

## Examination of Haemoglobin (Hb) Levels of Young Women and Counseling on Iron Deficiency Anemia in Young Women and Administration of Fe Tablets

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### ABSTRACT

The problem of iron deficiency is a common problem in developing countries, Indonesia being one of them. One of the targets for increasing iron is young women because it influences growth and development to become pregnant women. The purpose of this community service activity is to check hemoglobin levels and focus on increasing young women's understanding of the situation of iron deficiency anemia during the Covid 19 Pandemic. So that after sense emerges, it is hoped that they will be able to implement awareness to consume Fe tablets. The method used is to provide health education in the form of interactive lectures and check hemoglobin levels. The target of the implementation of this activity is all 20 students of SMP Terpadu Ishlahul Mubtadiin Cihaurbeuti Ciamis grades 7, 8, and 9. The results of laboratory examinations, most of the students did not experience anemia as much as 65%, but there were 35% of students who had anemia, either mild (20%), moderate (10%), and severe (5%).

The results of the examination laboratories most big girls do not experience anemia as much as 65%, but there are 35% of students experiencing anemia both mild (20%), moderate (10%), and weight (5%). Activity devotion people have managed to achieve the purpose of its implementation, namely the increase in understanding adolescent daughter against situation anemia, with the discovery of cases of anemia in target further increase the awareness of the target, especially teenage daughter in changing patterns of life, especially eating food that is nutritious as well pattern rest of the teenagers are.

**Keywords : Anemia, Teenage girls, Fe**

### INTRODUCTION

The problem of iron deficiency is a common problem in developing countries, Indonesia being one of them. One of the targets for increasing iron is young women because it influences growth and development to become pregnant women. Adolescent health problems, issues surrounding nutrition and health in adolescents cannot be underestimated because the impact has long-term effects. Growth in adolescence demands high nutritional needs to achieve maximum growth potential because nutrition and development are integral. Especially young women should pay more attention to their preparation before marriage (Majalah Jendela-BKLM Kemendikbud, 2021).

Riskesdas 2018 recorded that the coverage of giving blood-added tablets (TTD) obtained by young women was 76.2% (Ministry of Health of the Republic of Indonesia, 2018). The government's effort in dealing with iron deficiency is the provision of TTD. The Ministry of Health of the Republic of Indonesia (Kemenkes) in its Circular (SE) number HK 03.03/V/0595/2016 concerning the Provision of Blood-Adding Tablets to Adolescent Girls and Women Childbearing Age. According to the Ministry of Health, the target of young women is 12-18 years old and women of childbearing age 15-49 years old (Kemenkes RI, 2016).

Administration of Fe with a composition consisting of 60 mg of elemental iron (in Ferro Sulfate, Ferro Fumarate or Ferro Gluconate) and 0.4 mg of folic acid. The previous administration of Fe was 1 (one) tablet per week, and during menstruation, they gave 1 (one tablet) per day for 10 (ten) days (WHO, 2010).

The purpose of this community service activity is to check haemoglobin levels and focus on increasing young women's understanding of the situation of iron deficiency anaemia during the Covid-19 Pandemic which has an impact on decreasing body resistance and preparing for the future to become a pregnant woman which affects the welfare of growing up. And baby flowers. So that after understanding emerges, it is expected to be able to implement awareness to consume Fe tablets.

## **MATERIALS AND METHOD**

The method used in this seminar-based community service activity is two stages, including 1). Providing health education in the form of interactive lectures to all students about "Improving Awareness of Anemia-Free Young Women during the Covid-19 Pandemic", this counselling activity is carried out while maximizing health protocols for using masks and maintaining distance, 2). Checking haemoglobin levels in all students. The health education process is carried out by resource persons who have competence in midwifery and reproductive health, with the last education being a master of midwifery, master of applied midwifery, and master of health.

## **RESULT**

This community service activity was carried out on Monday, April 5, 2021, in the Ishlahul Mubtadiin Integrated Junior High School Hall, Cihaurbeuti - Ciamis, the target of the implementation of this activity was all students in grades 1, 2, and 3, as many as 20 people, who were in the middle age range of 15 - 15. 17 years (Ani, L, 2016).

The results of the Hemoglobin (Hb) examination in adolescent girls, most of the female students did not experience anaemia as much as 65%, but there were 35% of female students who experienced anaemia, both mild (20%), moderate (10%), and severe (5%). This is a record for parents, school administrators, and local health services.

At the beginning of this community service activity, participants were provided with education about iron deficiency, which can be identified early with a pale condition around the eyes, especially in the conjunctiva as well as on the palms of the hands, but a definite diagnosis can be made if it is carried out with supporting examinations (laboratory examination of Hb levels) (Akib Alfisnar, 2017).

Factors that influence the occurrence of anaemia in young women, in particular, are abnormal menstrual cycles with blood loss of 60-250 ml (A.A.Istri Mira Pramitya, 2013), nutritional status also has a positive correlation with haemoglobin concentration because the worse the nutritional status, the lower the Hb level in the blood (Gita Ayuningtyas, Dewi Firiani, 2020), Body Mass Index with anaemia, adolescent girls with lean Body Mass Index have 1.4 times the risk of suffering from anaemia compared to adolescent girls with normal BMI (Permaesih, 2015).

## **DISCUSSION**

Responding to the conditions that occurred to the participants of this activity, the community service team conducted simple interviews with students who had anaemia as well as school administrators regarding their lifestyle and food intake, as well as their menstrual cycle. The results of the interview concluded that the food provided by the school was in accordance with the nutritional needs of students in general, but these young women still did not have full awareness of daily nutritional needs. The students still choose to snack on snacks rather than eating from the portions that have been prepared by the school; it is not uncommon for them to miss their proper mealtime.

In accordance with the theory that eating habits during adolescence can affect health in later life (after adulthood and old age). Lack of nutrients can cause them to experience anaemia which causes fatigue, difficulty concentrating so that adolescents at working age become less productive. Teenagers need more iron, especially women, because every month, they experience menstruation which results in a lack of iron intake in the blood as a trigger for anaemia (Istiany, 2013).

The phenomenon of growth in adolescence demands high nutritional needs in order to achieve maximum growth potential. Unfulfilled nutritional needs at this time can result in delayed sexual maturation and linear growth retardation. At this time, nutrition is also important to prevent the occurrence of chronic diseases related to nutrition in adulthood, such as cardiovascular disease, diabetes, cancer and osteoporosis (Satgas Remaja IDAI, 2013). As future mothers when they grow up, young women should have good health qualities. Pregnant women who are malnourished and suffer from anaemia will have a higher risk of giving birth to babies with low birth weight (LBW) while also increasing the risk of maternal death. Since adolescence, prospective mothers need to be given nutritional knowledge so that later they do not give birth to babies with the risk of becoming stunted (short) children (Majalah Jendela-BKLM Kemendikbud, 2021).

## CONCLUSION

All students who have been determined to do the Haemoglobin (Hb) examination will receive the Infection Prevention Set (Masks, Hand Sanitizer, Wet and Dry Tissues), leaflets about Anemia and Fe tablets. This community service activity succeeded in achieving its implementation goal, namely increasing adolescent girls' understanding of the anaemia situation, with the discovery of anaemia cases on the target, increasing awareness of targets, especially young girls in changing lifestyles, especially eating nutritious food as well as resting patterns for the teenagers.

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APENDIX

Table 1. Results of Hemoglobin Examination in Adolescent Girls

Anemia Category	Frekuensi	Persentase
	n	%
No anemia	13	65
Mild anemia	4	20
moderate anemia	2	10
Severe anemia	1	5
Amount	20	100





Figure 1. The Process of Community Service Activities