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RESEARCH ARTICLE

THE CHARACTERISTICS OF MOTHER WHO EVER SUFFERED EITHER PREECLAMPSIA OR ECLAMPSIA IN SURABAYA.

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Abstract

Nowadays, hypertension in pregnancy was still one of the main causes of maternal mortality, besides hemorrhaging and infection (triage complications), even it was considered as a cause of maternal mortality and high perinatal pain. This research utilized case study approach. The population of this research was all pregnant women who were treated at Dr. M. Soewandhie Hospital Surabaya in 2013. The number of eclampsia cases in 2013 was 43 cases. Sampling method that was used was total sampling technique. The results showed that 32.7% of eclampsia was occurred in women who were >35 years old, 2.7% who had *gemelli* pregnancies (twins), 2.7% who had history of hypertension, 4.10% who had history of DM, 3.6% who had other diseases, 8.2% who suffered obesity, 72.6% who had low educational background, 41.8% who were unemployed, and 77.3% who earned low-income. Therefore, it was suggested for all women to improve their education so that their knowledge would also increase. Besides, it was required to improve the pregnancy services for all pregnant women.

Introduction:-

Maternal mortality was death of woman that was occurred during pregnancy or within 42 days after pregnancy, without looking at the age and location of pregnancy, by every cause that correlated with pregnancy or its treatment, neither by accident nor incidental factors (Ratna, 2010). Annually, there were about eight million women who suffered from pregnancy complications and more than a half million of them was death (Indonesia WRA, 2006). In some developing countries, 1 of 11 women (compared with 1 of 5000 women in developing countries) died due to pregnancy and childbirth (WHO, 2006).

There were several factors which caused and became the basis of maternal mortality classifications. Those factors were: maternal mortality with direct causes, maternal mortality with indirect causes, and accidental/incidental or fortuitous maternal mortality. Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) were very important to be considered because these were indicators of the success of health sector development, which referred to the number of maternal mortality, concerning with pregnancy, childbirth and postpartum, and because it was for looking at the welfare level of a society (Indonesian Health Department *(Depkes RI)*, 2008)

Preeclampsia was a major cause of worldwide maternal and perinatal morbidity and mortality (WHO, 2006). According to WHO, UNFPA, and UNICEF, preeclampsia-eclampsia was a major cause of health problems in

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developing countries. Annually, it was estimated that there were 50,000 worldwide maternal mortalities and it affected 5%-7% of pregnancies in the world. The occurrence of preeclampsia was varied occurrence which was in accordance with the researched population (Indonesian Health Department *(Depkes RI)*, 2008). Mortality that was caused by preeclampsia in developing countries had been decreased. However, it was different with some developing countries, such as Colombia which reached 42% of maternal mortality due to preeclampsia (Indonesia WRA, 2006).

In some hospitals in Sumatra, East Nusa Tenggara (NTT), and Banten-Indonesia in March 2005-April 2006, hemorrhaging, eclampsia and infection were still the most common causes of maternal mortality. Besides, most of maternal mortality was occurred at reproductive ages (20-30 years old) with low socioeconomic conditions (Rukmini & Wiludjeng, 2005). Nationally, either preeclampsia or eclampsia was 24% of all major causes of maternal mortality (Indonesian Health Department *(Depkes RI)*, 2008).

Preeclampsia and eclampsia cases in East Java were 26.7%, while in RSUD dr. Soetomo Surabaya, there were 184 cases of 690 childbirth in 2003 (Medical Record of RSUD dr. Soetomo Surabaya, 2012). Previous study result which was conducted at Dr. M. Soewandhie Hospital, Surabaya, showed that preeclampsia patients were 69 patients and eclampsia patients were 4 patients. The cases of preeclampsia and eclampsia were in the 5th place after normal childbirth of 463 people (41.97%), 127 (11.51%) incompletes abortion, 103 Caesarea (9.34%), and premature rupture membrane of 77 people (6.98%) (Medical Record of Dr. M. Soewandhie Hospital Surabaya, 2012).

Materials and Methods:-

This study used case study approach with population of all pregnant women who were treated in Dr. M Soewadhie hospital Surabaya in 2013. The number of eclampsia cases in 2013 was 43 cases. Sampling used was total sampling technique. Data were obtained from medical records of either preeclampsia or eclampsia patients. The data were collected, then, analyzed descriptively.

Result:-

Reproductive Factors of Preeclampsia Patients:-

Most of preeclampsia patients were Javanese who were 18-35 years old with parity 1 (Table 1).

Table 1:- Distribution of ethnic group, total of infants, age, and parity of preeclampsia Patients at Dr. M. Soewandhie Hospital, Surabaya.

Variable		Frequency	Percentage
Ethnic Group	Javanese	87	79.10
	Madurese	22	20.00
	Others	1	0.90
Total of Infants	1	107	97.30
	>1	3	2.70
Age	<18 years old	4	3.60
	18-35 years old	70	63.60
	>35 years old	36	32.70
Parity	G1	34	30.90
	G2	32	29.10
	G3	18	16.40
	>G3	26	23.60

Health Status Factors: History of Hypertension, History of Preeclampsia, and History of DM

Most of mothers did not have history of eclampsia, history of disease, and did not suffer obesity (Table 2).

Table 2:- Distribution of eclampsia history, hypertension history, and diabetes mellitus history at Dr. M. Soewandhie Hospital, Surabaya.

Variable	Frequency	Percentage
History of Eclampsia		
No	91	82.70
Yes	19	17.30
History of Disease		

No	93	84.5
Hypertension	3	2.70
DM	10	9.10
Others	4	3.60
Obesity		
No	101	91.80
Yes	9	8.20

Supporting Factors: Educational Level, Occupation, and Economic Status

Most of preeclampsia patients had low educational backgraound, earned <Rp.3.000.000, and had private employment (Table 3).

Table 3:- Distribution of educational level, occupation and economic status of Preeclampsia patients at Dr. M. Soewandhie Hospital, Surabaya

Variable	Frequency	Percentage
Education		
Low	81	73,60
High	29	26,40
Occupation		
Unemployed	46	41.80
Private	56	50.90
Civil Servant	8	7.30
Income		
< 3.000.000	85	77.30
> 3.000.000	25	22.70

Preeclampsia Level:-

Chronic preeclampsia patients and mild preeclampsia patients were 50%, respectively.

Discussion:-

Mothers who had suffered either preeclampsia or eclampsia in previous pregnancies would have greater risk of suffering either preeclampsia or eclampsia in next pregnancies and as well as in suffering other diseases. Pregnant women who suffered chronic diseases or degenerative diseases would be very easy to suffer preeclampsia. Obesity in pregnancy also simplified the occurrence of preeclampsia. Low incomes, low educational level, and occupation that could not guarantee the fulfillment of daily live needs were very influential factors in the occurrence of preeclampsia. Low educational level caused pregnant women could not receive right information about pregnancy care, such as nutrition fulfillment during pregnancy. Low incomes made pregnant women were unable to fulfill nutrition during pregnancy and made them could not do antenatal care properly.

Conclusion and Suggestion:-

Conclusion:-

1. Reproductive factors of mothers who had suffered eclampsia were: 3.6% who were <18 years old, 63.6% who were between 18-35 years old, 32.7% who were >35 years old, 97.3% who had single pregnancy, and 2.7% who had gemelli pregnancies (twins).
2. Health status factors of mothers who had suffered eclampsia were: 17.3% who had suffered either preeclampsia or eclampsia in previous pregnancy, 2.7% who had a history of hypertension, 9.10% who had a history of DM, 3.6% who had a history of other diseases, and 8.2% who suffered obesity.
3. Supporting factors of mothers who had suffered eclampsia were: 73.6% who had low educational level, 41.8% who were unemployed, and 77.3% who earned low income.
4. There was no dominant factors in affecting the occurrence of eclampsia.

Suggestion:-

1. The need for improving women's education so that they understood preeclampsia causes.
2. Providing counseling for pregnant women about how to prevent the occurrence of preeclampsia.
3. Improving pregnancy care services for all pregnant women.

References:-

1. Allen, M. V. (2004). The effect of hypertensive disorder in pregnancy on small for gestational age and stilbirth. Canada: http://www.biomedcentral.com/conten/pdf/1471-2393-4-17.
2. BKKBN. (2013), angka kematian ibu SDKI 2012 tinggi, BKKBN.go.id
3. Burn & Grove (2001), The practice in nursing research conduct, critique & utilization (4th ed) Philadeiphia: W.B Saunders Compani.
4. Carpenter, S., Steubart. (2003). Qualitative research in nursing: advancing the humanistic imperative,2rd ed. Philadelphia: Lippincott.
5. Dhiana, S. (2012). Asuhan Ibu Hamil Fisiologis dan Hamil dengan Komplikasi. Buku ajar pada Jurusan Keperawatan Poltekkes Kemenkes Surabaya tidak dipublikasikan.
6. Depkes RI. (2008). Profil Kesehatan Indonesia. Jakarta: http://www.depkes.go.id/downloads/ publikasi/Profil%20Kesehatan%20I ndonesia%202007.pdf.
7. Moleong, L. (2007). Dasar-dasar penelitian kualitatif. Bandung: Remaja Rosdakarya.Pritchard, 2001
8. Nugroho, H.S.W. (2017). Analisis Data Secara Deskriptif untuk Data Kategorik. Ponorogo: Forum Ilmiah Kesehatan (Forikes)
9. Polit &. Beck. (2008). Essential of nursing research: methods, appraisal and utilization. St Louis: Mosby Year Book Inc.
10. Ratna, (2010). Pengalaman ibu yang mengalami kejang saat hamil, Thesis, Unpublished.
11. WHO. (2006). Dibalik angka pengkajian kematian maternal dan komplikasi untuk mendapatkan kehamilan yang lebih aman. http://www.who.int/reproduktive-healthpublication/rh-indikator accessed on 13rd January 2014.
12. Dr. M. Soewandhie Hospital Surabaya. (2012). Data of Medical Record. Surabaya: Department of Medical Record, Dr. M. Soewandhie Hospital Surabaya.