



## Counseling on Make a Match Balanced Nutrition for Pregnant Women and Practice/Giving Cookies in Sukahitu in Pantai Labu Pekan Village, Pantai Labu District

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### ABSTRACT

Anemia is a health problem that occurs in all countries, especially developing countries, one of which is Indonesia. According to WHO, anemia in pregnant women is the condition of a mother with a hemoglobin (Hb) level in her blood of less than 11gr/dl as a result of the inability of the tissue that forms red blood cells (Erythropoetic) in its production to maintain the Hb concentration at a normal level. This service aims to overcome the problems of knowledge and attitudes among WUS women and pregnant women. With counseling and role playing make a match cards, it can increase knowledge and attitudes towards balanced nutrition in WUS mothers and pregnant women so that WUS mothers and pregnant women become enthusiastic about using make a match card role playing so that it makes mothers more interested in playing make a match card roles. In order to create a relationship between groups of mothers in learning to receive material and to make WUS mothers and pregnant women more creative and active in receiving counseling material so that it is easier for mothers to understand and take a stance on balanced nutrition education.

**Keywords:** Balanced Nutrition, WUS, Make a Match, Knowledge, Attitude.

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### INTRODUCTION

Anemia is a health problem that occurs in all countries, especially developing countries, one of which is Indonesia (Pesak et al., 2023; Santosa & Luthfiyyah, 2020; Sitaresmi et al., 2023). According to WHO, anemia in pregnant women is a condition of mothers with hemoglobin (Hb) levels in their blood less than 11gr / dl as a result of the inability of red blood cell-forming tissue (Erythropoetic) in its production to maintain Hb concentrations at normal levels (Lobo et al., 2023).

Data from the World Health Organization (WHO) 2010, globally the prevalence of anemia in pregnant women worldwide is 41.8%. The prevalence of anemia in pregnant women in Indonesia increased compared to 2013, in 2013 as many as 37.1% of anemic pregnant women while in 2018 it increased to 48.9% (Mahdiah & Rahmadani, 2023).

Based on the Profile of the North Sumatra Provincial Health Office, an anemia survey conducted in 4 regencies/cities in North Sumatra, namely Medan City, Binjai, Deli Serdang Regency and Langkat, it is known that 40.50% of women suffer from anemia (World Health Organization, 2017). During pregnancy, maternal nutritional needs will increase. It is important for pregnant women to pay attention to the food consumed so that the menu is balanced and nutritious. A balanced nutritious menu is a balanced condition between the nutrients needed to maintain the health of pregnant women with the nutrients needed for fetal growth and development. Nutritional status is a measure of success in fulfilling nutrition for pregnant women. Nutritional status is also defined as the health status produced by the balance between nutrient needs and inputs. Nutrition for pregnant women is a healthy and balanced food that must be consumed by mothers during their pregnancy, with two meals for people who are not pregnant (Syamsuryanita, Irmawati 2022)

Lack of knowledge about nutrition of pregnant women can then result in lack of nutritious food during pregnancy because basically knowledge about pregnant nutrition is useful for mothers. Mothers with good knowledge understand correctly how necessary it is to increase energy and good nutrition in fetal growth and development (Fitria et al., 2022). The needs of each type of nutrition during pregnancy are certainly different from nutritional needs when not pregnant. During pregnancy, there needs to be an additional 300 calories, especially in the second and third trimesters (Katare et al., 2021; Mauri et al., 2021; Muluh et al., 2024). The daily needs of pregnant women are calcium as much as 1000-1200 milligrams, folate as much as 600-800 micrograms, and iron as much as 27 milligrams. The nutritional content needed during pregnancy includes protein, carbohydrates, folate, and iron (Mardiana Ramdan and Novitriani 2020).

To overcome the problem of knowledge, attitudes and actions in the community, one of the programs contained in the action plan of the Ministry of Health of the Republic of Indonesia is to improve community nutrition education (Ardoin et al., 2020; Geletu & Mihiretie, 2023; Rudnicka et al., 2020). There are several activities related to sensitizing the public in the field of nutrition, including nutrition promotion, nutrition counseling, nutrition advocacy, nutrition training, and nutrition consultation/counseling (Isanovic et al., 2023; Salvia & Quatromoni, 2023). Ministry of Health (1991) in Supriasa (2012), Nutrition counseling is a learning process to develop a positive understanding and attitude towards nutrition so that the person concerned can have and form good eating habits in daily life (Probst et al., 2024; Screti et al., 2024). In other words, nutrition counseling is the process of helping others form and have good eating habits.

Pantai Labu Pekan Village, Pantai Labu District, Deli Serdang Regency, is one of the villages whose area is located on the coast. According to research conducted (Marbun et al., 2019) there are still toddlers who experience malnutrition, low poverty coverage, and low knowledge of pregnant women in toddlers causing the growth and development of toddlers to be disrupted and this can affect their health status widely. The potential possessed by this area is natural resources in the form of marine wealth such as fresh fish and also agricultural products such as katuk leaves, moringa leaves and so on, as well as human resources that accumulate owned by this village.

## RESEARCH METHODS

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This study is an observational study with a descriptive research design carried out in June 2023 in Pantai Labu Village, Pekan Beach, Pantai Labu District. In this community service activity, the method carried out in counseling Balanced Nutrition for WUS Women and Pregnant Women by playing the role of Make A Match cards. (Mariani et al., 2023) The tools and materials used are: Make a Match Cards, Sukahitu Cookies .

This knowledge improvement program for WUS and Pregnant Women goes through 4 stages, namely the licensing, preparation, implementation, and evaluation stages. The permit was carried out by the proposing team to Labu Pekan Beach Village. Preparation begins with ensuring the target especially in terms of the number of participants, the place and the media used. The implementation of this stage includes: 1. Filling in the attendance list, 2. Opening, 3. Pre test, 4. Delivery of material, 5. Post test, 6. Demonstration of making cookies, 7. Playing cards, 8. Discussion / Q&A, 9. The closing of this activity provides an evaluation of the activities that have been running. Counseling is carried out in order to find out the benefits and effectiveness of extension activities in community service. This counseling is carried out by lecture methods, role playing and conducting demonstrations and role playing Make a Match cards so that WUS mothers and pregnant women can change knowledge and attitudes and are skilled in choosing nutritionally balanced foods.

## RESULTS AND DISCUSSION

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The results of Community Service activities targeting WUS mothers and pregnant women in Pantai Labu Pekan Village were carried out for 2 days at the Pantai Labu Pekan Village Office. The Service Team according to expertise contributes to community service. The following Community Service activities have been carried out.

**Table 1. Results of Community Encoding Activities**

No	Activities	Day/Date Implementation	Place	Results of Program Activities / Achievements
1.	Providing Counseling	Friday, 23 June 2023	Pantai Labu Village Office	Pekan Preliminary observations have been made  • Activities attended by representatives of cadres, village heads as well as WUS mothers and pregnant women
2.	Make a Match role playing cards	Friday, 23 June 2023	Pantai Labu Village Office	Pekan There is an explanation of how to play and the group is divided into 3 groups, each group is directed to play the role of the Make a Match card to be played. Then a trial of role-playing Make a Match cards was carried out, then all groups played actively and understood how to play.
4.	Demonstration Practice of Processing Sukahitu Cookies Making	Monday, 26 June 2023	Pantai Labu Village Office	Pekan Explanation of the procedure for making cookies sukahitu, then a demonstration was carried out and a processing trial was carried out in front of WUS mothers and pregnant women. And continued with a demonstration of making by WUS mothers and pregnant women divided into two groups.
5.	Distribution of Sukahitu Cookies to	Monday, 26 June 2023	Pantai Labu Village Office	Pekan Each WUS mother and pregnant woman get a pack of cookies sukahitu

WUS mothers and pregnant women

From the table above, the results of community service activities are found, namely:  
There is an increase in knowledge and attitudes of WUS and Pregnant Women about Balanced Nutrition.



**Figure 1. Initial Observations**

There is an increase in knowledge, attitudes and understanding of WUS and pregnant women about the importance of balanced nutrition in preventing stunting in children. Based on the results of statistical analysis, after being given balanced nutrition counseling, wus mothers and pregnant women in role-playing make a match cards experienced an increase in knowledge with an average score of 60.97% and attitudes before counseling of 68.06% and an increase of 70.32%



**Figure 2. Counseling and demonstration of material on Balanced Nutrition for WUS mothers and pregnant women**

There is an increase in the skills of WUS and pregnant women about Balanced Nutrition in playing the role of Make a Match cards, by playing the role of make a match cards so as to make mothers more interested in playing the role of make a match cards. In order to create group relationships for mothers in learning to receive material and make WUS mothers and pregnant women more creative and active in receiving counseling materials so that mothers more easily understand and take an educational attitude of balanced nutrition



**Figure 3. Make a Match Card Role Playing Practice**

Anemia is a condition where the body has too few red blood cells (red blood cells) containing hemoglobin, which is a protein that functions to carry oxygen to all body tissues (Khasanah YU, 2018). Anemia of pregnancy is a condition of mothers with hemoglobin (HB) levels below 11 g% in the first trimester and third trimester and HB levels below 10.5 g% in the second trimester, this limit is different from the condition in non-pregnant women (de Jong et al., 2024). Iron nutrition anemia can be caused by two factors, namely direct and indirect causes. Direct causative factors include insufficient amounts of Fe in food, low Fe absorption, increased demand and blood loss, while indirect causes include poor feeding practices, less diverse food composition, low service, and low socioeconomic conditions of the community. Socioeconomic conditions include education level, knowledge level, family size, work, income and others (Collin et al., 2023).

In general, there are three causes of iron deficiency anemia in pregnant women, namely the tendency to low iron reserves (Fe) in women during menstruation and previous childbirth, lack of iron intake from food consumed and disrupted diet in pregnant women due to nausea felt during pregnancy (Bell et al., 2022; Brittenham et al., 2023; El-Kholy et al., 2023).

As an effort to prevent anemia in WUS and pregnant women, counseling is provided by health workers. Health counseling material related to the prevention of anemia is consuming a balanced nutritious diet. For the treatment of anemia in WUS and pregnant women, including

consuming foods containing iron, green vegetables and fruits (Mawardani et al., 2023). The provision of counseling has an influence on increasing the knowledge and attitude of mothers in providing a balanced nutrition menu. Counseling as a process of changing knowledge and attitudes that requires adequate preparation and knowledge for extension workers and their targets.

Balanced nutrition of WUS and pregnant women is a state of balance between nutrients needed for health both WUS and pregnant women that can be met by nutritional intake from a variety of foods. During pregnancy, expectant mothers need more nutrients than women who are not pregnant because pregnant women's food is needed for themselves and the fetus they contain. Similarly, if the mother's food is lacking, fetal growth and development will be disrupted, especially if the mother's condition before pregnancy is not so good.

Knowledge can be influenced by several factors, one of which is age. Age can affect a person's knowledge, because the older you get, the more developed your comprehension and mindset are so that the knowledge obtained is better. However, there is a decrease in catchability in old age which is influenced by physiological factors so that the level of knowledge possessed also decreases. In this study, the most age is in the age group of 30-39 years, which is a mature age, where someone at that age will have a good capture pattern and thinking power so that the knowledge he has will also improve.

A person's knowledge can affect the choice of daily food, the higher the level of knowledge of WUS and pregnant women, the more influential it will be in choosing the type of food consumed. Food consumption must pay attention to adequate and balanced nutritional intake according to needs. Intake of consumption patterns can affect the health status of WUS and pregnant women, where poor consumption patterns can cause health problems or diseases. Food optimization is one program that is expected to overcome the problem of anemia in WUS and pregnant women. Food optimization is to reduce the consumption of inhibitory foods and increase the intake of foods that contain high iron and foods that promote iron absorption consumed by WUS and pregnant women. It is hoped that WUS and pregnant women know and can choose and sort food to avoid anemia.

Attitudes can be viewed from various related elements such as attitudes with personality, motives, behavior, beliefs and others. Attitude is a tendency to approach or avoid, positive or negative towards various social circumstances, whether they are institutions, persons, situations, ideas, concepts and so on.

Good knowledge and a positive attitude can support the behavior of pregnant women in making efforts to prevent anemia. Education about prevention of anemia is one of the efforts that can increase knowledge and change attitudes to be positive so that in the end pregnant women can make various efforts to prevent anemia.

One very important factor in increasing knowledge is the method of delivering information that is in accordance with the needs of the target by using the right health education media. Health education media are all means or efforts to display messages or information that communicators want to convey, be it through print, electronic media (television, radio, computers and so on) so as to increase knowledge and change maternal behavior towards.

Make a match is one method of counseling that uses cards to find pairs that match the explanation on the card and can be applied using a grouping / team system. One of the advantages of the Make a Match counseling method is to overcome the problem of knowledge, attitudes to WUS mothers and pregnant women. With counseling and role playing using make a match cards, it can increase knowledge and attitudes of balanced nutrition in WUS and pregnant women. This is to create a group relationship between mothers in learning to receive counseling materials and make WUS and pregnant women more creative and active so that mothers more easily understand and take a balanced nutrition education attitude.

## CONCLUSION

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Counseling activities, as well as demonstrations and role playing Make a Match cards for WUS mothers and pregnant women to increase knowledge and attitudes of WUS mothers and pregnant women related to Balanced Nutrition. Counseling activities are also useful to find out the knowledge and attitudes of WUS mothers and pregnant women towards Balanced Nutrition, as well as increase the knowledge and attitudes of WUS mothers and pregnant women about balanced nutrition.

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**First publication right:**

Asian Journal of Engineering, Social and Health (AJESH)

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