[kesehatan Ibu dan Anak]

[THE CORRELATION BETWEEN HYPERTENSION AND LOW FETAL WEIGHT (LFW) IN PALEMBANG CITY, INDONESIA]

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Hypertension as one of health problem that often occurs during pregnancy is epidemiological evidence that can affect the incidence of small for gestational age.

AIM / OBJECTIVE

The purpose of this study is to determine the effect of hypertension on the incidence of low fetal weight.

METHODS

This study is using a cross-sectional design with a total of 752 samples in 25 selected health services in Palembang taken by accidental sampling method.

Hypertension in this study was 130/90mmHg blood pressure at the first antenatal care.

Data collection was used in this study by interviewing pregnant women who visited health service. The health worker in this study is a midwife or doctor who keeps the patient checked.

Midwives and doctors measured the size of fetal weight, gestational age, and hypertension

RESULTS

Table. Profil of Maternal

Variabel	N	Mean	Median	SD	Min	Maks
Age (year)	752	28	27	4	17	40
Weight before pregnant (kg)	752	52	52	4.5	40	72
Height (cm)	752	158	158	4	143	173
BMI (kg/m^2)	752	23.84	23.62	1.87	19.47	32.02

Table. Incident of Low Fetal Weight and Hypertension

Variabel	n	%	95 % Confident Interval	
			Lower	Upper
Low fetal weight	31	4.1	2.9	5.6
Normal weight fetal	721	95.9	94.4	97.1
Hypertension	29	3.9	2.5	5.5
Normotension	723	96.1	94.5	97.5

Table. Correlation of Low Fetal Weight and Hypertension

VARIABLE	Fetal Weight				Tot	P	PR (95 % CI)
	LFW		Normal				
	n	%	N	%	N		
Hypertension	7	24.1	22	75.9	29	0.000	7.27 (3.41-15.48)
Normotension	24	3.3	699	96.7	723		

Table. Logistic Regretion Analysis of Low Fetal Weight and Hypertension

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
	-2,226	0,481	21,422	1	0,000	0,108	0,042	0,277
Konstanta	1,081	0,892	1,468	1	0,226	2,949		

$$Y = \alpha + \beta X$$
$$Y = 1{,}081 + (-2.226\ (1)) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$
$$Y = -\ 1.145$$

$$P\ (x) = 1 / (1 + e^{-y})$$
$$P\ (LFW) = 1 / (1 + 2.718^{-1.145}) \ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$
$$P\ (LFW) = 0.241$$

$P\ (LFW) = 24.1\%$

PREVENTION

A healthy pregnancy begins before conception

importance of identification

- Early intervention by carrying out activities in the form of female chronic hypertension screening before the pregnancy phase may reduce the risk of low fetal weight due to hypertension.
- counseling and reducing the risk of pregnancy before pregnancy;
- health education related to pregnancy outcomes;
- availability of full family planning services, especially for women and adolescents form low-income
- The role of midwives in low fetal weight is the spearhead such as pregnant women who do not an antenatal care, the midwives will ask for help from the cadre to come to the pregnant woman's home.

Especially for hypertension pregnant, one of kind recommended for prevention or treatment of pre-eclampsia and eclampsia by WHO is in areas where dietary calcium intake is low,

calcium supplementation during pregnancy (at doses of 1.5–2.0 g elemental calcium/day) is recommended for the prevention of pre-eclampsia in all women,

but especially those at high risk of developing pre-eclampsia Women with severe hypertension during pregnancy should receive treatment with antihypertensive drugs

CONCLUSIONS

The prevalence of hypertension women experienced a low of fetal weight is at 7,272 times (95% CI 3,415-15,482) greater than those who are not hypertensive. The odds of low fetal weight in hypertensive women were 24.1%.

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