THE CORELATION BETWEEN MOTHER'S WEIGHT INCREASE WITH PRE-ECLAMPSION IN PREGNANCY AT SITI KHOLIZAH CLINIC

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ABSTRACT

Pre-eclampsia/eclampsia is one of the main causes of maternal death in Indonesia. The cause of pre-eclampsia in pregnant women is not known with certainty, although there have been several theories that try to explain the cause of pre-eclampsia is placental ischemia. The purpose of this study was to see the relationship between maternal weight gain and the incidence of preeclampsia in pregnancy. This type of research is an observational retrospective analytic study. Analytical observational research. The research location was at the Siti Kholizah Clinic, Medan Marelan District. The statistical test used the Chi Square test with a statistical significance p value of 0.05. After conducting research on statistical data tests, it was found that the increase in body weight during pregnancy has a relationship with the incidence of preeclampsia in pregnancy. There is a significant relationship between weight gain during pregnancy and the incidence of preeclampsia in pregnancy, with a p value of 0.003.

Keywords: *Weight increase, pre-eclampsia, pregnancy*

Received : Sept 2, 2022 Received in revised form : Oct 24, 2022 Accepted : Oct 28, 2022

INTRODUCTION

Pre-eclampsia/eclampsia is one of the main causes of maternal death in Indonesia. The cause of pre-eclampsia in pregnant women is not known with certainty, although there have been several theories that try to explain the cause of pre-eclampsia is placental ischemia. Pre-eclampsia is characterized by the onset of hypertension, edema and proteinuria as a result of a pregnancy that occurs at a gestational age of more than 20 weeks. Pre-eclampsia/eclampsia is the second cause after bleeding as a specific direct cause of maternal death.[1-2]

WHO has announced that MMR is expected to decrease to 70 per 100,000 live births by 2030 (World Health Organization, 2016). The Ministry of Health's Health Research and Development Agency revealed that the highest causes of MMR in Indonesia were 32.4% hypertension and/or preeclampsia and 20.3% postpartum hemorrhage. Other risk factors for preeclampsia include: history of chronic high blood pressure before pregnancy, history of preeclampsia, history of

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preeclampsia in mother or sister, obesity, carrying more than one baby, history of diabetes, kidney disease, lupus or rheumatoid arthritis.[3-4]

Preeclampsia is a specific multisystemic disorder in pregnancy which is characterized by the onset of hypertension and proteinuria after 20 weeks of gestation. Conditions that occur in cases of preeclampsia need to be handled appropriately because preeclampsia can cause serious complications for the mother and fetus. the risk of preeclampsia is known to increase in pregnant women with primigravidas; grandmultigravida; pregnancy that occurs immediately after marriage; pregnant women aged less than 20 years or more than 35 years; large fetus; more than one pregnancy (gemeli). From some of the things above.[5-6] Researchers will examine more about: The relationship between maternal weight gain and the incidence of pre-eclampsia in pregnancy at the Siti Kholizah Clinic in Medan.

MATERIAL AND METHOD

This type of research is an observational retrospective analytic study, using primary data as well as secondary data, with a cross-sectional design. The statistical test uses the chi square test with a statistical significance p value of 0.05.[7] The sample size is 50 cases from the medical records of the Siti Kholizah Medan Clinic for the period January-June 2022.

RESULT

This analysis is used to obtain an overview of the frequency distribution or proportion size based on the characteristics of the respondents' age, parity and weight increase

Table 1. Frequency Distribution of Respondent Characteristics

No	Characteristics	f	%
1	**Age (years)**		
	<20	8	16
	20-35	33	66
	>35	9	18
	Total	50	100
2	**Parity**		
	Primigravida	18	36
	Multigravida	32	64
	Total	50	100
3	**Weight Increase (kg)**		
	< 8	9	18
	8-16	30	60
	>16	11	22
	Total	50	100

Source: (Primary data, 2022)

Based on the above data it can be seen that the majority of pregnant women aged 20-35 years 33 (66%), multigravida parity 32 (64%), with weight gain up to the third trimester of pregnancy is 8-16 kg as many as 30 (60%).

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Table 2. Distribution of Pregnancies Based on the Incidence of Preeclampsia

No	Pregnancy	f	%
1	Preeclampsi	8	16
2	No Preeclampsi	42	84
	Total	50	100

Source: (Primary data, 2022)

Based on Table 2, it is known that the incidence of preeclampsia is quite high, namely 8 cases (16%)

Table 3. Corelation Weight Increase and Preeclampsia in Pregnancy

Weight Increase (kg)	Pregnancy				Frequency (%)	
	Preeclampsi		No Preeclampsi			
	n	%	n	%	n	%
< 8	0	0,0	9	88,9	9	100
8-16	1	3,3	29	96,7	30	100
>16	7	63,7	4	36,3	11	100
Total	**8**	**16**	**42**	**84**	**50**	**100**
p=0,000						

Source: (Primary data, 2022)

Based on Table 3. it shows that weight gain during pregnancy is related to the incidence of preeclampsia, the result is a p value of 0.003. Seven (63.7%) of mothers with weight gain > 16 kg experienced preeclampsia.

DISCUSSION

The results of the study are in table 3. It can be seen that the majority of preeclampsia, namely 7 cases (63.7%), occurred in mothers with weight gain > 16 kg. This research is in line with Magdalena's research, 2014 at the Tembelang Jombang Health Center. Pregnant women who are overweight or obese experience preeclampsia by 47.05%. Obesity, besides causing high cholesterol in the blood, also causes the heart to work harder, so that the fatter a person, the more blood there is in the body, which means that the heart's pumping function is also heavier. So that it can contribute to the occurrence of preeclampsia.[8-9]

Preeclampsia is a disease that is directly caused by pregnancy, with an unclear cause. Pre-eclampsia has signs of hypertension, proteinuria and excessive fluid retention with resulting edema and weight increase.[10]

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CONCLUSION

There was a significant relationship between maternal weight gain during pregnancy and the incidence of preeclampsia (p value 0.003). Health education about healthy nutrition and early detection of preeclampsia and neonatal maternal complications needs to be further improved.

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