

**THE CHILDBIRTH UTILIZATION IN HEALTH FACILITIES IN THE WORKING AREA
OF SUNGAI LOKAN PHC TANJUNG JABUNG TIMUR REGENCY: A CROSS
SECTIONAL STUDY**

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ABSTRACT

Introduction: The low number of deliveries assisted by midwives or health workers is an indicator of the low utilization of health facilities by mothers in labor. This study analyzes the factors related to the utilization of childbirth in health facilities in the Sungai Lokan Community Health Center Work Area, Tanjung Jabung Timur Regency.

Materials and Methods: This research is an analytic observational using a cross-sectional approach involving 74 participants. The research was conducted from January to July 2019 in the Sungai Lokan Health Center Work Area, Tanjung Jabung Timur Regency.

Results: The results showed that the factor of the utilization of childbirth in health facilities was related to family culture ($p = 0.0001$) and family support ($p = 0.003$), while the service access factor was not related ($p = 0.364$).

Conclusion: The role of health workers in socializing the importance of utilizing health facilities as a place of delivery is significant in reducing maternal mortality

Keywords: Health Facilities; Family Culture; Family Support; Access To Services

INTRODUCTION

Maternal Mortality Rate (MMR) is one indicator of success in maternal health programs. MMR is a recapitulation of maternal deaths during pregnancy, childbirth, and the puerperium due to pregnancy, delivery, and postpartum problems or their management per 100,000 live births. Reducing maternal mortality due to complications of pregnancy and childbirth is one of the eight targets of the Millennium Development Goals (MDGs) [1]. Family planning, especially for postpartum mothers and unmet need groups, integrated reproductive health services; strengthened village midwives' function, strengthened the referral system, and reduced financial barriers [2,3].

The achievement of the Millennium Development Goals (MDGs) health workforce target needs to receive support from service providers who are health service providers who have a major role in achieving health development goals [4]. Health workers are also providers of health services to patients in accordance with their professional authority to make optimal health efforts. Midwife is one of the non-medical health workers in accordance with their competence and authority to provide midwifery services which are an integral part of health services [5,6]. Every day, some 7,000 babies die in the first month of life. In 2019, an estimated 2.4 million newborns died worldwide. High Maternal Mortality Rate (MMR) and Infant mortality (IMR) is caused by complications in pregnancy and labor [7]. More in the MDG's target on MMR, as stated in the Roadmap to Accelerate Achievement of the Millennium Development Goals in Indonesia, is to reduce from 228 per 100,000 live births in 2007 to 102 per 100,000 live births in 2015. Coverage of deliveries by health workers in health care facilities in Indonesia based on data from the Profile Indonesian Health in 2017 amounted to 5,078,636 with deliveries assisted by health workers totaling 4,222,506 (83.14%). In 2019, 90.95% of deliveries were assisted by health workers. Meanwhile, pregnant women who underwent childbirth assisted by health workers in health care facilities were 88.75% [1]. Thus, around 2.2% of deliveries are assisted by health workers but are not carried out in health care facilities. The coverage of deliveries in Jambi Province based on

Indonesia's health profile data in 2017 was 69,774, with deliveries assisted by health workers at health facilities totaling 25,387 (76.37%) [8]. The government targets 85% of deliveries to be carried out in health care facilities. For this reason, the government seeks to improve the quality of quality health care facilities. It is a matter of being available and affordable [9]. The current condition, Puskesmas, as a primary health service facility owned by the government, already exists in every sub-district; it is just that it is still not evenly distributed so that it is less accessible to the public [10]. As a state administrator, the government is obliged to ensure equity and quality of health services for the community. Physically, equitable distribution of health services can be interpreted as affordability in topographical, demographic, and geographical aspects. Physical topographical affordability is the proximity of the population settlements to health service facilities. Affordability in the demographic aspect means that the Puskesmas can accommodate and serve the health needs of the entire population in the work area [9,11,12]. Another critical factor is the public's misconception about the competence of traditional birth attendants that they are birth attendants that are safe, inexpensive, and able to provide services that health workers cannot provide. It is exacerbated by the absence of family support, especially mothers or mothers-in-law to take advantage of health facilities as a place to give birth.

Several previous studies found that delivery coverage at health facilities was influenced by accessibility factors [13], family support [14,15], mothers knowledge [16]. The results of the study [17] show that one of the causes of neonatal death, in addition to the distance of access to health facilities, is also influenced by birth attendants, namely giving birth to a traditional birth attendant with a risk of causing neonatal death by 12.4 times compared to not giving birth to a traditional birth attendant.

Tanjung Jabung Timur Regency, Indonesia has 17 Health centers, with the number of deliveries in 2018 totaling 4,069, with deliveries assisted by health workers in health facilities totaling 1,512 (37.16%). Specifically, Sungai Lokan Village has one main health center and one secondary Health

center with total deliveries in 2018 of 29.58%, namely out of 71 deliveries, health workers assisted only 21 deliveries in health facilities [18]. The low number of deliveries assisted by midwives or health workers is an indicator of the low utilization of health facilities by mothers in labor.

Based on the existing phenomena, we tried to examine the factors related to the utilization of childbirth in health facilities in the Sungai Lokan Community Health Center Work Area, Tanjung Jabung Timur Regency”.

MATERIALS AND METHODS

The research design is a cross-sectional survey. Data collection was carried out by the research team assisted by two midwives from January to July 2019 in the Sungai Lokan Health Center Work Area, Tanjung Jabung Timur Regency. The research population was all mothers who gave birth in the Sungai Lokan Public Health Center, Tanjung Jabung Timur Regency, with a sample of 74 mothers who gave birth and at the same time as respondents who were selected by total sampling with inclusion criteria, namely the mother's place of residence is accessible, the mother is in good health, the mother who lives at home with her in-laws while the mother who does not live at home with her in-laws was excluded from the study. Before the research was carried out, the researcher first asked the mother's consent as a prospective respondent, after the mother signed the consent letter to become a respondent, then the researcher conducted interviews using a questionnaire. The research questionnaire consisted of a questionnaire on Utilization of childbirth in health care facilities consisting of 10 questions, a family culture questionnaire consisting of 10 questions, family support consisting of 10 questions, and an Access to the service questionnaire consisting of 10 questions. when the questionnaire was distributed, the mother was accompanied by a member of the researcher until the questionnaire was completed by the mother.

The study was performed in accordance with the ethical considerations of the Helsinki Declaration. No economic incentives were offered or provided for participation in this study. Ethical eligibility is

obtained from the Health Research Ethics Commission of the Health Polytechnic, Jambi Ministry of Health with the number: LB.02.06 / 2/110/2019.

Statistical analysis

Data are presented as numbers and percentages for categorical variables. Continuous data are expressed as the mean \pm standard deviation (SD), or median with Interquartile Range (IQR). The chi-square test and Fishers exact test were performed to evaluate significant differences of proportions or percentages between two independent groups. Particularly Fishers exact test was used where the chi-square test was not appropriate. The variables measured were adequate delivery facilities as the dependent variable and family culture, family support, and access to services as independent variables. All tests with p-value (p) $<$ 0.05 were considered significant. Statistical analysis was performed using SPSS app version 16.0.

RESULTS

The research results are then presented in the form of distribution tables and cross-tabulations and then narrated. The following will present research data on research variables, as follows:

Variable	n	%
Utilization of childbirth in health care facilities		
Yes	21	28.4
No	53	71.6
Family culture		
Support	28	37.8
Unsupportive	46	62.2
Family support		
Support	31	41.9
Unsupportive	43	58.1
Access to the service		
Affordable	57	77.8
Unreachable	17	23.2

Table 1. Frequency distribution of research variables in the working area of Sungai Lokan Public Health Center, Tanjung Jabung Timur Regency.

Table 1 shows that of the 74 respondents, most (71.6%) of respondents will not use health facilities, most (62.2%) of respondents with unsupportive culture, most (58.1%) of respondents do not. Most of them received support from their families (77.0%) were close to the place of service.

Independent Variable	Utilization of childbirth in health care facilities		p-value
	Yes	No	
Family Culture			0.0001 (C)
Supportive	15 (53.6)	13 (46.4)	
Unsupportive	6 (10.9)	40 (87.0)	
Family Support			0.003 (C)
Supportive	17 (54.8)	14 (45.2)	
Unsupportive	4 (9.3)	39 (90.7)	
Access to the Service			0.364 (F)
Affordable	18 (31.6)	39 (68.4)	
Unreachable	3 (17.6)	14 (82.4)	

Table 2. Results of the analysis of the relationship between the utilization of childbirth in health care facilities with a family culture, family support, and access to services in the working area of the Sungai Lokan Community Health Center, Tanjung Jabung Timur Regency

In Table 2, it can be seen from 46 respondents with a culture that does not support there are 40 people (87.0%) respondents who will not use health facilities. Meanwhile, out of 28 respondents with a supportive culture, 15 people (53.6%) will use health facilities. The results of statistical tests using the chi-square test obtained a value of $p = 0.0001$ ($p < 0.05$), meaning that there is a socio-cultural relationship with the use of delivery services in health facilities. Respondents who do not receive family support have 39 people (90.7%) respondents who will not use health facilities. Meanwhile, of the 31 respondents who received family support, 17 (54.8%) respondents would use health facilities. The results of statistical tests using the chi-square test obtained a value of $p = 0.003$ ($p < 0.05$), meaning that there is a relationship between family support and delivery services in health facilities. Of the 17 respondents with long distances to the four health facilities, 14 (82.4%) respondents would not use the health facilities. Meanwhile, out of 57 respondents with proximity to

health facilities, 39 (68.4%) respondents would not use health facilities. The statistical test results using the Fisher Exact test obtained a value of $p = 0.364$ ($p > 0.05$), meaning that there is no relationship between distance to the place of service and the utilization of delivery services in health facilities.

DISCUSSION

The question components in family culture variables include the habits of family members to give birth still choose a traditional birth attendant as a birth attendant. In this study it was found that the role of traditional birth attendants was very central and became the family's choice as birth attendants. family habits in giving birth to traditional birth attendants that have been carried out for generations. This has become a culture not only for the respondent's family but also for most of the people in the study area and Indonesia in general. Cultural factors have a very big influence in the selection of birth attendants. Moreover, in rural areas, the position of traditional birth attendants is more respectable, their position is higher than that of midwives, so that from examinations, delivery assistance to postpartum care, many ask for help from traditional birth attendants.

Based on the research results on the socio-cultural community in the working area of the Sungai Lokan Public Health Centre, when approaching delivery, they choose to give birth at home, in addition to being hereditary, because they feel comfortable giving birth at their own home. Some *dukuns* accompany mothers during childbirth, and some even choose to give birth to be assisted by shamans alone. They also think that their previous children born with the help of a *dukun* are no different from those who are now being helped by a midwife, apart from feeling comfortable giving birth at their own home because they feel ashamed and reluctant to give birth in a health facility.

The limited use of the national language is also one of the difficulties for the community to communicate with health workers, most of who are not from the local area. So that communication difficulties also make people more comfortable giving birth at their own home and choosing a

shaman to help the delivery process. It is in line with Yeni Aryani's research [19], which found that statistical tests showed a relationship between culture and the choice of place of delivery ($p = 0.028$). The results of the OR (Odds Ratio) of 3.162 indicate that mothers who receive support from culture have a 3.162 times greater chance of choosing a place of delivery in a health facility compared to mothers who do not receive support from culture. In line with research in Rural Uganda which states that for both men and women in the village, the cultural behaviour patterns of the community have the most substantial impact on birth choices [20]. A woman's relationship with her partner and family is also a factor in whether the mother will use health facilities for the birth process or not. In the family role variable, one component of the question in the questionnaire is the husband's role in determining the choice of place to give birth. The husband's role is very dominant in this study determining the place of delivery for the mother. The husband is the head of the household in a family, so the rules in the household should have deliberation with the husband. Therefore, how important is the role of the husband and family in making decisions for choosing the place of delivery. Based on this and previous studies, husband/family support can influence respondents to use health facilities as a place of delivery. It is due to the husband's/family's lack of knowledge about the importance of using health facilities, especially for childbirth due to lack of knowledge of Husband/family regarding the importance of health utilization and the advantages of giving birth in health facilities. Based on the research results from 74 respondents, most of the respondents did not receive support from their families in the working area of Sungai Lokan Public Health Centre, Tanjung Jabung Timur Regency, with a p -value < 0.05 . In line with previous research at Puskesmas XIII Koto Kampar, obtained p -value ($0.010 < 0.05$), this means that there is a socio-cultural influence with the selection of birth attendants [21].

The results of this study are also in line with previous research in the working area of the Muara Analong Health Centre, Kutai Timur Regency, which found that family support affected the choice of place of delivery with a p -value of 0.019, namely husband and parents, this indicates that the

influence of the closest family is considerable on respondents' decision making in choosing a place to give birth [21]. Another study in Kenya showed that family support in the form of funds was associated with the utilization of childbirth in health facilities [22]. The distance from a mother's house to a health facility is closely related to transportation costs and the time it takes to reach it. The closer the distance of a mother's house to a health facility is, the cheaper the costs. Accessibility based on geographical dimensions is related to time and space, which is believed to shape access to health services significantly. If these obstacles are overcome, someone will still think to decide whether the distance is an obstacle. A study states that the low utilization of health services is due to the existence of barriers for the community in accessing preventive, curative, and promotive health services [13].

Based on the study results, from 74 respondents, most of the respondents were close to the place of service in the working area of Sungai Lokan Public Health Center, Tanjung Jabung Timur Regency. It will undoubtedly increase pregnant women's access to give birth to health facilities, but in reality, this condition is very contrary to the respondent's decision not to use health facilities as a place to give birth.

This study indicates that there is no significant relationship between a mother's access to health facilities and the choice of place of delivery. According to the researcher's assumptions, this occurs because people travel long distances by using transportation to get to the garden. Affordability is based on the perception of distance and the presence or absence of private or public vehicles to reach the nearest health facility. Respondents who choose delivery assistance by traditional birth attendants are generally people whose homes are closer to the traditional birth attendant, while respondents who choose birth assistance by midwives need more time to get services because of the longer distance.

Unlike previous research in the work area of the Kawangu Health Centre, the utilization of childbirth in health facilities was influenced by the ability to access health services ($p < 0.001$) [16].

In this study, transportation limitations with high costs and poor road structures caused pregnant women to prefer to give birth. The difference in the results of this study is that the ability to access services in our study is already high because the distance from pregnant women's homes to the PHC is very close and does not cost a lot, even though the dominant mother decides to be more comfortable giving birth at home.

Conclusions

Most of the respondents did not use health facilities in the working area of Sungai Lokan Health Centre, Tanjung Jabung Timur Regency. Utilization of delivery services in health facilities in the working area of Sungai Lokan Public Health Center, Tanjung Jabung Timur Regency, is related to family culture and family support, while access to services is not related.

Limitation

In this study, there are limitations such as the presence of some areas that cannot be reached by the research team so they cannot participate in the study. Then in this study using a cross-sectional design so that the information obtained by researchers is only limited to data when the research is conducted.

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Competing interests statement

There are no competing interests for this study.

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