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Health Social Determinant to Maternal Mortality Risk in PHC of Bululoe, Jeneponto District

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Abstract
Maternal death is one of the major global health problems, and generally occurs mainly in developing countries. Trend The maternal mortality rate in Jeneponto district and particularly in the work area of Bululoe phc has increased voluntarily over the past 3 years. This study aims to obtain a database of social health determinant analysis results on the risk of maternal mortality. *The design study was* survey with descriptive approach. . *The research took place in Jeneponto District, South Sulawesi. The population study were all pregnant women (60 people) in Turatea Sub District. All the population taken by census*. Data obtained through *direct interviews and observations by using a questionnaire*. The study found that the majority of pregnant women in the work area of Bululoe phc were in high risk category for maternal mortality (64.9%), occupation (70%), 91.7% income), nutritional status (20%), illness (8.3%), and pregnant women who had a history of complications that could threaten pregnancy/labor (5%). The distribution of pregnant women who are categorized as high risk based on the majority of social determinants is spread in Tanjonga village and based on the health status of the majority spread in Bululoe village and at least in Jombe Village. The conclusions of this study found that social determinants are the highest risk factor for maternal mortality. Recommendation from this research is Need to conduct health promotion and facilitation effort to decrease maternal mortality risk based on social determinant aspect.

Keywords*: Social Health Determine, Maternal Mortality Risk, Puskesmas*

I. INTRODUCTION

Maternal death is one of the major global health problems, and generally occurs mainly in developing countries. Some countries have successfully achieved the MMR targets, and some other countries, including Indonesia, despite the decline, the MDG 5 2015 target is not achieved. Compared with some countries in the ASEAN region, MMR in Indonesia is higher than Thailand, Myanmar, Malaysia, Philippines although still lower than Camboja and Laos (Unicef 2012). Based on the results of Indonesia Demographic and Health Survey (IDHS) in 2012 showed very poor result of maternal mortality rate increased from 228 / 100.000 live birth in 2007 reached 359 per 100 thousand birth of life. This means that in an hour, three to four Indonesian mothers die from childbirth. A day there are 72 to 96 maternal deaths, a month 2,160 to 5,760 and a 25,000 to 34,560 year-old mother die from childbirth. More than the deaths caused by the Vietnam War are 20 thousands people. The results of the study (Rajab 2009, Fibriana, 2011, Fang Ye 2012) found that other parts of maternal mortality were social determinants of health, including poverty, which is related to income and family economic status, family education level (husband / pregnant mother). Families with poor economic levels and low education have a tendency to utilize TBA as labor helpers (Rajab, 2009). Fibriana (2011) in his research revealed that maternal mortality with income level below the UMR reached 71.2%. This is in line with Fang Ye's (2012) research in the interior of China which finds a very strong relationship between family income and labor costs in which 49% of maternal deaths occur due to an economic incapacity factor of pregnant women's families. Similarly, the level of family education (husband/pregnant women) where Fibriana found 63.5% of deaths occurred in mothers with lower education levels below junior high. The same was found in the Olsen (2008) study in which 17 maternal deaths occurred in husbands with low or no schooling. In Indonesia, there are variations in MMR between provinces. The province of South Sulawesi in 2013 has a population of 8 million people spread across 21 districts and 3 cities and annually reported as many as 80-140 pregnant women who died of pregnancy or childbirth (South Sulawesi Health Office, 2013). Trend The maternal mortality rate in Jeneponto Regency has increased from 2011 by 3 people (46 per 100,000 KH) to 11 people (170 per 100,000 KH) in 2012. Then there is a decrease in 2013 as many as 5 people (82 per 100,000 KH) and experienced a sharp increase in the Year 2014 as many as 13 people of maternal mortality, and in 2015 as many as 8 people maternal deaths. During the last 3 years in the work area of Puskesmas Bululoe there are always maternal mortality that is 1 person, K1 coverage is 91.12%, K4 is 87.85%, high risk detection by Nakes 32.56% and by

community 32.56%, referral of high risk case 51.16% , Delivery assistance by Nakes 88.24%, visit Nifas (KF) I of 68.6%, KFII of 68.6% and KFIII of 90.7% (Jeneponto District Health Office, 2014). Another problem, based on the results of observation and examination of document data obtained from the book cohort register pregnant women is less complete.

Departing from the description of the background then examines the factors of social determinants of health to be important and strategic to be examined more deeply as an effort to early awareness of the risk of maternal mortality by getting a picture of the results of risk factors that have been analyzed to pass intervention planning and or evaluate maternal mortality control activities have been done.

II. RESEARCH METHODS

A. Location of Research

Research carried out in Phc of Bululoe, Turatea District, Jeneponto Regency which has the highest maternal mortality rate in South Sulawesi Province, Indonesia.

B. Design, population, and sample

This study is a survey study with descriptive approach. The population was all pregnant women (60 people). No samples were taken in this study, because all of the population is taken as respondents.

C. Data Collection and Analysis

Data collection by observation and interview using questionnaire. Quantitative data processed with statistical software with the following stages: Editing, Coding, Scoring and Data Entry. The quantitative data that have been obtained will be analyzed by Univariat to see the frequency distribution of social determinant, maternal health status, and reproduction status. Data analysis is done in order to answer the problems that become the background of research. The data analysis is done by descriptive analysis is used to determine the quality of social determinant health information.

III. RESULTS

This research was conducted in Phc of Bululoe, Turatea sub district, Jeneponto district. Based on the results of the data analysis, presented the following information:

Table 1: Characteristics of Subjects

Characteristics of Pregnant Women	N=60	100%
The Origin of the Village		
Jombe	11	18.3
Tanjonga	23	38.3
Mangepong	13	21.7
Bululoe	13	21.7
Age (Years)		
<20	9	15.0
20-34	46	76.7
≥35	5	8.3
Age First Married		
<20	25	41.7
20-34	35	58.3
Age pregnancy (weeks)		
0-12	30	50.0
13-24	15	25.0
25-36	15	25.0
Mothers Education		
Never Schooled	5	8.3
Elementary School	20	33.3

Secondary School	14	23.3
High School	14	23.3
College	7	11.6

Table 2: Social Health Determinant

Variabel	(N=60)	(100%)
Social Determinant		
Education		
High Risk (≤Secondary School)	39	64.9
Low Risk (>Secondary School)	21	34.2
Employement		
High Risk	42	70.0
Low Risk	18	30.0
Income		
High Risk	55	91.7
Low Risk	5	8.3
Status Kesehatan Ibu		
Nutritional Status		
High Risk (LILA<23.5cm)	12	20.0
Low Risk (LILA>23.5cm)	48	80.0
Suffering from Disease		
High Risk	5	8.3
Low Risk	55	91.7
History of Complications In Pregnancy / Labor		
High Risk	3	5.0
Low Risk	57	95.0

Table 2 shows that the majority of pregnant women in the work area of Bululoe Phc based on social determinants and health status are in high risk category for maternal mortality (64.9%), occupation (70%), income (91.7%), nutritional status (20%), Suffering from illness (8.3%), and pregnant women who have a history of complications that can threaten pregnancy/labor (5%).

IV. DISCUSSION

A. ***Determinan Sosial Kesehatan***

a. ***Pendidikan:*** Maternal education also affects mother's knowledge. The study found that the level of mother education in the work area of Bululoe Phc is still low, because most of mothers only finish education of elementary school (33.3%). According to Latuamury stating that low maternal education has a 3.4 times greater risk for maternal deaths. The majority of pregnant women at high risk are scattered in Tanjonga Village and Low Risk (30.0%) spread in Bululoe Village. The majority of respondents in Tanjonga Village only receive education up to primary school level. The rest there are schools up to junior high, high school and college. Stdudy found that the education level in Tanjonga Village is still relatively low because the majority of the population who are only elementary school graduates even have residents who did not complete elementary school or did not attend school. The low level of education in Tanjonga Village is certainly influenced by several factors, the most striking factor is the economic factor. Economic factors are so influential in terms of the cost of education itself, with the majority of the people who work as farm laborers earning them usually only enough for household use.

Education will have an indirect effect through improving the social status and position of women in the community, increasing their choices for life and improving the ability to make their own decisions and express opinions. Women with low levels of education, causing their lack of understanding of the dangers that can happen to pregnant women, especially in terms of pregnancy and delivery diseases. The results showed that the distribution of pregnant women based on High Risk education (65.0%) and low risk (30.0%). It is seen that more pregnant women are at high risk due to the lack of public awareness about education, other

than that caused by economic factors that do not support. While low-risk mothers are due to have a concern about the importance of education. Studies in Mexico conducted by the National Safe Motherhood in the 1990s show that cases of death during labor are caused by several factors including socioeconomic, cultural, health status, and education. Poor and under-educated women experience limited power in decision-making related to the process of pregnancy and childbirth so that more people die, because they are not properly treated (Ana Langer, 1999; DepKes RI, 2000).

b. Work : The study found that the distribution of pregnant women based on work in Phc of Bululoe which included high risk category (free work in agriculture and housewives) (70.0%) spread in Tanjonga Village because some people in tanjonga village have no capital and That is because the lack of education and expertise and agriculture is not too open modaal is very large and the population who have not had the job can take the time to farm and the majority of respondents including low-risk category (self-employed / self-employed) (30.0%) spread in Bululoe Village. In this research mother job which mostly as housewife spread in tanjonga village. Most maternal deaths occur in housewives, this is possible because in housewives who are preoccupied with domestic affairs will have relatively little time to obtain adequate information about their health. It is also related to family economic condition, mother's own lack of knowledge. Mothers who work as housewives are economically very dependent on her husband's income and do not have more income that can be used to obtain needs during pregnancy and childbirth. A pregnant mother to help in supplementing family income is assumed they are more energy and mind-conscious, which can affect the health of the fetus and pregnant women. In trisemester I and II pregnancies, working moms do not significantly affect the baby's condition but in the third trimester this can affect the occurrence of prematurity. The results showed that the distribution of pregnant women based on occupations including High Risk (70.0%) and low risk (30.0%). The study found that more mothers are at high risk because they have no permanent jobs other than free labor in agriculture and low risk because pregnant women who have permanent jobs.

c. Income: The study showed that the distribution of pregnant women based on income in the work area of Bululoe Phc including high risk category (income ≤ Rp 2.504.500) (91.7%) spread in Bululoe Village and the majority of respondents including low risk category (income> 2,504. 500) (8.3%) spread in the Village Tanjonga. According to Sriningsih (2011), women of low-income families (<US $ 1 / day) have about 300 times more risk to suffer maternal morbidity and mortality than those with better incomes. The results showed that the distribution of pregnant women based on High Risk Revenue of 55 people (91.7%) and low risk 5 people (8.3%). The study found that more high risk because seen from the results of education and employment of respondents not in accordance with established and low-risk MSEs due to family income yag in accordance with MSEs.

B. ***Health Status***

a. ***Nutritional Status:*** The results showed that the distribution of pregnant women based on nutritional status (LILA size) in the work area of Bululoe Phc which belongs to high risk category (80.0%) spread in Bululoe Village, Jombe and majority of respondents are low risk category (20.0%) spread in Tanjonga Village. The nutritional status of a person is essentially the result of a balance between the consumption of food substances with the needs of that person. The nutritional status of pregnant women greatly affects the growth of the fetus that is being conceived. If the nutritional status of normal mothers during pregnancy then most likely will give birth to a healthy baby, enough months with normal weight. In other words the quality of babies born depends on the mother's nutritional status during pregnancy (Lubis, 2003, Hanifah, Lilik 2009: 7)**.** The result of research indicated that the nutritional status of pregnant women of low/normal risk category were 48 people (80%) and mother's nutritional status of high risk category/KEK was 5 people (8.3%). The period of pregnant women is a time when a woman needs a lot more nutritional elements than is necessary in a non-pregnant state. It is known that the fetus needs nutrients and only the mother can give it. Thus the food of pregnant women should be sufficiently nutritious so that the fetus it contains gets enough nutritious food. Maternal food during pregnancy and mother's nutritional status at the time of pregnancy are closely related to low birth weight (LBW). If the food consumed by the mother is lacking and the bad nutritional status of the mother is likely to be born with LBW (Ridwan, 2007). Pregnancy is a

physiological process that can happen to every woman. The expected pregnancy outcome is the birth of a healthy baby and grows as optimally as possible and a healthy mother (Eavhany, 2009: 15)**.** One factor among the more that affects the success of a pregnancy is nutrition. Nutritional status of pregnant women one of them affect the body weight, born baby which was one of them very closely related to the next baby's health level and infant mortality rate (Sunita Almatsier et al, 2011). Mothers with malnutrition status are at risk for bleeding and infection during childbirth. The state of malnutrition before and during pregnancy especially the condition of the mother with stunting in childhood that reflects severe malnutrition will risk the occurrence of a stalled partus due to cephalopelvik disproportion, which increases the risk of maternal death at delivery.

b. ***Suffering of Disease:*** The study found that the distribution of pregnant women based on disease in the work area of Puskesmas Bululoe Kecamatan Turatea of Jeneponto Regency which belongs to high risk category (8.3%) spread in Bululoe Village and majority of respondents are low risk category (91.7%) spread in Tanjonga Village that is abdominal pain, nosebleed, hypertension, mag and heart. A history of maternal illness is defined as a disease that has been suffered by the mother before pregnancy or childbirth or illness that arises during pregnancy that is not related to the cause of direct obstetrics, but is exacerbated by the physiological effects of pregnancy so that the mother's condition becomes worse. Maternal deaths due to maternal illness are the cause of indirect obstetric death (indirect obstetric death). The research found that high risk mothers because the people in Phc of Bululoe pay less attention to health problem, besides social factor, economy, environment, behavior, While pregnant women with low risk because the mother has been concerned with health so that can avoid the disease that can endanger the health of mothers. Mothers who are suffering from the disease have a risk 25.4 times greater for maternal death than those who do not suffer from the disease. Types of diseases suffered by the mother include hypertension, mag, abdominal pain, nosebleeds, heart and blood pressure. Maternal deaths due to maternal illness are the cause of indirect obstetric death (indirect obstetric death). The results of this study in accordance with the study (Rogo, 2002) states that diseases associated with maternal death are heart, hypertension, epilepsy and bronchial asthma bronkiale

c. ***History of Complications in Pregnancy/Labor*****:** The study showed that the distribution of pregnant women based on previous pregnancy/maternal complication history in the work area of Bululoe Phc including high risk category (5.0%) spread in Bululoe Village and Low risk categories (95.0%) spread in Tanjonga Village. Pregnant women at high risk because of the community in Phc of Bululoe who have poorly checked the antenatal carenya so as not to know the history of complications that will occur in pregnancy or prersalinan and low risk because respondents who have no history of complications of pregnancy or childbirth. Similar study by Kusumaningrum (1999) which states that the existence of pregnancy complications cause mothers have 19.2 times greater risk for maternal deaths. Other study are conducted by Suwanti E (2002) which states that the existence of labor complications causes the mother to have a 50.69 times greater risk for maternal deaths Also research by Kusumaningrum (1999) which states that complications of delivery cause mothers have a risk 13 times to experience maternal death.

C. **CONCLUSION**

Social determinants are the highest risk factor for maternal mortality. Recommendation of this study are necessary to conduct health promotion and facilitation efforts to reduce the risk of maternal mortality based on social determinant aspects of health.

References

1. *Abouzar C., W. T. (2001). "Maternal mortality at the end of decade : signs of progress? ." Bulletin of the WHO Vol 79 No. 6: 561 – 573.*

2. *Budi Rajab (2009). "Maternal Mortality : Social Cultural Study." Jurnal Masyarakat dan Budaya Vol 11 No. 2: 237 – 254.*

3. *Depkes RI (2004). "Review of Maternal and Child Mortality in Indonesia, AKI_AKA Study Team, Agency for Health Research and Development, Jakarta."*

4. *Dinkes Kab Jeneponto (2014). " Jeneponto Regency Health Profile. District Health Office Jeneponto."*
5. *Dinkes SulSel (2013). "Health Profile of South Sulawesi Province. South Sulawesi Provincial Health Office. Makassar."*

6. *Fang Ye, e. a. (2012). "The Immediate Economic Impact of Maternal Deaths on Rural Chinese Household,." PloS One, 7(6):e38467.*

7. *Fibriana Arulita (2011). "Three Delay Model sebagai salah satu Determinan Kematian Ibu di Kabupaten Cilacap." Jurnal Kesehatan Masyarakat Vol. 6.*

8. *Hove, I., Siziya, S, Katito, C and others. (1999). "Prevalence and associated factors for no-utilization of postnatal care services: Population-based study in Kuwadzana peri-urban area, Zvimba District of Mashonaland West Province, Zimbabwe. ." African journal of reproductive health 3 (2) 25-32.*

9. *Kusumaningrum, 1999. Thesis Risk factors affecting maternal mortality (case study in cilacap district). Diponegoro University*

10. *Say L et al (2014). "Global Causes of Maternal Death: A WHO Systematic Analysis. Lancet..2(6). ." p. e323-e333.*

11. *Setyowati T., W. Y., Sulistyowati N, (2000). " Protap recording / reporting of maternal deaths at puskesmas. Jakarta. National Health Research and Development Agency, MOHRI."*

12. *Sriningsih, 2011. Journal of parenting in the health of the child in the mother of factory workers. Sekolah Tinggi Ilmu Kesehatan Indonesia Forward*

13. *Unicef (2012). "Maternal and Child Health, Issue Brief. Oktober.".*

14. *Vivi Yulaswati (2013). " The Path of Risk Reduces Maternal Mortality Rate. International NGO Forum on Indonesian Development (INFID)."*

15. *WHO (2012). "Trends in maternal mortality: 1990 to 2010. WHO-World Bank – UNICEF, 2012."*