



Risk Factors Intra Uterin Fetal Death at Nabire General Hospital Papua Province

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Abstract

Perinatal's mortality, child mortality maternal's mortality, and toddler mortality constitute health situation parameter, midwifery service, and health and reflects economic social situation a state Embryonic mortality in womb at Indonesian unknown for sure since haven't available survey that comprehensive. Embryonic death instance become by RSUD Nabire and has risk of mother data and also mother health history. This research aimed to know the risk factor's intra uterin fetal death at general hospital nabire regency Papuan Province. The method was observational by designs studi *case control* with retrospective approaching. This research is executed at general hospital Nabire Regency that will be plotted on month of September 2016 as much 58 intra uterin fetal death cases and kontrol as much 58. Acquired data of medik's recording data and analysing to utilize chi square and binars regression logistics. Results revealed that there is not correlation variable to INTRA uterin fetal death incidence is aged (*p value* 1,000; OR = 0,926; CI95% = 0,428 – 2,000), ethnic Intra Uterin Fetal Death (*p value* 0,707; OR = 0,809; CI95% = 0,387 – 1,692), ANC frequency (*p value* 0,477; OR = 0,636; CI95 = 0,248 – 1,630) and congenital abnormality (*p value* 0,435; OR = 2,642; CI95% = 0,491 – 14,206).

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Influential variable to Intra Uterin Fetal Death insidene at general hospital Nabire regency is obstetrics histories (*p value* 0,001; OR= 7,105; CI95%= 2,248 – 22,461), pre eklampsia / eklampsia (*p value* 0,032; OR= 2,554; CI95%= 1,155 – 5,646), long partus (*p value* 0,007; OR= 5,143; CI95%= 1,600 – 16,529) and plasenta winding (*p value* 0,033; OR= 5,833; CI95%= 1,218 – 27,937). Obstetrics history, pre eklampsia / eklampsia, and partus so long constitute dominant factor to intra Uterin Fetal Death incidence at general hospital Nabire.

Keywords: The risk factor intra uterin fetal death.

1. Introduction

Health development goals is to achieve healthy untukhidup ability for each resident in order to realize optimal kesehatanyang degrees. The success of development can be seen from the degree kesehatanmasyarakat. In this case there are several indicators to assess derajatkesehatan society, particularly maternal and child health indicators, yaituangka child and maternal mortality, life expectancy, the number of health care coverage, and others. One yardstick palingpeka untukmenilai community health status is the perinatal mortality rate [1]. The perinatal mortality rate, child mortality rate (infant), the maternal mortality rate and under five mortality rate is the Mo-health-state parameter, obstetric care, and health and reflect the socio-economic situation of a country [2]. Approximately 15% to 25% of fetal death caused by problems in the placenta, membranes, or the umbilical cord and placental abruption is the sole cause of fetal death in utero to diiden-fying. In addition to bleeding and infection, preeclampsia and eclampsia is the cause of maternal and perinatal mortality is high, especially in developing countries, deaths from eclampsia rose more sharply than the rate of severe preeclampsia [1]. According Rukiyah [3], the cause of fetal death in utero was the discrepancy rhesus maternal and fetal blood, fetal movements are active, the disease in the mother, maternal infection, antepartum bleeding, malnutrition and others. Figures intrauterine fetal death (IUFD) or fetal death in utero in Indonesia is not known to pastikarena no thorough survey. The numbers are in the hospital perinatal angkakematian great that no memberikangambaran approaching the perinatal mortality rate is keseluruhan.Kematian fetus in the womb can be caused by beberapafaktor that maternal factors, fetal factors, and factors umbilical cord abnormalities. Factors ibumeliputi age, parity, antenatal and maternal dideritaoleh disease (anemia, pre-eclampsia and eclampsia, placental abruption, diabetes mellitus, infections in pregnancy, premature rupture of membranes and latitude layout). Factors that fetal congenital abnormalities, and Infeksiintranatal). Factors that umbilical cord abnormalities insertion of umbilical cord abnormalities, simpultali center, and a nuchal cord [4]. Figures fetal death in utero (IUFD) can be lowered through antenatal supervision on all pregnant women to find early danmendeteksi factors that affect the safety of the fetus danneonatus. In addition to monitoring in pregnant women, for menurunkanangka perinatal mortality can be done by improving keadaansosial and economy, improving maternal health, fetal diagnosis gawat repair techniques, improve health-care facilities, and pencegahaninfeksi seriously [4]. According to data Writer Perolehdari Profile Papua Health Office (2015), infant mortality rate is 52/1000 births hidup.data Nabire District Health Office as 8/1000 live births. Based on data obtained in hospitals district Nabiretahun 2013 as many as 2,432 labor and fetal death in utero as many as 23 cases (0.94%), in 2014 as many as 2,327 and the incidence of fetal death in utero as many as 31 cases (1.33%) and 2015 total 2059 delivery and the incidence of fetal death in utero in utero by 37 cases (1.79%). The data indicate fetal death in utero still high enough. The aim of research to identify factors that influence fetal death in utero in

Nabire district hospitals.

2. Materials and Methods

This study was an observational study with case control study design with a retrospective approach. A case control study was an epidemiological study study design variables including the risk factors and variables that include the effect observed while at the same time. This study was conducted in Nabire district hospitals which dilsaksanakanbulan October 2016. Populasi in this study were all births in Nabire Hospital padabulan January to October 2016. Berdasarkan number of cases of fetal death in utero in January to October 2016 as many as 58 cases, the research this use case-control comparison, ie 1: 1, so that the number of samples taken as many as 116 people.

3. Results

3.1 Univariate Analysis

Table 1: Distribution of Independent and Dependent Variables in Nabire Hospital 2016 Top of Form Bottom of Form

No	Variabel	Frekuensi (n)	Presentase (%)
1	Age		
	< 20 year , > 35 year	39	33,6
	20 - 35 year	77	66,4
2	Occupation		
	No work	105	90,5
	Work	11	9,5
3	Tribe		
	Papua	67	57,8
	Non papua	49	42,2
4	FrekuensiANC		
	Irregular	94	81
	Regular	22	19
5	Obstetrik history		
	Yes	24	20,7
	No	92	79,3
6	Pre eklampsia		
	Yes	40	34,5
	No	76	65,5
7	Congenital disorder		
	Yes	7	6
	No	109	94
8	Old Partus		
	Old	20	17,2
	Normal	96	82,8
9	Lilitan Tali Pusat		
	Yes	12	10,3
	No	104	89,7
10	Death in womb		
	Death	58	50
	Life	58	50
Total		116	100

Based on Table 1, indicate that most respondents in the age group 20-35 years as many as 77 people (66.4%), did not work as many as 105 people (90.5%), the frequency of irregular ANC as many as 94 people (81%). In addition, most respondents no obstetric history as many as 92 people (79.3%), no pre-eclampsia / eclampsia as many as 76 people (65.5%), no congenital abnormalities as many as 109 people (94%), while normal parturition as many as 96 people (82.8%), no winding talipusat as many as 104 people (89.7%).

3.2 Analysis Bivariat

a. Effect of Age Mothers against the Death Fetus In Womb

Table 2: Effect of Age Mothers against the Death Genesis Fetus In Womb in Nabire Hospital

No	Age	Genesis Death Fetus In Womb				n	%
		Yes		No			
		n	%	n	%		
1	< 20 year , > 35 year	19	32,8	20	34,5	39	33,6
2	20 – 35 year	39	67,2	38	65,5	77	66,4
Total		58	100	58	100	116	100
<i>p-value</i> = 1,000; OR = 0,926; CI95% (0,428 – 2,000)							

Table 2 shows that of the 58 respondents to the incidence of fetal death in utero as many as 19 people (32.8%) in the age group <20 years and> 35 years and the age of 20-35 years as many as 39 people (67.2%). Meanwhile, from 58 babies born alive as many as 20 people (34.5%) at age <20 years and> 35 years old and 20-35 years of age were 38 people (65.5%). The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained p -value 1,000 or $p > \alpha$ (0.05), thus there is no influence of age on the incidence of fetal death in rahimdi Nabire hospital. When viewed from the value of OR = 0.926; CI95% (0.428 to 2.000), which was interpreted not meaningful.

b. Influence of Ethnicity on Death Fetus In Womb

Table 3 shows that of the 58 respondents to the incidence of fetal death in utero as many as 32 people (55.2%) in the Papuan and non-Papuan many as 26 people (44.8%). Meanwhile, from 58 babies born alive as many as 35 people (60.3%) in the Papuan and non-Papuan many as 23 people (39.7%).

The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained p -value 0,707 or $p > \alpha$ (0.05), thus no effect on the incidence rate of fetal death in rahimdi Nabire hospital. When viewed from the value of OR = 0.809; CI95% (0.387 to 1.692), which was interpreted not meaningful.

Table 3: Effect of Fetal Death Rate of Genesis in Nabire Hospital in Rahim Top of Form Bottom of Form

No	Tribe	Genesis Death Fetus In Womb				n	%
		Yes		No			
		n	%	n	%		
1	Papua	32	55,2	35	60,3	67	57,8
2	Non Papua	26	44,8	23	39,7	49	42,2
Total		58	100	58	100	116	100
<i>p-value = 0,707; OR = 0,809; CI95% (0,387 – 1,692)</i>							

c. Effect of Frequency ANC against the Death Fetus In Womb

Table 4: Effect of Frequency ANC of Genesis Fetal Death In Rahimdi Nabire Hospital

No	Frekuensi of ANC	Genesis Death Fetus In Womb				n	%
		Yes		No			
		n	%	n	%		
1	Irregular	45	77,6	49	84,5	94	81
2	Regular	13	22,4	9	15,5	44	19
Total		58	100	58	100	116	100
<i>p-value = 0,477; OR = 0,636; CI95% (0,248 – 1,630)</i>							

Table 4 shows that of the 58 respondents to the incidence of fetal death in utero as many as 45 people (77.6%) with a frequency of irregular and regular ANC as many as 13 people (22.4%).

Meanwhile, from 58 babies born alive as many as 49 people (60.3%) with a frequency of irregular and regular ANC were 9 people (15.5%).

The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained p -value 0,477 or $p > \alpha$ (0.05), thus no effect on the incidence of ANC frequency of fetal death in utero at the Nabire hospital. When viewed from the value of OR = 0.636; CI95% (0.248 to 1.630), which was interpreted not meaningful.

d. Effect of Obstetric history against the Death Fetus In Womb

Table 5: Effect of Obstetric history of Genesis Fetal Death In Rahimdi Nabire Hospital

No	Obstetrik Hystory	Genesis Death Fetus In				n	%
		Womb					
		Yes		No			
		n	%	n	%		
1	Yes	20	34,5	4	6,9	24	20,7
2	None	38	65,5	54	93,1	92	79,3
Total		58	100	58	100	116	100
<i>p-value</i> = 0,001; OR = 7,105; CI95% (2,248 – 22,461)							

Table 5 shows that of the 58 respondents to the incidence of fetal death in utero as many as 20 people (34.5%) no obstetric history and no history of obstetric many as 38 people (65.5%). Meanwhile, from 58 babies born alive as much as 4 (6.9%) there was no history of obstetric and obstetric history as many as 54 people (93.1%). The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained *p-value* 0,001 or $p < \alpha$ (0.05), thus no effect on the incidence obstetrik riwayat fetal death in utero at the Nabire hospital. When viewed from the value of OR = 7.105; CI95% (2.248 to 22.461) interpreted the existing maternal obstetric history increased risk of fetal death in utero 7.105 times greater than mothers who no obstetric history.

e. Effect of Pre-eclampsia / eklampsia to fetal death in utero

Table 6: Effect of Pre-eclampsia / eklampsia to incidence of Fetal Death In Rahimdi Nabire Hospital

No	Pre eklampsia/ eklampsia	Genesis Death Fetus In				n	%
		Womb					
		Yes		No			
		n	%	N	%		
1	Yes	26	44,8	14	24,1	40	34,5
2	None	32	55,2	44	75,9	76	65,5
Total		58	100	58	100	116	100
<i>p-value</i> = 0,032; OR = 2,554; CI95% (1,155 – 5,646)							

Table 6 shows that of the 58 respondents to the incidence of fetal death in utero as many as 26 people (44.8%) No Pre-eclampsia / eklampsia and no Pre-eclampsia / eklampsia as many as 14 people (24.1%). Meanwhile, from 58 babies born alive as many as 32 people (55.2%) No Pre-eclampsia / eklampsia and no Pre-eclampsia / eklampsia many as 44 people (75.9%). The test results on the value of chi square statistic significance of 95% (α

= 0.05) was obtained p-value 0,032 or $p < \alpha$ (0.05), thus there is the effect of pre-eclampsia / eklampsi terhadap incidence of fetal death in utero at the Nabire hospital. When viewed from the value of OR = 2.554; CI 95% (1.155 to 5.646) which interpreted the mother that there is a history of pre-eclampsia risk for fetal death in utero 2,554 times greater than in women with no history of pre-eclampsia.

f. Congenital Abnormalities Influence on Death Fetus In Womb

Table 7: Effect of Congenital Disorders of Genesis Fetal Death In Rahimdi Nabire Hospital Top of Form Bottom of Form

No	Kongenital disorder	Genesis Death Fetus In Womb				n	%
		Yes		No			
		n	%	n	%		
1	Yes	5	8,6	2	3,4	7	6
2	None	53	91,4	56	96,6	109	94
Total		58	100	58	100	116	100
<i>p-value</i> = 0,435; OR = 2,642; CI 95% (0,491 – 14,206)							

Table 7 shows that of the 58 respondents to the incidence of fetal death in utero as many as five people (8.6%) there was no congenital abnormalities and congenital abnormalities by 2 people (3.4%). Meanwhile, from 58 babies born alive as many as 53 people (91.4%) no congenital abnormalities and no congenital abnormalities as many as 56 people (96.6%). The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained p-value 0,435 or $p > \alpha$ (0.05), thus no effect on the incidence of congenital abnormalities of fetal death in utero at the Nabire hospital. When viewed from the value of OR = 2.642; CI 95% (0.491 to 14.206), which was interpreted not meaningful.

g. Partus influence on Death Old Fetus In Womb

Table 8 shows that of the 58 respondents to the incidence of fetal death in utero as many as 16 people (27.6%), prolonged labor and normal parturition as many as 42 people (72.4%). Meanwhile, from 58 babies born alive as much as 4 (6.9%), prolonged labor and normal parturition as many as 54 people (93.1%).

The test results on the value of chi square statistic significance of 95% ($\alpha = 0.05$) was obtained p-value 0,007 or $p < \alpha$ (0.05), thus no influence on the incidence of prolonged labor fetal death in rahimdi Nabire hospital. When viewed from the value of OR = 5.143; CI 95% (1.600 to 16.529) interpreted prolonged labor increased risk of fetal death in utero 5.143 times greater than the normal parturition.

Table 8: Effect of Genesis Death Partus Old Fetus In Womb in Nabire Hospital

No	Old Partus	Genesis Death Fetus In				n	%
		Womb					
		Ya		Tidak			
N	%	N	%				
1	Old	16	27,6	4	6,9	20	17,2
2	Normal	42	72,4	54	93,1	96	82,8
Total		58	100	58	100	116	100
<i>p-value</i> = 0,007; OR = 5,143; CI95% (1,600 – 16,529)							

h. Influence of the Death Coil Cord Fetus In Womb

Table 9: Effect of Genesis Death Partus Old Fetus In Womb in Nabire Hospital Top of Form Bottom of Form

No	Cord winding	Genesis Death Fetus In				n	%
		Womb					
		Yes		No			
n	%	N	%				
1	Yes	10	17,2	2	3,4	12	10,3
2	None	48	82,8	56	96,6	104	89,7
Total		58	100	58	100	116	100
<i>p-value</i> = 0,033; OR = 5,833; CI95% (1,218 – 27,937)							

Table 9 shows that of the 58 respondents to the incidence of fetal death in utero as many as 10 people (17.2%) No nuchal cord and no umbilical cord loops as many as 48 people (82.8%). Meanwhile, from 58 babies born alive as much as 2 (3.4%) No nuchal cord and no umbilical cord loops as many as 56 people (96.6%). The test results on the value of chi square statistic significance of 95% = 0.05) was obtained $p\text{-value} = 0,033$ or $p\alpha (< \alpha (0.05))$, thus no influence roping pusatterhadap Genesis fetal death in utero at the Nabire hospital. When viewed from the value of OR = 5.833; CI95% (1.218 to 27.937) which is interpreted there nuchal cord at risk for fetal death in utero 5,833 times greater compared to no nuchal cord.

3.3 Multivariate Analysis

Multivariate analysis is used to obtain answers to the factors which influenced the incidence of fetal death in utero, it is necessary to proceed on the bivariate and multivariate analysis. Modelling using bivariate logistic

regression modeling begins with bivariate. obstetric history variables, pre-eclampsia / eclampsia, obstructed labor and winding talipusat into the category of p-value <0.25, so get into the multivariate model and tested together - together with the test binaries logistics. Multivariat analysis results obtained p-value <0.05 as shown in Table 10 below.

Table 10: Variables Multiple Logistic Regression Analysis

No	Variabel	B	p-value	OR	95% C. I. for Exp (B)	
					Lower	Upper
1	Obstetric history	2,159	0,001	8,661	2,550	29,418
2	Pre eklampsia	1,003	0,029	2,727	1,109	6,709
3	Old Partus	1,736	0,006	5,674	1,632	19,731
4	Cord winding	1,378	0,114	3,967	0,719	21,883
	Constant	-11,428	0,000			

Table 10 above, obstetric history, pre-eclampsia / eclampsia, and obstructed labor has a p-value <0.05 and were tested again to determine the dominant factor on the incidence of fetal death in utero in Nabire hospital can be seen in Table 11 below ,

Table 11: Variables Multiple Logistic Regression Analysis

No	Variabel	B	p-value	OR	95% C. I. for Exp (B)	
					Lower	Upper
1	Obstetric history	2,144	0,000	8,536	2,557	28,502
2	Pre eklampsia	1,071	0,018	2,919	1,204	7,074
3	Old Partus	1,874	0,003	6,515	1,889	22,465
	Constant	-9,128	0,000	0,000		

Table 12 above, obstetric history, pre-eclampsia / eclampsia, and obstructed labor lamamemiliki p-value <0.05 and a dominant factor in the incidence of fetal death in rahimdi Nabire hospital, while the umbilical cord loops is a factor interactions.

4. Discussion

4.1. Effect of Age Mothers against the Death Genesis Fetus In Womb

The result showed that there was no effect of age terhadap Kejadian rahim di fetal death in Nabire hospital (p-value 1,000). The results of this study are not consistent with research at the Maternity Hospital Kota Makassar and Miske [5] in RSKDIA Siti Fatimah Makassar that there is influence of age on perinatal mortality. Reproductive age is good for a pregnant woman is 20-35 years old. At the age of young mother's reproductive organs dan mosi not mature enough, this is due to deterioration of the reproductive organs are umum. Wanita age is 35 years or older and multiparous who are age 40 years or more will be at risk of placenta previa berisiko, hydatidiform mole and vascular disease, neoplasms and diseases degeneratif. Peningkatan risk of giving birth to fraternal twins or a baby with a genetic disorder particularly Down syndrome [4]. The results of the analysis that the respondents to the incidence of fetal death in utero (32.8%) in the age group <20 years and > 35 years of age and 20-35 years (67.2%). While live-born infants (34.5%) at age <20 years and > 35 years of age and 20-35 years (65.5%). This shows that there was no difference in age or have the same risk of death of the fetus in the womb, This is evident from the value of OR = 0.926; CI 95% (0.428 to 2.000), which was interpreted not meaningful.

According to Manuaba [1], the age of women under 20 years old are more susceptible to the occurrence of pre-eclampsia (a condition characterized by high blood pressure, protein in the urine and fluid retention setama pregnancy) and eclampsia (seizures due to pre-eclampsia), they are also more likely having a baby with a low birth weight or infant malnutrition, because of mental preparedness in the face of pregnancy. Moreover it has less to existing knowledge perawatn-risk pregnancies and on nutritional status and other risk factors koimplikasi due to the immaturity of the reproductive organs. Based on the above opinion concluded that the lack of effect of age on the incidence of fetal death in utero due to the age factor is a factor that indirectly. Age factor can be associated with various complications or complications in pregnancy and childbirth. However, if a mother with young and old do not have the risk of complications or in complications during pregnancy and antenatal care are able to do well, so this risk is getting smaller. It is concluded that the age factor is not a direct factor causing fetal death in utero.

4.2. Effect on Mortality Rate Fetus in Womb

The result showed that the incident did not adapengaruh rate of fetal death in rahim di Nabire hospital (p-value 0,707). The results of this study are not consistent with research conducted Marimbun in Sarimi find that there are ethnic influences that affect nutritional status have an impact on newborn mortality (p = 0.041) OR = 3,325 (CI 95: 1.171 to 9.442) that ethnic Papuans higher risk 3,325 times greater occurrence of neonatal mortality compared to non Papua ethnicity. Various ethnic groups may differ in habits, lifestyle and so on which can result in differences in morbidity or mortality [6]. Aspek greatly affect the social and cultural patterns of all human life. In the era of globalization with various changes that are so extreme at this time demanding all men should pay attention to the social aspects of culture [7]. Results of the analysis showed that the incidence of fetal death in utero (55.2%) in the Papuan and non-Papuan (44.8%). While live-born infants (60.3%) in the Papuan

and non-Papuan (39.7%). This suggests that each ethnic alike - each has a risk of fetal death in utero. It was proven that the value of OR = 0.809; CI95% (0.387 to 1.692), which was interpreted not meaningful. The absence of ethnic relations on the incidence of fetal death in utero caused by other factors that more strongly influence the incidence of fetal death in utero. Although ethnically different, but health care has increased, so that all mothers delivered utilizing the access to services and information about care during pregnancy and health workers.

4.3 Effect of Frequency ANC against the Death Fetus in Womb

The result showed that there was no effect on the incidence of ANC frequency of fetal death in rahimdi Nabire hospital (p-value 0,477). The results of this study are not consistent with research [8], states that the proportion of neonatal deaths in women who do visit ANC <4 times as big as 52.78%. Results of research explains that the mother did not visit risiko ANC had 2.38 times greater neonatal mortality compared to mothers who melakukann ANC. Antenatal care is the basis for the assessment and review the care and treatment of the mother and fetus in the future based on individual needs (Holmes & Baker, 2011). Antenatal care is health care provided to the mother during her pregnancy in accordance with service standards antenatal [7]. According to Jannah caresatu Kunjungan Antenatal schedule time in the first trimester (gestational age 0-13 weeks), one times in the second trimester (14-27 weeks gestation) and twice in the third trimester (28-40 weeks gestation). The results of the analysis found that respondents with the incidence of fetal death in utero as much (77.6%) with a frequency of irregular and regular ANC as many as 13 people (22.4%). While live-born infants (60.3%) with a frequency of irregular and regular ANC (15.5%). This shows that the frequency of regular and irregular alike - the same risk of the occurrence of fetal death in utero. This is evident from the results of the OR = 0.636; CI95% (0.248 to 1.630), which was interpreted not meaningful.

The absence of ANC frequency relationship can be caused even if the mother is irregular but not have the disease during pregnancy, so the process of normal fetal growth. This is the opinion of Asrinah seuasia [9]; revealed that pregnancy care goal is to monitor the progress of the pregnancy, ensuring the health of the mother and infant growth, improve and maintain physical, mental, and social and baby, discovered early on when there is a problem or disorder and komplikasi that may occur during pregnancy, prepare for pregnancy and childbirth safely, both mother and baby, with minimal trauma, post partum mothers to prepare and exclusive breastfeeding is running normally and prepare the mother and family may play well in order to keep the baby grow and develop normally. Based on the above opinion that the frequency of ANC mothers get information about fetal development and early detection of complications or complications during pregnancy. If IUI have complications or complications during pregnancy do danaperawatan treatment. So that mothers with irregular frequency of antenatal care visits, but did not have the complications of the disease or complications during pregnancy are not at risk for the incidence of fetal death in utero.

4.4 Effect of Obstetric history against the Death Fetus in Womb

The result showed that there was an effect on the incidence riwayat obstetrik rahimdi fetal death in Nabire hospital (p-value 0,001). The results are consistent with research Miske (2013) in RSKDIA Siti Fatimah

Makassar, that there is the influence of obstetric history with the incidence of fetal death in utero. Researchers carried out by Schoeps and his colleagues [10] found that women who experienced pregnancy complications eight times more at risk of perinatal death compared with women who did not experience complications, while research conducted by Emmanuel and his colleagues found that mothers who experience complications during pregnancy and childbirth seven times more at risk of perinatal mortality. A retrospective analysis of maternal and infant deaths in one hospital study in Kenya found that uterine rupture, distorsia and eclampsia is the leading cause of perinatal mortality associated with complications of pregnancy and childbirth.

Results of the analysis showed that of the 58 respondents to the incidence of fetal death in utero as many as 20 people (34.5%) no obstetric history and no history of obstetric many as 38 people (65.5%). Meanwhile, from 58 babies born alive as much as 4 (6.9%) there was no history of obstetric and obstetric history as many as 54 people (93.1%). This shows that the high tendency obstetric history on the incidence of fetal death in utero. Haisl value of OR = 7.105; CI95% (2.248 to 22.461) interpreted the existing maternal obstetric history increased risk of fetal death in utero 7.105 times greater than mothers who no obstetric history.

4.5 Effect of Pre-eclampsia / eclampsia against the Death Fetus in Womb

There is the influence of pre-eclampsia / eclampsia against the incidence of fetal death in rahim Nabire hospital (p-value 0,032). The results of this study are not consistent with research conducted Kirana [11], that there is no association between preeclampsia / eclampsia with death janindalam uterus. Pre-eclampsia and eclampsia are symptoms that occur in pregnancy, childbirth and the postpartum period consisting of the triad: hypertension, proteinuria and edema, which is sometimes accompanied by convulsions to coma. The mother showed no signs of abnormalities vaskular atau hipertensi sebelumnya [1]. According Prawirohardjo [12], pregnant women with preeclampsia showed maternal inadequate response to the formation of the placenta. In pregnancy, vascular changes described above are usually only found in decidua segment of uteroplacental arteries. As a result, segment myometrium of the spiral arteries remain structurally muskuloelastik causing them highly responsive to hormonal influences. Pregnant women with pre-eclampsia causing endothelial damage on all specimens preeclamptic women, which are not found in all biopsies normotensive women. This damage seems to affect endothelial mitochondria, which indicates the possibility of a metabolic disorder that affects the health of the fetus at risk for fetal death in utero.

4.6 Effect on Mortality Fetal Congenital Abnormalities in Uterus

The result showed that there was no effect on the incidence of congenital abnormalities of fetal death in rahim Nabire hospital (p-value 0,435). Results of research consistent with research Murwati in Puskesmas Pedan Klaten of Central Java, that there is the influence of congenital anomalies of the fetal death in utero. Congenital anomalies are congenital malformations in the fetus since konsepsi to delivery [13]. The baby's death or neonatal death caused adalah faktor yang disebabkan endogenous factors-factors that brought children from birth, yang diperoleh of his parents at the time konsepsi. Menurut Mochtar [14], infant mortality yang disebabkan of the condition itself that LBW babies, premature babies, and congenital abnormalities. Opinions Saifuddin [13],

which brought olehbayi infant deaths from birth asphyxia. While kematianbayi and neonates from exogenous factors or kematianpost-neonatal caused by factors yangbertalian with the influence of the outside environment. Results of the analysis showed that the incidence of fetal death in utero (8.6%) there was no congenital abnormalities and congenital abnormalities (3.4%). This suggests a high proportion of the death of the fetus in rahimdengan congenital abnormalities. The test results OR = 2.642; CI95% (0.491 to 14.206), which was interpreted not meaningful. The researchers concluded that fetal congenital abnormalities disrupt pertumbuhan risk stunted fetal growth and create risk of complications in the fetus causing fetal death in utero.

4.7 Effect on Mortality Partus Old Fetus in Womb

The result showed that there was an effect on the incidence of prolonged labor fetal death in rahimdi Nabire hospital (p-value0,007). According Manuaba [1] the causes of prolonged labor are multikomplek and of course rely on the supervision while pregnant, deliveries were good and its management. The results of the analysis found that respondents with the incidence of fetal death in utero (27.6%), prolonged labor and normal parturition (72.4%). While babies born alive at normal parturition (93.1%). This indicates a high risk partus old with incidence of fetal death in utero. The test results OR = 5.143; CI95% (1.600 to 16.529) interpreted prolonged labor increased risk of fetal death in utero 5.143 times greater than the normal parturition. Mochtar [14], the dangers of prolonged labor to the fetus due to the increasing duration of labor, the higher the morbidity and mortality of the fetus and the more frequent result of asphyxia, trauma cerebri caused by an emphasis on the fetal head, injuries from acts of extraction and rotation with forceps difficult and rupture long before birth. This situation resulted in the infection of the amniotic fluid and can then carry a lung infection and systemic infection in the fetus. Even if there are no real damage, infants in prolonged labor requires longer treatment of any type khusus.Sementara pertus bring bad consequences infant child, the greater the danger especially the progress of labor never stops. Most doctors consider even prolonged labor increases the risk to children during childbirth, but the effect on the baby's development just a little further. Some states that babies born through a long labor was experiencing so distinctly different intellectual deficiency with babies born after a normal delivery.

4.8 Effect on Death Coil Cord Fetus in Womb

The result showed that there was an effect on the incidence of nuchal cord fetal death in rahimdi Nabire hospital (p-value0,033). Penelitianini results consistent with research Miske that there was an effect of umbilical cord loops on the incidence of fetal death in utero. The umbilical cord is very important that the fetus is moving freely in the amniotic fluid, so that the growth and development goes well. In general, the cord has a length of about 55 cm. The umbilical cord that is too long can cause the coils on the neck, thereby disrupting the blood flow to the fetus and cause asphyxia until the death of the fetus in the womb. Fetal movement active on a long cord likely can occur nuchal cord. Nuchal cord in the neck is very dangerous, especially in the event of winding several times. Long cord dangerous because it can cause umbilical cord prolapse, or leading umbilical cord. It can be estimated that more enter the fetal head to the pelvic floor, getting tight nuchal cord and increasingly disrupted the blood flow to and from the fetus which can cause fetal death in utero [4].

The results obtained by analysis of the incidence of fetal death in utero (17.2%) No nuchal cord while the baby

was born alive no umbilical cord loops as many as 56 people (96.6%). This shows that the proportion of infants born alive if not experienced roping center. The test results OR = 5,833; CI95% (1.218 to 27.937) which is interpreted there nuchal cord at risk for fetal death in utero 5,833 times greater compared to no nuchal cord. Researchers found that experienced nuchal cord of the fetus at the time of lowering the head to the lower part of the pelvic floor causing respiratory disorders oxygen supply to the fetus due to umbilical cord loops that generally occur on the neck of the fetus, so the fetus tercekit that cause fetal death womb.

4.9 The dominant factor on the incidence of fetal death in utero

Multivariate analysis showed that obstetric history, pre-eclampsia / eclampsia, and obstructed labor is the dominant factor in the incidence of fetal death rahimdi Nabire hospital, while the umbilical cord loops is a factor interactions. It they are due that obstetric history, pre-eclampsia / eclampsia berpengaruh directly to the fetus dalamrahim that interfere with the growth of the fetus, whereas prolonged labor factor can directly cause trauma and respiratory problems in the fetus.

5. Conclusion

1. No effect of age on the incidence of fetal death in rahimdi Nabire hospital (p-value1,000; OR = 0.926; CI95% = 0.428 to 2.000), which was interpreted not meaningful.
2. There was no effect on the incidence rate of fetal death in utero in Nabire hospital (p-value0,707; OR = 0.809; CI95% = 0.387 to 1.692).
3. There was no effect on the incidence of ANC frequency of fetal death in utero in Nabire hospital (p-value0,477; OR = 0.636; CI95 = 0.248 to 1.630).
4. There is the influence of Genesis riwayat obstetrik fetal death in utero in Nabire hospital (p-value0,001; OR = 7.105; CI95% = 2.248 to 22.461).
5. There is an effect of pre-eclampsia / eklampsiaterhadap incidence of fetal death in utero in Nabire hospital (p-value0,032; OR = 2.554; CI95% = 1.155 to 5.646).
6. There is no effect on the incidence of congenital abnormalities of fetal death in utero in Nabire hospital (p-value0,435; OR = 2.642; CI95% = 0.491 to 14.206).
7. There is a prolonged labor influence on the incidence of fetal death in utero in Nabire hospital (p-value0,007; OR = 5.143; CI95% = 1.600 to 16.529).
8. There is an effect on the incidence of nuchal cord fetal death in utero in Nabire hospital (p-value0,033; OR = 5.833; CI95% = 1.218 to 27.937).
9. obstetric history, pre-eclampsia / eclampsia, and obstructed labor is the dominant factor in the incidence of fetal death rahimdi Nabire hospital.

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