



The affecting factors of choosing delivery place in Working Area of Sikumana Health Center

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ABSTRAK

Latar Belakang: Salah satu penyebab kematian ibu dan bayi adalah persalinan yang masih terjadi di rumah dengan fasilitas kesehatan yang belum memadai. Persalinan pada fasilitas pelayanan kesehatan yang memadai dapat menurunkan AKI dan AKB.

Tujuan: Penelitian ini bertujuan untuk menganalisis pengaruh pemeriksaan kehamilan, dukungan keluarga dan dukungan tenaga kesehatan terhadap pemilihan tempat persalinan berdasarkan Revolusi KIA di wilayah kerja Puskesmas Sikumana Kota Kupang.

Metode: Penelitian ini menggunakan rancangan kasus kontrol. Besar sampel kelompok kasus adalah 30 ibu yang melahirkan di non fasilitas kesehatan yang memadai dan kelompok kontrol adalah 30 ibu yang melahirkan di fasilitas kesehatan yang memadai. Pengambilan sampel menggunakan teknik simple random sampling dan melakukan wawancara dan kuisisioner. Analisis data dilakukan dengan menggunakan uji statistik Chi Square.

Hasil: Hasil analisis menunjukkan dari variabel yang diteliti, variabel yang mempengaruhi pemilihan tempat persalinan yaitu sikap ibu ($p=0,000$), dan riwayat tempat persalinan sebelumnya ($p=0,038$), sedangkan variabel umur ibu tidak mempengaruhi ($p=0,778$).

Kesimpulan: Sikap ibu dan riwayat persalinan sebelumnya berpengaruh terhadap pemilihan tempat persalinan, sedangkan umur ibu tidak mempengaruhi. Faktor-faktor risiko ini diharapkan menjadi perhatian khusus bagi tenaga kesehatan dalam memberikan konseling kehamilan bagi ibu dalam menentukan tempat persalinannya. Selain itu diperlukan dukungan secara intens dari tenaga kesehatan untuk memotivasi ibu dan keluarga agar memilih fasilitas kesehatan yang memadai sebagai tempat persalinan.

KATA KUNCI: tempat persalinan; umur; sikap ibu; riwayat persalinan sebelumnya

ABSTRACT

Background: One of the causes of maternal and infant mortality is childbirth that still occurs at home with inadequate health facilities. Delivery at adequate health care facilities can reduce Mother Mortality Rate and Infant Mortality Rate.

Objectives: This study aims to analyze the effect of antenatal care, family support and health support of workers regarding a place of delivery choice based on the MCH Revolution in working area of Sikumana Health Center, Kupang.

Methods: This study used a case control design. The sample size of the case group was 30 women who gave birth in non-adequate health facilities and the control group was 30 women who gave birth in adequate health facilities. The sample collected by random sampling technique and used direct interview and questionnaire. Data analysis was carried out using Chi Square statistical test.

Results: The results of the analysis indicated that from the studied variables, variables that influenced the choice of labor place were the mother's attitude ($p = 0.000$), and the history of previous place ($p = 0.038$), while the variable of mother's age did not affect ($p = 0.778$).

Conclusion: The mother's attitude and previous delivery history had an effect on the choice of labor place, while the mother's age did not have any effect. These risk factors are expected

to be a special concern for health workers in providing counseling for pregnant women in determining the place of labor. In addition, intense support from health workers is needed to motivate mothers and families to choose adequate health facilities as a place of labor.

KEYWORD : *place of delivery; age; mother's attitude; previous birth experience*

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INTRODUCTION

Various effort has been done to decrease infant and maternal mortality rate in East Nusa Tenggara, however the rate still above the average and it is considering as not optimum because the number keep increase from year to another year. In 2012, the maternal mortality rate (MMR) in East Nusa Tenggara province was 539 per 100.000 live birth which far beyond the national average for 359 per 100.000 live birth, while the infant mortality rate (IMR) was 45 per 1.000 live birth above the national average for 32 per 1.000 live birth (1). To overcome this kind of problem, regional government of East Nusa Tenggara initiate new innovation to decrease Infant and Maternal Mortality rate through the revolutionary policy of KIA (Maternal Child Care) by the motto of every maternal women can give birth on an adequate facilities. The achievement indicators include the decrease on the role of traditional birth attendants in assisting childbirth and increasing the role of skilled health workers in assisting childbirth and increasing the number of deliveries in adequate health facilities (2).

The ideal place of delivery is in hospital because at any time people need emergency handling, the required facilities are available or at least women can give birth in other health facilities therefore, referrals can be made immediately. On the other hand, if woman give birth at home and need emergency medical care at any time, it cannot be immediately handled (3).

Based on 2018 basic health research (4), it shows that 79,3% births occur in health facilities with the highest percentage in health worker practice for 29.6%. In national and private hospital 14.9% and 17.8%, while in clinic 4.9% and community health center (puskesmas) 12.1%, however, there are 16.7% women still give birth in their house. Based on Indonesian health profile 2012, the birth percentages that was help by medical personnel on 2012 reach 88,64%. This number has been fulfilled the target of health ministry in 2012. This indicator achievement shows a significant increase of 9 last years, from 74,27% on 2004 become 88,64% on 2012. Nationally, this indicator has been fulfilled the target of 2012 strategic planning, however in east Nusa Tenggara, the indicator achievement still on 69,41% (5).

The benefits of giving birth at adequate health care facilities that it can reduce the MMR and IMR and for women to have a safe, healthy, and most satisfying delivery. Based on the result of basic health research on 2013, there are 66,8% of deliveries in East Nusa Tenggara were assisted by medical personnel, 19,3% were assisted by hospital, 29,4% Auxiliary Health Center, 6,4% by village health center, and other places for 42,1% (5). There are factors that influence mother to choose delivery place such as Age, mothers attitude and previous birth place.

Triana et al. (6) stated the pregnancy gap that is too young, too short, or too old can cause

the death of the mother. As WHO (World Health Organization) recommended that the ideal interval between being pregnant again and giving birth is 12 to 18 months. (7) The knowledge on health reproduction also influence the mothers' attitude in taking decision for herself and her family, including things related to selection of birth attendants. (8)

Sikumana Health Center is one of health centers in Kupang which percentage coverage of deliveries by health workers does not meet the target. The percentage of deliveries by medical workers was 75% in 2015 and 95.5% in 2016, 85% in 2017. besides, among 1310 mothers who gave birth in 2017, 15% gave birth in non-adequate health facilities. Although East Nusa Tenggara provincial government has pursued the KIA (Maternal Child Care) Revolution program which requires all mothers to give birth in adequate health facilities, there are still mothers who choose to deliver their child at home, *polindes* or sub-health centers. Moreover, people still choose places that do not have adequate medical equipment as a place to give birth. Thus, the purpose of this study is to examine the factors (mother's age, attitude, and history of previous delivery places) that influence choice of delivery place in work area of Sikumana Health Center, Kupang.

MATERIALS AND METHODS

This research is an analytic observational research with case control research design. The research located in Sikumana Health Center and it carried out in May-June 2018. The respondents of this study were mothers who works area in Sikumana Health Center which divided into 2 groups, 30 mothers who gave birth in non-adequate health facilities (case group) and 30 mothers who gave birth in adequate health facilities (control group). Maternal data taken in last 6 months and listed in the birth register at Sikumana Health Center. The sampling method was done by simple random sampling. The

independent variables are the mother's age, mother's attitude and the history of previous delivery place and the dependent variable is the choice of delivery place.

The data collection technique is the method of direct observation and questionnaire interview. The collected data in this study consist of primary data, which collected through direct interviews with respondents and secondary data, obtained from the East Nusa Tenggara Provincial Health Office, Kupang City Health Office, and Sikumana Health Center. The obtained data will be analyzed using SPSS by the instrument of Age, mothers' attitude and previous delivery place. Data analysis using Chi Square test with test decisions, $p < 0.05$ means that there is an influence of independent variable on dependent variable, if the value of $p \geq 0.05$ means that there is no influence of independent variable on dependent variable.

RESULTS AND DISCUSSION

The results of independent variable test on the choice on place of delivery can be seen in the table below.

Table 1. The effect of maternal age on the choice of delivery place

Variable	Delivery place				Total		p
	Adequate Non-medical facilities		Adequate Medical facilities				
	n	%	n	%	n	%	
Age							
No risk	22	73,3	20	66,7	42	70	0,778
Have a risk	8	26,7	10	33,3	18	30	
total	30	100	30	100	60	100	

The results of the study for the category of age that have no risk obtained the number of respondents in case group is 22 (73.3%) in control group is 20 (66.7%), while in the age category with risk, the number of respondents in case group was 8 (26.7%) and control group of 10 (33.3%). The results of statistical test indicated the value of $p = 0.778$ ($p \geq 0.05$), statistically there

was no effect of maternal age on the choice of delivery place.

Table 2. The influence of mother's attitude on the choice of delivery place

Variable	Delivery Please				Total	p
	Adequate Non-medical facilities		Adequate Medical facilities			
	n	%	n	%		
Positive attitude	6	20	23	76,7	29	48,3
Negative attitude	24	80	7	23,3	31	51,7
total	30	100	30	100	60	100

Respondents distribution based on the attitude variable obtained as **Table 2** above, for positive attitude category, the number of respondents in case group was 6 women (20%) and control group were 23 women (76.7%), while in negative attitude category, the number of respondents in case group was 24 women (80%) and control group was 7 (23.3%). The results of the statistical test showed the value of $p = 0.000$ ($p < 0.05$), statistically there was an influence of mother's attitude towards the choice of delivery place based on KIA (Maternal Child Care) Revolution.

Respondents distribution based on the variable history of previous deliveries, for the category of previous history in adequate medical facilities, the number of respondents in case group was 9 (30%) and in control group was 18 (60%). In the category of previous history in adequate non-medical facilities, the number of respondents in case group was 21 (70%) and control group was

12 (40%). The results of statistical tests indicated p value = 0.038 ($p < 0.05$), it can be concluded that there is an effect of previous birth place history on the choice of delivery place.

DISCUSSION

Delivery place are divided into two groups, adequate medical facilities and non-adequate medical facilities. Categorization was taken based on 2009 East Nusa Tenggara Governor's Regulation regarding KIA (Mother Child Care) Revolution. The KIA revolution means that every deliveries should be carried out in adequate medical facilities (2). KIA revolution in Kupang has been implemented quite well. It can be seen from the increase in deliveries at adequate health facilities. Besides, in its implementation, public has also been able to take advantage of emergency ambulance services that able to pick up every pregnant women who are about to give birth to be brought to adequate health facilities. beside ambulances, currently Sikumana Health Center already has PONED building that can be used for baby deliveries. moreover, Sikumana Health Center is still working on building a waiting house.

Age

The characteristic of Age (high risk and low risk) have the same tendency in the utilization of health services (9). In the high-risk age group, it is recommended not to get pregnant again, however, if a woman already pregnant, it is required to pay more attention on pregnancy care and better preparation of delivery. Therefore, if

Table 3. The effect of previous birth place history on the choice of delivery place

Variable	Delivery Place				Total	p
	Adequate Non-medical facilities		Adequate Medical facilities			
	n	%	n	%		
Previous birth place history						
Adequate medical facilities	9	30	18	60	27	45,0
Adequate non-medical facilities	21	70	12	40	33	55,0
Total	30	100	30	100	60	100

there is any complications occur during pregnancy or childbirth, they can be detected early (10).

Based on the results of the study, both mothers who gave birth in adequate health facilities and those in non-adequate health facilities were generally included on the age group with no risk. Maternal women who are at risk or not at risk will choose the delivery place according to their own wishes or the family's choice, they did not consider the risk factors for maternal age. This is happen due to other factors, such as previous childbirth experience. Mothers who feel comfortable giving birth at home or at auxiliary health center will remain to choose home and the health center as delivery place.

This research result are in line with the research by (11) which states that there is no significant relationship between age and the choice of medical help and delivery place. it is similar to the research results of Widiawati's (2008) which states that age does not relate to the selection of birth attendants, however there are differences in age groups, there are more women at non-risk ages who give birth at home (12). This is not in line with the research of Arief (2012) which states that there is an influence of age and the choice of delivery place in medical facilities (13). the proportion of maternal women around 20 and 35 years who choose to give birth in health facility is higher than the proportion of women under 20 years and over 35 years.

Maternal age is not related to the choice of delivery place because at the age of under 20 years old, decision making of choosing medical help and delivery place are obtained by advice or follow the experience of their parents, whereas at the age over 35 years old, the women choose it due to a history of previous childbirth. Green in Notoatmodjo (14) stated that age is an antecedent factor to behavior as the basis or motivation for individual behavior which is supported by reinforcing sources including parents, friends and others (14).

Based on the result and previous study, it can be indicated that The results indicated that in case and control groups, respondents were in the age category of not carried out any risk. The results of statistical tests show that there is no effect of age on the choice of delivery place based on KIA Revolution.

Mothers attitude

Mothers attitudes cannot be directly seen, it can only be interpreted from closed behavior. Attitude clearly shows the connotation of the appropriateness on the reaction to particular stimulus. In daily life, it is an emotional reaction toward social stimuli (14).

The results indicated two kind of categories, for the positive attitude category, most of respondents used adequate health facilities as a place of delivery, while in negative attitude category, most of the respondents used non-adequate health facilities as a place of delivery. Statistically there is an influence of mother's attitude towards the choice of delivery place in KIA Revolution.

It means that mothers with positive attitudes will choose a delivery place in adequate health facilities. Therefore, it is very important to build a positive attitude of mother towards the choice of delivery place. Thus, the mother will choose an adequate health facility as a place of delivery. In working area of Sikumana Health Center, public decision to choose a place of delivery tends to be influenced by the ease of getting services. For example, the services provided by traditional birth attendants are assist childbirth, taking care the baby until the umbilical cord is removed and taking care to the mother until she reach the recovery condition.

Pratiwi, N (15) stated that attitude is a readiness to react to objects in a certain environment as an appreciation of an object. Determining the mother's attitude of choosing the delivery place, knowledge, thoughts, beliefs and emotions which play an important role.

This is in line with the research of Cucu (2012) which states that attitude is the most related variable to the behavior of choosing a medical help and delivery place. Women with positive attitude have 58 times opportunity to choose delivery place to medical facilities compared to women who have negative attitude (16).

Based on the analysis and previous study, it can be indicated that there is an influence of mother's attitude on mother's intention to give birth in adequate health facilities ($p < 0,05$). Mothers who have positive attitude will have the intention to give birth in adequate health facilities therefore she will choose the adequate health facilities as the place of delivery.

Previous birth experience

Arief, M (13) stated that someone uses a certain type of birthing place because he has past experience on receiving the services. The results showed that for a history of previous deliveries at adequate medical facilities, most of women still chose adequate health facilities as their delivery place. For the category of previous delivery experience in adequate non-medical facilities, there are some respondents who choose adequate medical facilities however, it is more dominated by women who still choose non-adequate medical facilities as their delivery place. Statistically, there is an effect of previous birth experience on the choice of delivery place during KIA Revolution. By the enactment of Governor's Regulation on KIA Revolution, it influence women to come to adequate facilities.

In working area of Puskesmas Sikumana, 40% of mothers who previously gave birth in adequate non-medical facilities choose to change to an adequate health facility as a delivery place. However, there are several women who still choose non-medical facilities as a delivery place. It can be caused by other factors, such as economy, or the mother's experience of the

previous delivery place. Besides, some people consider that the assistance of health workers in childbirth is required if the traditional birth attendant can no longer handle the conditions of childbirth. Based on the results of interviews, several women move from giving birth from non-medical facilities to adequate medical facilities because of the increase on awareness of situation, besides, the mother has experienced prolonged labor on life-threatening conditions, moreover, it will motivate them to give birth in adequate health facilities.

this is related to the research result of Hardianti, et al. (17) which stated that there was a significant relationship between the previous delivery place and the last delivery place. The Change in the choice of delivery place from non-medical facilities to medical facilities by 16.25% (17). Thus, it can be indicated that delivery place influence the delivery process, delivery place that contain adequate medical facilities will help mother to experience a better process.

CONCLUSION AND RECOMMENDATION

After conducting the research on the factors that influence women in choosing delivery place in work area of Sikumana Health Center, Kupang City, thus it can be concluded that the attitude of mother and the previous delivery experience has an effect on the choice of choosing delivery place, while age do not affected. It is recommended for relevant agencies to increase the promotion for pregnant women, families and the public regarding the importance of childbirth in medical facilities. Another recommendation can be related to the support from healthcare for people around to do the counseling and make sure that the existence of medical facilities is to make delivery process easier.

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