Supplements Consumption and Associated Factors among Pregnant Women in Eswatini: A Multicenter Cross-Sectional Study." BioMed Central 21(1). doi: 10.1186/s12884-021-03881-8.
23. Mbhenyane, Xikombiso, and Matodzi Cherane. 2017. "Compliance with the Consumption of Iron and Folate Supplements by Pregnant Women in Mafikeng Local Municipality, North West Province, South Africa." Makerere University 17(3):657. doi: 10.4314/ahs.v17i3.8.
24. Mekonnen, Abebe, Wallelign Alemnew, Abebe Zegeye, and Getu Debalkie Demissie. 2021. "Adherence to Iron with Folic Acid Supplementation Among Pregnant Women Attending Antenatal Care in Public Health Centers in Simada District, Northwest Ethiopia: Using Health Belief Model Perspective." Dove Medical Press Volume 15:843–51. doi: 10.2147/ppa.s299294.
25. Miedema, Stephanie Spaid, Regine Haardörfer, Amy Webb Girard, and Kathryn M. Yount. 2018. "Women's Empowerment in East Africa: Development of a Cross-Country Comparable Measure." World Development 110:453–64. doi: 10.1016/j.worlddev.2018.05.031.
26. Ministry of State Secretariat of the Republic of Indonesia. 2021a. "National Stunting Prevalence."
27. Ministry of State Secretariat of the Republic of Indonesia. 2021b. "Presidential Regulation of the Republic of Indonesia No. 72 of 2021 Concerning the Acceleration of Stunting Reduction."
28. Muh, Andi, Asrul Irawan, Andi Mukramin Yusuf, Harna Harna, Annisa Aulia, and Kyla Denaneer. 2024. "Maternal Characteristics and Iron Intake as a Factors of Iron Deficiency Anemia among Pregnant Women Corresponding." International Journal of Current Science Research and Review 07(11):8423–28. doi: 10.47191/ijcsrr/V7-i11-28.
29. National Development Planning Agency. 2017. "Sustainable Development Goals." Retrieved February 28, 2019 (http://sdgs.bappenas.go.id).
30. National Development Planning Agency and Unicef. 2019. "Emerging Findings for Reaching the Targets." Achieving the SDGs for Children in Indonesia: Emerging Findings for Reaching the Targets 1–28.
31. National Poverty Eradication Team. 2017. 100 Priority Districts/Cities for Stunting Intervention. Jakarta: Secretariat of the Vice President of the Republic of Indonesia.

32. Nisar, Yasir Bin, Victor M. Aguayo, Sk Masum Billah, and Michael J. Dibley. 2020. "Antenatal Iron-Folic Acid Supplementation Is Associated with Improved Linear Growth and Reduced Risk of Stunting or Severe Stunting in South Asian Children Less than Two Years of Age: A Pooled Analysis from Seven Countries." Nutrients 12(9). doi: 10.3390/nu12092632.
33. Noptriani, Sonia, and Demsa Simbolon. 2022. "Probability of Non-Compliance to the Consumption of Iron Tablets in Pregnant Women in Indonesia." Journal of Preventive Medicine and Hygiene 63(3):E456–63. doi: 10.15167/2421-4248/jpmh2022.63.3.2340.
34. Permanasari, Yurista, Meda Permana, Joko Pambudi, Bunga Christitha Rosha, Made Susilawati, Eko Putri Rahajeng, Agus Triwinarto, and Rachmalina S. Prasodjo. 2020. "Tantangan Implementasi Konvergensi Pada Program Pencegahan Stunting Di Kabupaten Prioritas." Media Penelitian Dan Pengembangan Kesehatan.
35. President of The Republic of Indonesia. 2013. "Presidential Regulation No. 42 of 2013 Concerning the National Movement to Accelerate Nutrition Improvement."
36. Puspita, Linda, Mareza Yolanda Umar, and Kusuma Wardani Psiari. 2022. "Prevention of Stunting Through The First Thousand Days of Life." HIV Nursing 22(2):671–73.
37. Rowlands, Jo. 1997. "Questioning Empowerment: Working With Women in Honduras." 196.
38. Samanta, Tannistha. 2020. "Women's Empowerment as Self-Compassion?: Empirical Observations from India." PLoS ONE 15(5):1–18. doi: 10.1371/journal.pone.0232526.
39. Samari, Goleen. 2019. "Women's Empowerment in Egypt: The Reliability of a Complex Construct." Sexual and Reproductive Health Matters 27(1):146–59. doi: 10.1080/26410397.2019.1586816.
40. Sasube, Laurensi M., and Aldian H. Luntungan. 2017. "Asupan Gizi Pada 1000 Hari Pertama Kehidupan." J. Ilmu Dan Teknologi Pangan 5(2):1–5.
41. septianto, andre. 2021. "Sustainable Development Goals in ASEAN (1989 - 2020)."
42. Setiawan Wangsaatmaja. 2021."Acceleration of Stunting Control in West Java."
43. Shieh, Carol, Rose M. Mays, Anna M. McDaniel, and Jennifer Yu. 2009. "Health Literacy and Its Association With the Use of Information Sources and With Barriers to Information Seeking in Clinic-Based Pregnant Women." Taylor & Francis 30(11):971–88. doi: 10.1080/07399330903052152.
44. Taheri, Safoura, Mahmoud Tavousi, Zohre Momenimovahed, Ashraf Direkvand-Moghadam, Nazanin Rezaei, Nasibeh Sharifi, and Ziba Taghizadeh. 2021. "Determining Health Literacy Level and Its Related Factors Among Pregnant Women Referred to Medical and Health Centers of Tehran in 2019: A Cross-Sectional Study." 22(10). doi: 10.5812/semj.109592.
45. Talegawkar, Sameera A., Yichen Jin, Erica Sedlander, Rohini Ganjoo, Satyaranjan Behera, Loretta DiPietro, and Rajiv N. Rimal. 2021. "A Social Norms-Based Intervention Improves Dietary Diversity among Women in Rural India: The Reduction in Anemia through Normative Innovations (RANI) Project." Multidisciplinary Digital Publishing Institute 13(8):2822. doi: 10.3390/nu13082822.
46. Tegodan, Eleni, Gurmesa Tura, and Ayantu Kebede. 2021. "Adherence to Iron and Folic Acid Supplements and Associated Factors Among Pregnant Mothers Attending ANC at Gulele Sub-City Government Health Centers in Addis Ababa, Ethiopia." Dove Medical Press Volume 15:1397–1405. doi: 10.2147/ppa.s301630.
47. The Indonesia Ministry of Health. 2019. Main Results of 2018 Basic Health Research.
48. The Minister of National Development Planning. 2021. "Regulation of the Minister of National Development Planning/Head of the National Development Planning Agency of the Republic of Indonesia Number 2 of 2021." Menteri Perencanaan Pembangunan Nasional (8.5.2017):2003–5.
49. Tim Ayo Sehat. 2020. "Gizi Seimbang Untuk Ibu Hamil." Kemenkes RI. Retrieved November 1, 2023 (https://ayosehat.kemkes.go.id/1000-hari-pertama-kehidupan/home#:~:text=Pada ibu hamil normal diperlukan,mencapai 30 gram per hari.).
50. Unicef/WHO/World Bank. 2021. "Levels and Trends in Child Malnutrition UNICEF / WHO / World Bank Group Joint Child Malnutrition Estimates Key Findings of the 2021 Edition." World Health Organization 1–32.
51. Unicef. 2021. "Conceptual Framework on Maternal and Child Nutrition." Nutrition and Child Development Section, Programme Group 3 United Nations Plaza New York, NY 10017, USA 2–3.
52. Weldemariam, Solomon, Ashenafi Damte, Kedir Endris, Melba C. Palcon, Kidisti Tesfay, Almaz Berhe, Tsige Araya, Hadgay Hagos, and Haftom Gebrehiwot. 2018. "Late Antenatal Care Initiation: The Case of Public Health Centers in Ethiopia." BioMed Central 11(1). doi: 10.1186/s13104-018-3653-6.
53. WHO. 2023. "Low Birth Weight." WHO International. Retrieved February 7, 2024 (https://www.who.int/data/nutrition/nlis/info/low-birth-weight).
54. WHO, Unicef, and World Bank. 2023. Levels and Trends in Child Malnutrition. New York, Geneva, Washington DC.
55. Widodo, Yekti, Prisca Petty Arfines, and Andre Yunianto. 2023. "Risk Factors for Anaemia in Pregnant Women Who Take Iron Folic Acid Tablets in Locus Stunting Districts in Indonesia." KnE Medicine 2023:284–94. doi: 10.18502/kme.v3i3.13515.
56. World Bank. 2021. "Prevalence of Stunting, Height for Age (% of Children under 5)." The World Bank Data. Retrieved April 13, 2021 (https://data.worldbank.org/indicator/SH.STA.STNT.ZS).
57. Wulandari, Novianti Dewi, and Sugeng Iwan. 2024. "Pengaruh Penyuluhan Gizi Terhadap Kepatuhan Mengonsumsi Tablet Fe Pada Ibu Hamil." Nurtiture Journal 03(3):103–10.
58. Zalfa, Tuffahati, Andi Muh, Asrul Irawan, Zakia Umami, Lusi Anindia, and Andi Mukramin Yusuf. 2024. "Relationship Between Energy , Protein , Iron , and Calcium Intake with Hemoglobin Levels of Pregnant Women." 3(3):177–84.
59. Zangmo, Rinchen, Archana Kumari, Deepali Garg, and Aparna Sharma. 2020. "Redesigning Routine Antenatal Care in Low Resource Setting during COVID-19 Pandemic." Medknow 9(9):4547.