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THE EFFECT OF GIVING GOLOBE FRUIT CAPSULE (HORSNTEDTIA ALLIACEA) ON THE IMPROVEMENT OF HEMOGLOBINE LEVELS IN PREGNANT WOMEN AT THE PUBLIC HEALTH CENTER GALELA, NORTH HALMAHERA DISTRICT.

Dian Lestari Basir[1], Jumriani,[2] Arend L Mapananwang[2]

[1]Program D III Kebidanan Sekolah Tinggi Ilmu Kesehatan Makariwo
[2]Dosen Sekolah Tinggi Ilmu Kesehatan Makariwo

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Correspondence to Author:
Dian Lestari Basir

Email :
ega@gmail.com

ABSTRACT

Based on the results of the 2018 Basic Health Research, the proportion of anemia in pregnant women in 2013 was 37.1%, an increase in 2018 was 48.9%. This condition shows that anemia is quite high in Indonesia. If it is estimated that the prevalence of anemia is still 48.9%, then there will still be high maternal mortality due to postpartum bleeding. Maternal Mortality Rate (MMR) in Indonesia is still stagnant, at 305 per 100,000 live births. The research objective was to determine the effect of Giving Golobe fruit capsules (Horsntedtia alliacea) on the increase in hemoglobin levels in pregnant women at Galela Health Center, North Halmahera Regency in 2019.

Quasy Experiment Research Methods with the design used were pretest and posttest. The population in this study were 10 pregnant women with anemia. The sampling technique used total sampling was 10 pregnant women with anemia. The results of the study, the average number of Hb levels before treatment is 9.80 gr / dl, and after treatment is 10.06 gr / dl, and after treatment or administration of Fe tablets once a day is 10.22 gr / dl. obtained a significance value (p) of 0.04. The value of significance was p <0.05.

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Conclusion and Suggestion, There is a significant effect of golobe capsule administration on the increase in Hb levels given twice a day for 1 consecutive week in pregnant women with anemia.

Preliminary

Maternal and child health programs are one of the priorities of the Ministry of Health and the success of the MCH program is one of the main indicators in the National Long-Term Development Plan (RPJPN) 2005-2025. One indicator of successful development in the health sector can be seen from the high and low rates of maternal mortality and baby. 1 Maternal Mortality Rate (MMR) is an important indicator to determine the degree of public health, MMR describes the number of women who die from a cause of death related to pregnancy disorders or their handling (excluding accidents or incidental cases) during pregnancy, childbirth and during the puerperium. (42 days after delivery) regardless of gestation length per 100,000 live births. AKI is used to monitor pregnancy-related deaths. This indicator is influenced by general health status.2 During pregnancy, there are many risk factors that can cause complications in pregnant women, including anemia, bleeding, abnormal weight and exposure to infectious diseases. to watch out for during pregnancy is anemia in pregnancy. Anemia in pregnancy is a condition of the mother with hemoglobin levels below 11 g% in the first and third trimesters or Hb levels <10.5 g% in the second trimester. Anemia is a condition in which the number and size of red blood cells or hemoglobin concentration is below normal limits, as a result it can interfere with the capacity of the blood to carry oxygen around the body. Anemia is an indicator of poor health. Maternal anemia is strongly associated with maternal and neonatal mortality and morbidity, including the risk of miscarriage, stillbirth, prematurity, and low birth weight (LBW).

Anemia occurs in women of reproductive age, especially pregnant and lactating women due to iron deficiency. Anemia occurs in 45% of women in developing countries and 13% in developed countries. 3 According to the World Health Organization (WHO), the incidence of anemia in pregnant women ranges from 20% - 89% by determining the Hb level of 11 g% as the basis. According to development reports, maternal mortality rates are recorded in several ASEAN countries (Association South East Asia Nations), such as in Vietnam 18 per 100,000 live births, Malaysia 55 per 100,000 live births, Philippines 26 per 100,000 live births and Singapore 3 per 100,000 live births. In ASEAN countries the incidence of anemia varies, the Philippines is around 55%, Thailand 45%, Malaysia 30%, and Singapore 7% who suffer from anemia.4 Based on the main data from the 2018 Basic Health Research, the proportion of anemia in pregnant women in 2013 was 37.1%, an increase in 2018 was 48.9%. This condition shows that anemia is quite high in Indonesia. If it is estimated that the prevalence of anemia is still 48.9%, then there will still be high maternal mortality due to postpartum bleeding. The Maternal Mortality

Rate (MMR) in Indonesia is still stagnant, at 305 per 100,000 live births.

This high figure is caused, among others, by the low maternal health and nutrition conditions during pregnancy. North Maluku Province The proportion of anemia is 35%, and in Halmahera Regency Method The type of research or design used is the Quasy Experiment Design with one group design, pretest and posttest, where it will be Measured before intervention and measurement after treatment methods.

This research will be conducted at Public Health Center Galela, Galela District, North Halmahera Regency. When the planned research was carried out in July 2019. Population is the total number consisting of objects that have characteristics and quality.12 The population in this study were 10 anemia pregnant women at Galela Public Health Center. In this study, the population size is <30, the sampling method is saturated sampling technique (non-probability sampling), namely a saturated sampling technique where all members of the population are used as samples.

The number of samples is 10 pregnant women Methods This research will be conducted at Public Health Center Galela, Galela District, North Halmahera Regency. When the planned research was carried out in July 2019. Population is the total number consisting of objects that have characteristics and quality.12 The population in this study were 10 anemia pregnant women at Galela Health Center. In this study, the population size is <30, the sampling method is saturated sampling technique (non-probability sampling), namely a saturated sampling technique where all members of the population are used as samples. The number of samples is 10 pregnant women.

Results Table 1.1 Frequency Distribution Characteristics of the effect of giving Golobe fruit HB levels

Age	**n**	**%**
<20	1	10.0
20-30	5	50.0
30-40	4	40.0
Total	10	100.0

Education	**n**	**%**
SD	6	60.0
SMP	2	20.0
SMA	2	20.0
Total	10	100.0

Profession	**N**	**%**
IRT	7	70.0
Private	1	10.0
PNS	2	20.0
Total	10	100

10 respondents (100%) found that the majority of pregnant women who were taken as respondents in this study were mostly in the age range of 20-30 years, namely 5 people (50.0%) and the least in the age range <20 years as many as 1 person (10.0%). explained that out of 10 respondents (100%), it was found that the majority of pregnant women who were taken as the most respondents had elementary education, namely 6 people (60.0%) and at least 2 people (20.0%) respectively. respondents (100%), it was found that the majority of pregnant women who were taken as the most respondents were housewives, namely 7 respondents (70.0%) and 1 respondent (10.0%) who were private employees.

Tabel 2 Frequency distribution of hemoglobin levels before being given Golobe capsules to pregnant women in the experimental group

Variabel	Mean	Deviasi
el (Intervention Group)	10.06	6

Tabel 2 Table 2 Distribution of hemoglobin levels before administration of Golobe Hemoglobin in the control group

Variabel	N	Mean	Standar Deviasi
Hb levels after (Intervention Group)	10	10.22	0.86

Tabel 3. Analysis of Differences in Hemoglobin Levels Before and After Giving Golobe Capsules to Pregnant Women

Variable	N	Mean Defference	Min-max	Sig-(2-tailed)
Ater (Intervensi)	5	11,16	-1,311	0,038
Avter (Kontrol)	5	10,48	0,607	0,064

DISCUSSION

Based on the results of the examination of the Hb levels recorded through the observation sheet, the Hb levels of each pregnant woman were known. Table 4 shows that the average Hb of pregnant women in the experimental group was 10.06 gr / dl, pregnant women had mild anemia. Where it is known together, that the group of pregnant women (pregnant women) is one group that is at high risk of developing anemia, although the anemia experienced is generally a relative anemia due to physiological changes in the body during pregnancy. Generally pregnant women are considered anemic if the hemoglobin level is below 11 g / dl or the hematocrit is less than 33%. In routine practice, Hb concentrations <11 g / dl at the end of the first trimester, and 10 g / dl in the second and third trimesters are suggested to be the lower limits for looking for causes of anemia in pregnancy. Anemia in pregnancy caused by iron deficiency reaches approximately 95%. An increase in blood volume results in hemodilution or blood

thinning so that Hb levels decrease and anemia occurs. Dilution of blood is considered a physiological adjustment in pregnancy and is beneficial for women. First of all, the dilution relieves the burden on the heart, which has to work harder during pregnancy, because as a result of hydremia cardiac output increases. Pregnancy-induced hypervolemia has several important functions, including: filling the vascular space in the uterus, the network of vessels in the breast, muscles, kidneys and skin. Hypervolemia also reduces the effect of hemogloblin secretion in labor. The decrease in blood viscosity reduces the resistance to flow so that the heart works to push the blood lighter. Another factor that causes iron deficiency is the increased need for iron in pregnant women. The need for pregnant women for iron is 900 mgr Fe, in the second trimester (peak gestational age 32 to 34 weeks) there will be hemodilution (blood thinning) in pregnant women so that hemoglobin will decrease, resulting in physiological pregnancy anemia. 15 Based on table 5, it shows that the average Hb level of pregnant women after treatment of Golobe capsules is 10.[22] gr / dl. The results showed that the hemoglobin level of pregnant women increased by 0.6 g / dl or by 1.6%. Factors that cause anemia in pregnancy are iron deficiency, and nutritional anemia can be caused by a deficiency of various kinds of important nutrients in the formation of hemoglobin. Iron deficiency, which is common worldwide, is the main cause of nutritional anemia. Anemia in pregnancy can have an impact on the well-being of both the mother and the fetus. Anemia in pregnant women is associated with increased preterm birth, maternal and child mortality and infectious diseases. Iron deficiency anemia in pregnant women can affect the growth and development of the fetus / baby during pregnancy and after. The difference in hemoglobin levels before being given golobe capsules was 10.06 gr / dl and the mean value of hemoglobin levels after golobe capsules was 10. 22 gr / dl. The results obtained from data processing with the Paired sample T-Test statistical test obtained a p value of 0.04 ($p < 0.05$) so that it can be concluded that there is an effect of giving Golobe capsules on hemoglobin levels of pregnant women with anemia. The same results were obtained from research from Reimarson Pangi (2019) where Golobe capsules have the effect of increasing hemoglobin levels in adult patients, so this shows that after consuming Golobe capsules, both pregnant women and other general patients have increased. golobe fruit chemistry is antioxidants,

which are antionski and really help the process of properly absorbing iron. Iron will form hemoglobin and maintain red blood cells for pregnant women. The need for iron is very important for pregnant women because it functions to meet the mass of fetal red blood cells, umbilical cord and placenta, and to replace blood lost during childbirth. Thus this iron therapy can be combined with complementary therapies derived from herbs because it is proven to increase red blood cell production so that hemoglobin levels also increase.[16]

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