

Effect of Complications of Pregnancy and Prenatal Care on The Occurrence Of Baby Weight Born Low In Dr.Pirngadi Hospital Medan Year Of 2017

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Abstract: low birth weight babies is still remains a public health problem, being one of the main causes of morbidity, infant mortality and improve the risk of non-communicable diseases such as diabetes and cardiovascular later. WHO estimates that the global prevalence of low birth weight is 15% which means about > 20.6 million babies are born each year in Indonesia as many as 8,432 (10.2%), terrain of 6.0%, according to Dr.Pirngadi field Neonatal Mortality in 2016 were 38 (30.89%) of the 123 cases (30.82%) of 399 cases of low birth weight births. The research objective is to analyze the influence of pregnancy complications, pregnancy tests (*Antenatal Care*) on the incidence of low birth weight infants in Dr. Pirngadi city of Medan in 2017. This study is research *observational analytic survey* with design, *case control* the population in this study are the data of all mothers who gave birth in Dr. Pirngadi Medan in 2016 as many as 399 people. Samples were taken by *simple random sampling* by first removing the sampling that is not in accordance with the inclusion and exclusion criteria, a total of 130 respondents, consisting of 65 cases and 65 controls. Data collected on secondary data obtained from medical records and analyzed using test *Chi Square* and multiple logistic regression. The results of the bivariate shows that there is a significant effect on pregnancy complications ($p < 0.001$) and *antenatal care* ($p < 0.001$) on the incidence of LBW. Results of multivariate logistic regression test shows pregnancy complications ($p < 0.001$; OR = 6.413; 95% CI: to 2.35117.494) and the most dominant *antenatal care* ($p < 0.001$; OR = 14.2445, 226-38.819CI95%). ANC <4x visit risky 14.244 times through LBW. suggested to the City Health Office of Medan and other related institutions to improve the program of antenatal care through posyandu activities and home visits, pregnant women dig health information and checks her pregnancy regularly and follow the advice obtained from health workers to prevent the occurrence of low birth weight babies.

Keyword: complications of pregnancy, antenatal care, LBW

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I. INTRODUCTION

World Health Organization (WHO) defines birth weight Low as babies born weighing less than 2500g. LBW continues to be a significant public health problem in global for the short and long-term effects on health (WHO, 2014). Recent studies have found that low birth weight also increases the risk of non-communicable diseases such as diabetes and cardiovascular Later (WHO, 2014). So serious global concern for This issue up to the World Health Assembly in 2012 endorsed the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition by targeting a 30% reduction in low birth weight in 2025 (WHO, 2014).

WHO estimates that the global prevalence of low birth weight is 15% which means about > 20.6 million babies born each year, 96.5% occurred in developing countries with the highest incidence in Central Asia 27.1% and the lowest in Europe as much as 6.4%, figures LBW Indonesia by 9% which is above the average rate of 7% Thailand, Vietnam 5% (Ekawati, 2015; UNICEF, 2012). The incidence of LBW in the world at 16%, this figure has increased from the previous year's data (UNICEF, 2014). Most babies born with low birth weight developing countries including Indonesia, LBW not the only major cause of death prenatal but also causes of morbidity (WHO, 2014). IDHS 2012, the show brought high rates of neonatal mortality at 66 per 1000 live births, infant to 84 per 1000 live births due to the weight of the baby at birth of small / very small (<2500 g),

when compared with birth weight > 2500 g ie neonatal death by 8 per 1000 live births, children at 18 per 1000 live births (CBS, 2012).

Data Riskesdas 2013, said that in Indonesia alone the percentage of low birth weight in 2010 amounted to 11.1% and in 2013 birthweight infants (0-59 months) with LBW by 8,432 (10.2%) of 82 666. This shows that the percentage of infants with low birth weight is downward sloping but still the government policy as a program evaluation by the Ministry of Health, meaning that one in ten babies Indonesia was born with LBW. Based Health Research (RISKESDAS) In 2010, the percentage of low birth weight in the province of North Sumatra by 8.2%. Data Riskesdas, 2013, the highest LBW in central Sulawesi by (16.8%), and lowest in North Sumatra by (7.2%) (MoH RI, 2010; 2013).

Based Riskesdas per district/town, in 2013, the highest LBW in Nias as much as 31.5%, the lowest in Toba Samosir and Pakpak west as much as 0.0%, the incidence in Serdang Bedagai 7.0%, 12.1%, Deli Serdang, Tebing Tinggi 4.4%, 6.0% Terrain (MoH RI, 2013). Less nutrition during pregnancy will give a bad effect on pregnant women and can affect how quickly the growth of the fetus, fetal structural perfection, and organ function are formed, so that may give birth to infants weighing <2500g. Babies with low birth weight if not dealt with soon to be a negative impact on growth, both physically and psychologically in the future (Badriah, 2011).

Factors that can affect birth weight by Manuaba (2012) includes internal environmental factors are maternal age, birth spacing, parity, gestational age, hemoglobin levels, nutritional status of pregnant women, complications of pregnancy and disease during pregnancy, environmental factors includes external environmental conditions, nutrient intake and socioeconomic levels of pregnant women and health facilities use factors related to the frequency of antenatal or antenatal care (ANC). Pregnant women during pregnancy situation should be monitored, because of poor maternal health conditions that can lead to complications during pregnancy, so it can have an impact on the state of the baby. Research Suriani (2010) concluded that there is a pregnancy complication influence on the incidence of low birth weight infants with $p = 0.003$ (OR = 1.53; CI = 1.16 to 2.02). May be associated with the incidence of low birth weight babies.

Therefore, the health condition of the mother during pregnancy should always be monitored with ANC visit to the health care workers, pregnant women visit to the midwife or doctor as early as possible since she felt she was pregnant to get service / antenatal care. At each visit antenatal care (ANC), the officer collecting and analyzing data about the condition of the mother through the history and physical examination to get a diagnosis of intrauterine pregnancy and whether there is a problem or complication (Saifuddin, 2014).

Diniya research results (2015), about the risk factors associated with low birth weight babies in the working area of the district health centers Martapura Banjar, that there is a significant correlation between the status of visits antenatal care with a low birth weight, results OR 3.73, which means the status of visits antenatal care that in complete had 3.73 times greater risk of having a baby of low birth weight compared with mothers who had visit status antenatal care complete. The research result Malvika (2014), about between low birth weight of babies and antenatal care of mothers at a tertiary care hospital of Kishanganj, Bihar, the result is that 34% of newborns were found to experience low birth weight, and there is a significant relationship between low birth weight infants with maternal age, religion, literacy, and regular antenatal care (ANC) during pregnancy.

Given that services antenatal care are services already available to the public since 1952, why LBW still high in Indonesia, then how far the services antenatal care existing have been able to help reduce the incidence of low birth weight. Medan is the largest city in the province of North Sumatra. As the largest city, should the city of Medan has a variety of advances in various fields compared to other regions in North Sumatra, including in terms of health services in terms of both quantity and quality. One of the important health services that are required in terms of both quantity and quality is antenatal care.

Services Antenatal care that do can monitor the health condition of the mother and fetus during pregnancy, so that the things that can cause low birth weight can be prevented. However, pregnant women who use antenatal care (antenatal care) in the maternity hospital in the city of Medan, there are those who give birth to babies with low birth weight (LBW). LBW high indicates that the quality of health and welfare is still low. Therefore, it is necessary to reduce the incidence of low birth weight so that the quality of health and welfare to be increased. LBW can be prevented if we know its causes. Regional General Hospital (Hospital) Dr. Pirngadi Medan city is a place of referral services in Medan area.

Based on the results of a preliminary survey of the medical record that has been done at the Hospital Dr. Pirngadi Medan, LBW in 2012 as many as 141 (19.5%) infants, in 2013 as many as 204 (28.1%) infants, by 2014 as many as 154 (21.2%) infants, in 2015 as many as 103 (14, 2%) infants, by 2016 as many as 123 (17.0%) infants. Neonatal mortality in 2016 were 38 (30.89%) of the 123 cases (30.82%) of 399 cases of low birth weight and birth of the baby, It shows the high incidence of LBW in Dr. Pirngadi Medan.

Based on the above it can be seen that many risk factors that can lead to low birth weight because the authors are interested in conducting research on "the effect of pregnancy complications, antenatal care (ANC) on the incidence of low birth weight babies in hospitals Dr. Pirngadi Medan Year 2017

II. METHODS

This research was observational analytic study using case control design by selecting mothers who give birth to babies with low birth weight as the case and mothers who give birth to babies with BBLN as controls. This design is used to look at exposure to disease by comparing the case group and control group. The research was carried out in the region of Dr. Pirngadi Medan. The research will be conducted from January to December 2017. The population in this study is the data of all mothers who gave birth in Dr. Pirngadi Medan in 2016 and the sample in this study were 130 respondents, 65 cases and 65 controls in Dr. Pirngadi city of Medan in 2017. The sample case is data mothers who give birth to babies of low birth weight <2500g in Dr. Pirngadi the city field.

Inclusion Criteria Cases:

1. Mothers with complete pregnancy records.
2. baby born alive

Exclusion criteria Cases:

1. Twins.
2. Mother with first pregnancy

Control sample of data mothers who give birth to babies of low birth weight <2500g in Dr.terrain city Pirngadi.

Inclusion Criteria Case:

1. Mothers with complete pregnancy records.
2. baby born alive

Exclusion criteria Cases:

1. Twins.
2. Mother with her first pregnancy.

Sampling was done by simple random sampling, The data were analyzed using Chi-Square test.

III. RESULT AND DISCUSSION

Characteristic traits or characteristics of the mother is naturally inherent in a person that included age, education and employment. No maternal education are primary, secondary and High School while the mother worked and did not work can be seen in the following table. Based on the Table 1 results show that out of 65 respondents in the majority of cases the group aged <35 years as many as 42 people (64.6%), the majority of respondents have completed high school education background as many as 23 people (35.4%) and the majority respondents work as self-employed and civil servants as many as 22 people (33.8%). In the control group of 65 people aged ≥35 years the majority of respondents as many as 33 people (43.1%), the majority of respondents have completed high school education background as many as 35 people (53.8%) and the majority of respondents work as self-employed and civil servants are 32 people (49.2%) the results can be seen in table1.

Table 1: Frequency Distribution Characteristics of Respondents in the Regional General Hospital Dr Pirngadi Medan Year 2017

No.	Characteristics	Genesis Low Birth Weight Babies (LBW)			
		Cases		Controls	
			N%		N%
Age					
1	≥35 years	23	35.4	33	43.1
2	<35 in	42	64.6	32	56.9
Total		65	100	65	100
Education					
1	SD	5	7.7	9	13.8
2	junior	19	29.2	11	16.9
3	high school	23	35.4	35	53.8
4	PT	18	27.7	10	15.4
Total		65	100	65	100
Job					
1	IRT	21	32.3	21	32.2
2	Self Employed	22	33.8	12	18.5
3	civil servants	22	33.8	32	49.2
Total		65	100	65	100

Parity Respondents and type baby Gender

Based on table 2 shows that in the case group of 65 respondents majority spawned > 3x as many as 49 people (75.4%), ≤3x spawned as many as 16 people (24.6%), the majority of babies born male sex as many as 38 infants (58.5%) in the control group gave birth ≤3x majority of respondents as many as 38 people (58.5%), the majority of babies born male sex as many as 34 infants (55.4%). The results of the study are shown in Table 2:

Table 2: Frequency Distribution of Respondents parity and baby gender in Dr. Pirngadi Medan 2017

No		An Events Low Birth Weight Babies (LBW)			
		Cases		Controls	
			N%		N%
Parity					
1	≤3x born	16	24.6	38	58.5
2	>3x born	49	75.4	27	41.5
Total		65	100	65	100
Baby Gender					
1	male	38	58.5	34	55.4
2	Female	27	41.5	31	44.6
Total		65	100	65	100

Independent Variables (Age Pregnancy, Distance Pregnancy, Pregnancy Complications, ANC)

Based on the results, the results shows that in the case group of 65 respondents majority ≥37 week gestation as many as 39 people (60.0%), the majority of spacing pregnancies <2 years as many as 46 people (70.8%), there is a complication of pregnancy as many as 47 people (72.3%), antenatal care the majority of <4x visit as many as 45 people (69.2%). In the control group of 65 respondents majority ≥37 week gestation as many as 47 people (72.3%), the majority of pregnancies distance ≥2 years as many as 37 people (56.9%), the majority were no complications of pregnancy as many as 38 people (41.5%), Antenatal care the majority ≥4x visit as many as 53 people (81.5%). The results of the study are presented in Table 3.

Table 3: Frequency Distribution of Age Pregnancy, Distance Pregnancy, Pregnancy Complications, ANC in Dr.Pirngadi Medan Year 2017

No.	Independent Variables	Genesis Infant Low Birth Weight (LBW)			
		Cases		Controls	
			n%		n%
Age Pregnancy					
1	<37 week	26	40.0	18	27.7
2	≥37 week	39	60.0	47	72.3
Total		65	100	65	100
Distance Pregnancy					
1	<2 years	46	70.8	28	43.1
2	≥2 years	19	29.2	37	56.9
Total		65	100	65	100
Complications of Pregnancy					
1	there were	47	72.3	27	41.5
2	No	18	27.7	38	58.5
Total		65	100	65	100
Antenatal Care (ANC)					
1	<4x visit	45	69.2	12	18.5
2	≥4x visit	20	30.8	53	81.5
Total		65	100	65	100

Effect of Age Pregnancy results Bivariat, Distance Pregnancy, Complications of Pregnancy, Antenatal Care (ANC) of Genesis Low Birth weight Babies (LBW)

Based on the results research showed that showed that in case group as many as 26 people (40.0%) of respondents gestation <37 week and 39 (60.0%) of respondents us he pregnancies ≥37 week. Whereas in the control group there were as many as 18 people (27.7%) of respondents gestation <37 week and 47 (72.3%) of respondents were ≥37 week gestation. The results of statistical tests showed that there was no effect of gestational age on the incidence of low birth weight (p = 0.138; OR = 1.741 95% CI 0.834 to 3.633).In the case group there are as many as 46 people (70.8%) of respondents were within her pregnancy <2 years and 19

(29.2%) of respondents pregnancy distance ≥ 2 years. Whereas in the control group there were 28 people (43.1%) of respondents who spacing pregnancies < 2 years and 37 (56.9%) of respondents who spacing pregnancies ≥ 2 years. The results of the statistical test showed that there is influence of pregnancy on the incidence of LBW distance ($p = 0.001$; OR = 3,199 95% CI 1.548 to 6.611), meaning that respondents within her pregnancy < 2 years of potentially 3,199 times greater risk would BBLR compared with the spacing pregnancies ≥ 2 years.

In the case group there were 47 people (72.3%) of respondents who experienced complications in pregnancy and 18 (27.7%) of respondents who do not experience complications in pregnancy. Whereas in the control group there were as many as 27 people (41.5%) of respondents who experienced complications in pregnancy and 38 (58.5%) of respondents who did not experience complications in pregnancy. The results of statistical tests showed that there are complications in pregnancy influences the incidence of low birth weight ($p = < 0.001$; OR = 3,675 95% CI 1.764 to 3.001), meaning that respondents who experienced complications in pregnancy likely 3,675 times greater risk would BBLR compared with those not experiencing complications in pregnancy.

In the case group there were 45 people (69.2%) of respondents who did ANC $< 4x$ visits during pregnancy and 20 (30.8%) of respondents who do $\geq 4x$ ANC visits during pregnancy. Whereas in the control group there were 12 people (18.5%) of respondents who do ANC $< 4x$ visits during pregnancy and 53 (81.5%) of respondents who do $\geq 4x$ ANC visits during pregnancy. The results of statistical tests showed that there are complications in pregnancy influences the incidence of low birth weight ($p = < 0.001$; OR = 9.938 95% CI 4.383 to 22.531), meaning that respondents who do ANC $< 4x$ visits during pregnancy is potentially risky 9.938 times greater than would BBLR by doing $\geq 4x$ ANC visits during pregnancy. The research results are presented in Table 4.

Table 4: Cross Tabulation Age Pregnancy, Distance Pregnancy, Complications of Pregnancy, Antenatal Care (ANC) to Low Birth Weight Babies events in Dr. Pirngadi Medan Year 2017

No.	Independent Variable	Genesis Low Birth Weight Babies (LBW)				P value	OR	95% CI
		Cases		Controls				
		n%	n%	n%	n%			
gestational age								
1	<37 week	1.741 0,834-3,633	40.0	18	27.7	0.138	26	
2	≥ 37 week	39	60.0	47	72.3			
Total		65	100	65	100			
Distance Pregnancy								
1	<2 years	3.199 1,548-6,611	70.8	28	43.1	0.001	46	
2	≥ 2 years	19	29.2	37	56.9			
Total		65	100	65	100			
Pregnancy complications								
1	Exist	47	72.3	27	56.9	<0.001	3.675	1.764 to 3.001
2	No	18	27.7	38	43.1			
Total		65	100	65	100			
Antenatal Care (ANC)								
1	<4x visit	45	69.2	12	18.5	<0.001	9.938	4,383-22.531
2	$\geq 4x$ visit	20	30.8	53	81.5			
Total		65	100	65	100			

Results of the multivariate analysis variable Selection for logistic regression test

Variables included in the logistic regression is a variable that has a value of $p < 0.25$ selected by looking at the p value shows that the variable of pregnancy, spacing pregnancies, complications of pregnancy, antenatal care has a value of $p < 0.25$ so it can be included in a multiple logistic regression model. Can be seen in Table 5:

Table 5: Selection Variables That Can Log In Multiple Logistic Regression Model

Variable	p value	Value Assessment	Modeling
Age Pregnancy	0.138	p <0.25	Sign modeling
Distance Pregnancy	0.001	P <0.25	Sign modeling
Complications of Pregnancy	<0.001	P <0.25	Sign modeling
Antenatal Care (ANC)	<0.001	P <0.25	Sign modeling

Logistic Regression Model to the incidence of LBW

Analysis shows that there is one variable that p value >0.05 is gestation p value 0.062 > 0, 05, so that further modeling variables gestational age were excluded from the model. Can be seen in Table 6. The results of phase 2 logistic analysis showed that all the variables of variable spacing pregnancies, complications of pregnancy, antenatal care has a value p <0.05 which means it has a significant variable. Namely that the variable spacing pregnancies, complications of pregnancy, antenatal care affect LBW. So based on the results of logistic regression, the dominant variable effect on the incidence of low birth weight babies are antenatal care (p= <0.001; OR = 14.244 5.226 to 38.819 CI95%) of respondents who pass the examination means that the ANC during pregnancy <4x visit potentially risky 14 2 times more likely give birth to low birth weight babies than those who pass the examination during pregnancy ≥4x ANC visits during pregnancy. Can be seen in Table 7.

Table 6: Logistic Regression Model First Stage of Low Birth Weight Babies events in Dr. Pirngadi Medan Year 2017

Variable	B	Sig.	OR	95% CI	
				Lower	Upper
Gestational age	0.988	0.062	2.685	0.950	7.584
Distance Pregnancy	1.287	0.008	3.621	1.392	9.419
Pregnancy Complications	1.997	0.000	7.370	2.609	20.816
Antenatal care (ANC)	2.553	0.000	12.850	4.672	35.338
constant	-3.313	0.000	0.036		

Table 7: Logistic Regression Model Second Stage Genesis against Low Birth weight Babies in Dr. Pirngadi Medan Year 2017

Variable	B	Sig.	OR	95% CI	
				Lower	Upper
Distance pregnancy	1.060	0.021	2.886	1.176	7.085
pregnancy complications	1.858	0.000	6.413	2.351	17.494
Antenatal care (ANC)	2.656	0.000	14.244	5.226	38.819
constant	-2.822	0.000	0.060		

Based on the analysis and interpretation of research data have been obtained then it can be seen that there are causes that affect the incidence of low birth weight incidence based on data from medical records of patients who gave birth in Dr. Pirngadi Medan 2017.

Genesis Effect of Pregnancy Complications of Low Birth Weight Babies in Dr. Pirngadi Medan Year 2017

Based on the results in Dr. Pirngadi city of Medan on the results of bivariate analysis, p = <0.001 <0.05 OR = 3.675; 95% CI: 1.764 to 3.001, meaning that pregnancy complications influenced the incidence of low birth weight, p = <0.001 <0.25 then go in for modeling to be analyzed in a multivariate analysis.

The results showed that in the case group there are as many as 47 people (72.3%) of respondents were no complications during pregnancy give birth to babies with low birth weight and 18 (27.7%) of respondents were no complications during pregnancy give birth to low birth weight. Whereas in the control group there were as many as 27 people (41.5%) of respondents were no complications during pregnancy gave birth weight normal infant and 38 (58.5%) of respondents were no complications during pregnancy give birth to babies BBLN. Results of multivariate analysis obtained by value (p = <0.001 <0.05), meaning that there is a significant influence of complications during pregnancy on the incidence of low birth weight. From the analysis results are also obtained value (OR =6.413;95% CI: to2.35117.494),meaning that respondents who had complications during pregnancy are at increased risk of LBW 6.413 times will give birth than those who did not have complications during pregnancy.

Based on research results from some kind of pregnancy complications are the most common KPD, hypertension in pregnancy. These complications can be caused by lack of hygiene factors and less checks ANC so undetectable abnormalities during pregnancy. Complications of pregnancy is a health problem that often occurs during pregnancy and at delivery. Maternal health problems could have occurred before pregnancy, which in turn impact on pregnancy complications. These complications can have an impact on maternal health, infant health typing born, or both.

Complications of signs and symptoms experienced when the last child pregnancy include seizures, pre-eclampsia, eclampsia, headache, edema, anemia, premature rupture of membranes (PROM), heart disease, based on the diagnosis during pregnancy, thus affecting the pregnancy. This is in line with research Suriani (2010) concluded that there is a pregnancy complication influence on the incidence of low birth weight infants with $p = 0.003$ (OR = 1.53; CI = 1.16 to 2.02). May be associated with the incidence of low birth weight babies. Suriani states that the infection during pregnancy may be associated directly or indirectly with LBW, such as infection in malaria, Toxoplasma, Plasmodium and viral infections.

Effect of Antenatal Care (ANC) Genesis Against Low Birth Weight Babies in Dr. Pirngadi Medan Year 2017

Based on the results in Dr. Pirngadi city of Medan on the results of bivariate analysis, $p = <0.001 <0.05$ OR = 9.938; 95% CI: 4.383 to 22.531, i.e. antenatal care effect on the incidence of low birth weight, $p = <0.001 <0.25$ then go in for modeling to be analyzed in a multivariate analysis. The results showed that in the group there are 45 cases (69.2%) of respondents who do ANC $<4x$ the visit gave birth to low birth weight babies and 20 (30.8%) of respondents who do $\geq 4x$ ANC BBLR visit. Whereas in the control group there were 12 people (18.5%) of respondents who do ANC $<4x$ the visit gave birth weight normal infant and 53 (81.5%) of respondents who gave birth to a baby ANC BBLN $\geq 4x$ visit. Results of multivariate analysis obtained by value ($p = <0.001 <0.05$), meaning that there is a significant influence of the ANC visit to LBW. From the analysis results are also obtained value (OR = 14.244; 95% CI: 5.226 to 38.819), meaning that respondents who visit ANC $<4x$ visits during pregnancy are at increased risk of low birth weight 14.244 times will give birth than those who do visit $\geq 4x$ ANC visits during pregnancy.

Maternal health programs in Indonesia recommends that pregnant women do at least 4 visits for inspection during pregnancy, according to the 1-1-2 schedule is: at least one visit in the first trimester, once in the second trimester, two visits in the third trimester to monitor the state of the mother and fetus carefully, so that it can detect early and can provide quick and accurate intervention.

In Indonesia, all pregnant women are encouraged to get services as follows: measurement of height and weight, blood pressure measurement, get iron pills, tetanus toxoid immunization, and examination of high-fundus, and consultation pregnancy for birth preparation, explanation about the signs of complications pregnancy (MoH RI, 2013; CBS, 2012). Diniya research results (2015), about the risk factors associated with low birth weight babies in the working area of the district health centers Martapura Banjar, that there is a significant correlation between the status of visits antenatal care with a low birth weight, results OR 3.73, which means the status of antenatal visits were not Detailed had 3.73 times greater risk of having a baby of low birth weight compared with mothers who had visits status antenatal care complete.

According Subkhan (2011) risk mothers who have a history of the disease have a higher risk of having low birth weight, lack of inspection of the ANC during pregnancy influenced the incidence of low birth weight, which the mother who visit ANC $<4x$ during pregnancy have a higher risk of having low birth weight compared with mothers conducting ANC $\geq 4x$ during pregnancy. The research result Malvika (2014), about between low birth weight of babies and antenatal care of mothers at a tertiary care hospital of Kishanganj, Bihar, the result is that 34% of newborns were found to experience low birth weight, and there is a significant relationship between low birth weight infants with maternal age, religion, literacy, and regular antenatal care (ANC) during pregnancy.

Given that services antenatal care are services already available to the public since 1952, why LBW still high in Indonesia, then how far the services antenatal care existing have been able to help reduce the incidence of low birth weight.

Services Antenatal care that do can monitor the health condition of the mother and fetus during pregnancy, so that the things that can cause low birth weight can be prevented. However, pregnant women who use antenatal care (antenatal care) in maternity hospitals, public hospitals in the city of Medan, there are those who give birth to babies with low birth weight (LBW).

IV. CONCLUSION

Variable pregnancy complications is also one of the factors that affect the incidence of low birth weight infants with value ($p = <0.001 <0.05$; OR = 6.413; 95% CI: 2.351 to 17.494), maternal complications of pregnancy would lead to the risk of babies low birth weight. It is caused due to infection during pregnancy may

be related directly or indirectly to inhibit fetal growth and even cause death. Variable ANC visits greatly influenced the incidence of low birth weight infants with values ($p = <0.001 <0.05$; OR = 14.244; 95% CI: 5.226 to 38.819), respondents who do $\geq 4x$ ANC visits during pregnancy on a regular basis will be makes it possible to avoid having a baby of low birth weight, compared to those ANC visit $<4x$ during pregnancy. ANC variable is the most dominant variable affecting low birth weight babies. This suggests that $\geq 4x$ ANC visits during pregnancy and regular visits are essential.

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