DESCRIPTION OF THE RESULTS OF EXAMINATION OF THROMBOCYTE LEVELS IN PREGNANT WOMEN IN PUSKESMAS KABILA, BONE BOLANGO DISTRICT

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ABSTRACT

Platelets are blood components that play a role in the hemostasis process, so it is important to know that changes in platelet values often occur during pregnancy where thrombocytopenia can cause anemia, other dangerous complications and put the mother and fetus at greater risk for excessive bleeding. While thrombocytosis causes disruption of blood flow, causing miscarriage, premature labor or prolonged labor. This study aims to describe the results of examination of platelet levels in pregnant women and to determine the risk factors associated with platelet levels.

The research method used in this research is descriptive with a quantitative approach. The sampling technique is purposive sampling with a total sample of 24 respondents.

The results showed normal platelet levels were 18 (75%), and experienced a decrease in abnormal platelets (thrombocytopenia) by 2 (8.3%), which experienced an increase in platelets (thrombocytosis) by 4 (16.7%) so that it could affect the risk factors for platelets. in pregnant women, namely the age of pregnant women and gestational age.

Keywords: Platelets, Pregnant Women, Abnormal, Normal

INTRODUCTION

The success of maternal health efforts can be seen from indicators of maternal mortality due to various very complex problems during pregnancy until delivery. The main complications that cause almost 75% of all maternal deaths include severe bleeding after childbirth, nutritional problems, high blood pressure during pregnancy (preeclampsia and eclampsia), complications that occur in childbirth and unsafe abortions [2].

Hematological disorders are often found in pregnant women because of physiological changes that make pregnant women more susceptible to disorders in blood circulation, especially chronic diseases such as anemia, thrombocytopenia, as well as malignancies, namely leukemia and lymphoma [1].

The maternal mortality rate in the world in 2015 was 216/100,000 live births, or it is estimated that the number of maternal deaths was 303,000 deaths with the highest number in developing countries, which was 302,000 deaths. The maternal

mortality rate in developing countries is 20 times higher than the maternal mortality rate in developed countries, namely 239/100,000 live births, while in developed countries it is only 12/100,000 live births[21]

The maternal mortality rate in Indonesia is high among ASEAN countries, where the results based on Indonesia's health demographic survey show a maternal mortality rate of 359/100,000 live births. While the results of the Inter-Census Population Survey (SUPAS) in 2015 showed a maternal mortality rate of 305/100,000 live births, which is still very high compared to the Indonesian Ministry of Health estimates.

The prevalence of health services for pregnant women in Indonesia is 88.03%. The highest prevalence in DKI Jakarta Province was 193,222 or 103.17% and the lowest was in Papua Province as much as 31,949 (40.74%)[10]

The prevalence of pregnant women in Gorontalo Province is 2,428 people or 4.03%. The highest pregnancy was in Gorontalo Regency as much as 785 or 3.21%, the lowest was in North Gorontalo Regency as much as 246 or 3.3%. Bone Bolango Regency is 304 or 3.6%[18]

The prevalence of pregnant women in the working area of the Kabila Public Health Center in 2021 in August was 111 pregnant women, with the highest pregnant women in Pauwo Village as many as 19 people in the second trimester as many as 9 people and in the third trimester as many as 10 people. The lowest is in North Olohuta Village, 3 trimester pregnant women as many as 4 people [3]

The reason for choosing this location is because I have made direct observations at the Kabila Health Center, many pregnant women check themselves at the Kabila Health Center and the Kabila Health Center, one of the health centers that already has a hematology examination.

Examination of the platelet count is part of a complete blood count. Generally, a normal platelet count in the blood is around 150,000 to 450,000/mm3. Abnormalities in the number or function of platelets (or both) can interfere with blood clotting, either having too many platelets (thrombocytosis) or too few (thrombocytopenia)[5]

During pregnancy there are various kinds of physiological changes in the blood either directly or indirectly, one of which is hematological disorders. Hematological disorders are often found in pregnant women because these physiological changes cause pregnant women to be more susceptible to disorders of blood circulation, especially chronic diseases such as anemia, thrombocytopenia, and malignancies, namely leukemia and lymphoma [1].

During pregnancy, the entire female genitalia will undergo fundamental changes so that it can support the development and growth of the fetus in the womb. The energy metabolism of the mother also increases due to the process of growth, maturation of the fetus and placenta which causes physiological changes in circulation or blood circulation during pregnancy. 11]

Pregnancy can cause several physiological changes in the blood so that it can cause difficulties in diagnosing diseases and blood disorders in pregnant women. Blood health in pregnant women is very decisive for the success of fetal growth and development in the uterus [12].

During pregnancy, one of the blood components, namely the platelets, undergoes changes. A high platelet value or called thrombocytosis causes disturbances in blood flow, causing

thrombosis, necrosis and placental infarction. The effect that occurs from placental infarcts on pregnancy will cause the pregnancy to experience miscarriage, premature labor or prolonged labor [12].

Low platelets or thrombocytopenia affects up to 10% of all pregnancies. Normally in pregnancy, the work of the bone marrow increases so that the number of cells produced by the bone marrow increases, such as red blood cells and platelets. However, there was also an increase in blood volume, reaching up to 30% above normal. This results in blood thinning, so it can be seen that the levels of blood components, including platelets, are decreased on examination [5].

Age increases the risk to the mother during pregnancy and childbirth. The safe age for pregnancy is 20-35 years. On average, pregnancies over 35 years of age are classified as riskier pregnancies because the older you get, the organ functions will also decrease or not function perfectly again. Including the liver and spleen which are the main organs that play a role and continue to produce blood cells, including platelets until about 2 weeks after birth, which are continued by the bone marrow [7]

Gestational age, the length of time the mother is pregnant starting from the first day of the last menstruation which is calculated in weeks listed in the status of the mother. In pregnancy usually an increase in the number of platelets occurs in the first trimester along with the occurrence of blood hypercoagulation caused by changes in clotting factor levels [16].

Platelet counts usually drop during pregnancy and should be monitored at least monthly through the first two trimesters, biweekly in the third and weekly as a long-term approach. Thrombocytopenia will occur at gestational age in the first to second trimester. Usually this occurs when the pregnant woman has autoimmune thrombocytopenia. Autoimmune thrombocytopenia occurs in 1 in 1000–10,000 pregnancies, accounting for 3% of all thrombocytopenia in pregnant women [16].

Previous research conducted by Olivia 2018 with the results of the study obtained that 3 pregnant women (6.7%) had thrombocytopenia or low platelet values with a number of 122,000/mm3, 40 people with a total (88.9%) having normal platelet values of 150,000- 450,000/mm3 with a total of 241,467/mm3 as many as 2 people (4.4%) had thrombocytosis or a high platelet value with a total of 642,000/mm3. A high platelet value or thrombocytosis causes blood flow disturbances that will cause thrombosis, necrosis and placental infarction. The effect of placental infarct on pregnancy can cause miscarriage, preterm labor and prolonged labor [12].

Primary Thrombocytosis or essential Thrombosis is caused by disorders of the bone marrow. This condition is the more common cause of blood clots and secondary or reactive thrombocytosis. Generally, these platelets are caused by infection or other disease that already exists or is being suffered. Secondary thrombocytosis is an excessive reaction to conditions experienced by the body and can be caused by several conditions, including reactions in the form of allergies, physical exercise, infections (eg tuberculosis), heart attacks, iron deficiency, vitamin deficiency to cancer [12].

Low platelets or also called thrombocytopenia affects up to 10% of all pregnancies. Normally in pregnancy 150,000-450,000/mm3, the work of the bone marrow increases so that the number

of cells produced by the bone marrow increases, such as red blood cells and platelets. However, there is also an increase in blood volume, up to 30% above normal. This can result in blood thinning, so it can be seen that the levels of blood components, including platelets, decrease during examination [5].

Based on the above background, the researcher is interested in conducting research on "Overview of the results of examination of platelet levels in pregnant women at the Kabila Public Health Center"

RESEARCH METHODS

This research approach is a descriptive quantitative approach which has the aim of knowing

an overview of the results of examination of platelet levels in pregnant women at the Kabila Health Center. The type of research used is descriptive quantitative with the aim of describing or describing the occurrence of a phenomenon (one or more research variables) in depth and systematically in the form of quantitative data (numbers), without looking for relationships between research variables.

Types of data in this study Researchers used primary data with the results of examination of platelets that have been carried out in the laboratory. As for secondary data, the data obtained from the medical record data of the Kabila Health Center.

The population in this study were all pregnant women who had their pregnancy checked in the working area of the Kabila Health Center as many as 111 patients. Samples taken from this study were blood samples of pregnant women in the Kabila Health Center area as many as 24 samples. The sampling technique used in this study used a purposive sampling technique from pregnant women at the Kabila Health Center in accordance with the inclusion and exclusion criteria.

The data analysis used is by using the SPSS Version application 25.0 and presented in table form.

RESEARCH RESULT

Table.1 Frequency Distribution of Respondents Platelet Levels in Pregnant Women in the Work Area of the Kabila Health Center

No.	Results	Frequency	Percentage
1.	Normal (150,000 – 450,000/mm3	18	75
2.	Abnormal		
	- Thrombocytopenia (< 150,000mm3)	2	8.3
	- Thrombocytosis (> 450,000/mm3)	4	16.7
	Total	24	100%

(Source: Primary Data, 2021)

Based on table 4.1, it shows that of the 24 pregnant women patients based on the results of normal platelet levels examination as many as 18 samples with a percentage (75%), from the results of examination of abnormal platelet levels who have experienced thrombocytopenia as many as 2 respondents with a percentage (8.3%) and the results of the examination Abnormal platelet levels with thrombocytopenia were 4 respondents with a percentage (16,7%).

Table. 2 Frequency Distribution of Results by Age of Pregnant Women in the Work Area of the Kabila Health Center

No	Age	Abnormal		Normal		Total	%
		F	%	F	%		
1.	20 – 30 years	4	16.7	18	75	22	91.7
2.	31 – 40	1	4.2	0	0	1	4.2
3.	41 – 50	1	4.2	0	0	1	4.2
	Amount	6	25	18	75	24	100

(Source: Primary Data, 2021)

Based on table 4.2 shows that of the 24 pregnant women patients aged 20-30 years who had abnormal platelet levels as many as 4 people with a percentage (16.7%) while pregnant women with normal platelet levels as many as 18 people with a percentage (75%). 1 patient (4.2%), and 1 patient (4.2%).

Table. 3 Distribution of Outcome Frequency Based on Gestational Age in the Work Area of the Kabila Health Center

Age Pregnancy	Abnormal		Normal		Total	%
	F	%	F	%		
II Trimester	1	4.2	5	20.9	6	25.0
Third trimester	5	20.8	13	54.1	18	75.0
Amount	6	25	18	75	24	100%

(Source: Primary Data, 2021)

Based on table 4.3 shows that of the 24 pregnant women patients based on gestational age in the second trimester, 1 person with abnormal platelet levels (4.2%) had abnormal platelet levels, while 5 pregnant women with normal platelet levels (20.9%) had abnormal platelet levels. . Pregnant women patients based on gestational age in the third trimester who had abnormal platelet levels were 5 people with a percentage (20.8%) while pregnant women with normal platelet levels were 13 people with a percentage (54.1%).

DISCUSSION

Pregnancy is defined as a condition that occurs in a woman who has stopped menstruating for some time until the labor process is over, this usually occurs for approximately 9 months or 40 weeks. A normal pregnancy will last for 38-40 weeks. This phase will also take place in three trimesters, namely trimester 1, trimester 2, trimester 3 [8]

In the process of traveling the sperm will meet the egg (ovum), only a few have managed to reach the egg from the 20-40 million sperm released. From that small amount, only 1 sperm is capable and can fertilize an egg (ovum). If it can be calculated from fertilization to the birth of a baby, a normal pregnancy will take place within 40 weeks or 9 months according to the international calendar[13]

A person who has experienced pregnancy may experience several signs and symptoms, such as cessation of menstruation (amenorrhoea), nausea (nausea), vomiting (emesis), craving for certain foods (cravings), fainting (syncope), fatigue, breast tenderness, constipation or constipation. and skin pigmentation[13]

Pregnancy in the first trimester occurs in weeks (0-13 weeks). In the first trimester, the first trimester of growth and development of a fertilized egg occurs and occurs in three phases, namely the ovum phase, the embryonic phase, and the fetal phase.

Pregnancy in the second trimester occurs at 14-26 weeks of gestation. The second trimester is a period of rapid growth in which the renal venous pressure also increases, so in the second trimester it is recommended to carry out one of the laboratory tests to find out if there is a possibility of disease that is harmful to the growth process [22].

Pregnancy in the third trimester occurs at the time of gestation at 27-40 weeks. The third trimester is a period of perfecting the organs and forms of the growing fetus so that it is ready to be born. In the third trimester there are various changes both anatomically and physiologically in the mother. The third trimester is often referred to as the waiting and alert period because

at that time the mother feels impatient waiting for the birth of her baby[22]

Pregnancy can cause several physiological changes in the blood so that it can cause difficulties in diagnosing diseases and blood disorders in pregnant women. Blood health in pregnant women is very decisive for the success of fetal growth and development in the uterus [12].

During pregnancy, one of the blood components, namely the platelets, undergoes changes. A high platelet value or called thrombocytosis causes disturbances in blood flow, causing thrombosis, necrosis and placental infarction. The effect that occurs from placental infarcts on pregnancy will cause the pregnancy to experience miscarriage, premature labor or prolonged labor [12].

Low platelets or thrombocytopenia affects up to 10% of all pregnancies. Normally in pregnancy, the work of the bone marrow increases so that the number of cells produced by the bone marrow increases, such as red blood cells and platelets. However, there was also an increase in blood volume, reaching up to 30% above normal. This results in blood thinning, so it can be seen that the levels of blood components, including platelets, are decreased on examination [5].

Maternal blood circulation is influenced by several factors, including the need for development and growth of the fetus in the womb to increase maternal blood circulation, then there is a direct relationship between arteries and veins in retro-placental circulation, as well as an increase in the hormones estrogen and progesterone [22].

As a result of these factors, changes in blood circulation occur during pregnancy, namely, blood volume increases where the amount of blood serum is greater than the growth of blood cells, resulting in a kind of blood thinning (hemodilution), with a peak at 32 weeks of gestation. Blood serum (blood volume) increases by 25-30% while blood cells increase by about 20%. Cardiac output will increase by about 30%. Increased hemodilution of blood begins to appear around 16 weeks of gestation, and red blood cells are increasing in number to be able to balance the growth of the fetus in the womb, but the increase in blood cells is not balanced with the increase in blood volume, resulting in hemodilution, which is accompanied by physiological anemia. White blood cells increase by reaching a count of 10,000/ml.

Platelets or platelets are blood cells that play a role in blood clotting. These platelets are the most important part of the blood when the blood vessels are damaged or the skin is injured and leaks which will result in blood coming out of the vessels or bleeding will occur [5].

Platelets in the blood have a life of 5 to 9 days. Platelets in the blood will perform their functions during their lifetime, will experience aging and are destroyed by the spleen in the body and will be replaced with newly formed platelets [5].

Platelets are 2-4 microns in size, their cells are round or oval in shape, and platelets do not have a cell nucleus. Although they do not have a nucleus, platelets can still synthesize proteins because they contain RNA in their cytoplasm. The cell diameter ranges from 1-3 microns[5]

Examination of the platelet count is part of a complete blood count. Generally, a normal platelet count in the blood is around 150,000 to 450,000/mm3. Abnormalities in the number or function of platelets (or both) can interfere with blood clotting, either having too many platelets

(thrombocytosis) or too few (thrombocytopenia)[5]

During pregnancy there are various kinds of physiological changes in the blood either directly or indirectly, one of which is hematological disorders. Hematological disorders are often found in pregnant women because these physiological changes cause pregnant women to be more susceptible to disorders of blood circulation, especially chronic diseases such as anemia, thrombocytopenia, and malignancies, namely leukemia and lymphoma [1].

During pregnancy, the entire female genitalia will undergo fundamental changes so that it can support the development and growth of the fetus in the womb. The energy metabolism of the mother also increases due to the process of growth, maturation of the fetus and placenta which causes physiological changes in circulation or blood circulation during pregnancy. 11]

The main function of platelets is to play a role in the blood clotting process. If there is a wound, platelets will gather due to the stimulation of open collagen so that the platelets will go to the wound site which then triggers the blood vessels to constrict (so that not a lot of blood comes out) and triggers the formation of blood clotting threads called fibrin threads. 5]

The fibrin threads will form a net-like formation that will cover the wound area so as to stop the active bleeding that occurs in the wound. In addition, it turns out that platelets also have a role in fighting viral and bacterial infections by eating viruses and bacteria that enter the body and then with the help of other immune cells destroying viruses and bacteria in the platelets [5].

The main function of platelets or platelets is for blood clotting. When a blood vessel gets injured or leaks, the body will carry out 3 main mechanisms to stop ongoing bleeding, namely by shrinking or (constriction), platelet activity, activity of other blood clotting components in blood plasma [5].

Hematological disorders are found in pregnant women because of physiological changes that make pregnant women more susceptible to disorders in blood circulation, especially chronic diseases such as anemia, thrombocytopenia, as well as malignancies, namely leukemia and lymphoma [1].

During pregnancy, one of the blood components, namely platelets, will experience changes. A high platelet value or called thrombocytosis causes disruption of blood flow so that it can cause thrombosis, necrosis and placental infarction. The effects of placental infarcts can cause miscarriage, premature delivery or prolonged labor[12]

Low platelets or called thrombocytopenia affects up to 10% of all pregnancies. Normally in pregnancy, the work of the bone marrow increases so that the number of cells produced by the bone marrow increases, such as red blood cells and platelets [5].

Platelet Examination Results

The results of the study on the description of platelet levels in pregnant women with a total sample of 24 samples obtained normal platelet levels examination results as many as 18 respondents (75%) while for abnormal platelet levels 6 respondents (25%) with thrombocytopenia were 2 respondents (8.3%) and thrombocytosis as many as 4 respondents (16.7%). This is in line with previous research conducted by Siti Lintang that the results of the examination of platelet levels were obtained by 23 normal respondents (24.34%), abnormal platelet levels by 5

respondents (71.43%) so it can be seen that the Chi-square test results show p value = 0.0175 then there is a significant correlation on changes in blood platelet levels in pregnant women [19]

A platelet count is usually part of a complete blood count. Generally, the normal number of platelets in the blood is around 150,000 to 450,000/mm3. Abnormalities in the number or function of platelets (or both) can interfere with blood clotting, either having too many platelets (thrombocytosis) or too few (thrombocytopenia)[5]

During pregnancy, one of the blood components, namely platelets, undergoes changes. High platelet values or thrombocytosis cause disruption of blood flow resulting in thrombosis, necrosis and placental infarction. The effect of placental infarction on pregnancy can cause miscarriage, premature delivery or prolonged labor. Thrombocytopenia or also platelet deficiency, is a condition in which the number of platelets in the circulatory system is below normal (<150,000/mm3 of blood)[12]

Thrombocytopenia usually found in patients with anemia, leukemia, viral and protozoan infections mediated by the immune system (Human Infection Virus, dengue fever and Malaria). Thrombocytopenia can also occur during pregnancy, when the body is deficient in vitamin B12 and folic acid, and is undergoing radiotherapy and chemotherapy[5]

Some of the methods for performing manual examination of platelets are as follows: Direct method (Rees Ecker) is a direct count of platelets using a counting chamber, namely with a microscope. Count platelets Rees Ecker method, the blood is diluted with a solution containing Brilliant Cresyl Blue so that the platelets will appear bluish. Platelet cells were counted using a counting chamber and viewed under a microscope [14].

This method has advantages and disadvantages, the advantages are that the platelets are more clearly visible and the platelets are blue. Disadvantages are that the price of the solution is more expensive, it cannot lyse erythrocytes and with a small dilution, the erythrocytes accumulate so that they cover the platelets. accurate and uneven distribution of platelets [14]

The indirect method is this method using a blood smear that has been stained with Giemsa dye. Platelet cells are counted on the part of the preparation where the erythrocytes are evenly distributed and do not overlap. The indirect method of counting platelets is the Fonio method in which the number of platelets is compared to the number of erythrocytes, while the number of erythrocytes is actually counted. This method is no longer used because it is not practical, where in addition to counting the number of platelets, erythrocyte counts must also be carried out [14]

Automatic examination The direct/automatic examination of the platelet count is carried out using automatic tools such as the Hematology Analyzer. The automatic cell counter is carried out in an electronic way capable of directly measuring the platelet count in addition to the leukocyte count and erythrocyte count. The principle of this method is impedance and light scattering. Platelets and erythrocytes are counted together, but they are distinguished by size. Smaller particles are counted as platelets and larger particles are counted as erythrocytes[14]

Mother's Age

Based on the risk factors for the age of pregnant women, 18 respondents (75%). While abnormal platelets were 4 respondents (16.7%) who experienced thrombocytosis and 2 respondents each with thrombocytopenia, while pregnant women with normal platelet levels were 18 people with a percentage (75%).

Pregnant women patients by age >35 years who have abnormal platelet levels as many as 2 people with a percentage (8.3%) who have thrombocytosis. This is in line with previous research conducted by Andini that from a total of 45 pregnant women patients there were platelet counts based on the age range (<20 or >35) years, 2 patients (16.6%) experienced changes in platelet levels [14].

Age increases the risk to the mother during pregnancy and childbirth. The safe age for pregnancy is 20-35 years. On average, pregnancies over 35 years are classified as riskier pregnancies because the older they get, the organ function also decreases or does not function perfectly again. Including the liver and spleen, which are the main organs that play a role and continue to produce blood cells, including platelets. until about 2 weeks after birth which is continued by the bone marrow [7]

The optimal reproductive age for a woman is 20-35 years, because the female reproductive organs are mature and ready to accept pregnancy and are also ready to give birth. Ages classified as high risk are <20 years and >35 years, so pregnant women who are too young or <20 years old will have a high risk of illness and death during pregnancy and childbirth. Because physically the condition of the uterus and pelvis is not optimal. If you are pregnant at the age of > 35 years, you will experience a high risk of being anemic, and it is very possible to experience excessive bleeding. Pregnant women at the age of >35 years are associated with a decline in the body's resistance to various diseases that afflict at this age. Risks that occur at the age of pregnant women> 35 years are miscarriage, easy infection,

The cause of maternal death from reproductive factors is the age of pregnant women. The safe age for pregnancy and childbirth is 20-30 years. Maternal mortality in women who are pregnant and during childbirth at the age of under 20 years is 2-5 times higher than maternal deaths that occur at the age of 20-29 years. Then maternal mortality increased again after the age of the mother 30-35 years. The age of a woman at the time of pregnancy should not be too young and not too old[20]

At gestational age <20 years or >35 years it is not good for pregnancy or childbirth because pregnancy at this age has a high risk such as miscarriage, or failure to give birth, which can even cause death. Older women have a higher risk of complications in childbirth than younger women because at the age of 35 years and over, in addition to being physically weak, there is also the possibility of various risks of health problems [6].

Gestational Age

Based on the risk factors for gestational age, it shows that pregnant women in the second trimester have normal platelet levels as many as 5 people (20.9%), while pregnant women with abnormal platelet levels who experience thrombocytosis are 1 person (4.2%). Pregnant women patients based on gestational age in the third trimester had normal platelet levels as many as 13 people (54.1%), while pregnant women with abnormal platelet levels as many as 5 respondents (20.8%) who had thrombocytosis as many as 3 respondents and thrombocytopenia as many as 2 respondents. This is in line with previous research conducted by Olivia, gestational age can affect platelet levels, there are abnormal platelets in the second trimester as many as 2 respondents (16.6%) and in the third trimester as many as 1 respondent (4.2%)[14]

Gestational age, the length of time the mother is pregnant starting from the first

day of the last menstruation which is calculated in the weeks listed in the status of the mother. In pregnancy, an increase in the number of platelets usually occurs in the first trimester along with the occurrence of blood hypercoagulation caused by changes in clotting factor levels. Platelet counts usually drop during pregnancy and should be monitored at least monthly through the first two trimesters, biweekly in the third and weekly as a long-term approach. Thrombocytopenia will occur in the first to second trimester of pregnancy. Usually this occurs when the pregnant woman has autoimmune thrombocytopenia. Autoimmune thrombocytopenia occurs in 1 in 1000-10,000 pregnancies, accounting for 3% of all thrombocytopenia of pregnant women[16]

Pregnancy causes the plasma volume to increase markedly which causes hemodilution and cytopenia to occur. This will result in thrombocytopenia <10% in pregnant women who enter 34 weeks of gestation or in the third trimester. Changes that occur in the relationship between hormones and regulation of sodium levels will cause an increase in the volume, this situation causes the dilution of various blood-soluble substances including platelets which results in a decrease in the value [15].

According to the results obtained in pregnant women who experience thrombocytosis in accordance with the theory, according to a 2007 manuaba, thrombocytosis or high platelet values are caused by factors such as iron deficiency, malignancy, severe bleeding, infection, connective tissue disease, inflammation as well as excessive physical activity so that will cause a high number of platelets [12]. Pregnant women who experience thrombocytosis will cause blood flow disorders that will cause thrombosis, necrosis and placental infarction. The effect of placental infarct on pregnancy can cause miscarriage, premature labor or prolonged labor. This increase in the platelet count in pregnancy may be due to hemodilution and partly to excessive platelet activity in a healthy pregnancy.

CONCLUSION

Based on the results of research on platelet levels in pregnant women at the Kabila Health Center, Bone Bolango Regency, it can be concluded that:

1. The results of platelet levels in pregnant women in the Kabila Health Center area were 18 respondents 75% normal platelets, abnormal platelets decreased (Thrombocytopenia) 2 respondents 8.3%, and increased (Thrombocytosis) 4 respondents 16.7%
2. The risk factors that affect the results of platelet levels in pregnant women in the working area of the Kabila Health Center are the age of the pregnant woman and the gestational age.

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