# Factors Influencing Delivery Achievement in Health Facilities in the Working Area of the Bungus Health Center 2020

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## **ABSTRACT**

Health efforts that can be given in reducing mortality such as normal childbirth care with a new paradigm. The purpose of the study was to determine the factors that influence the achievement of childbirth in health facilities in the Bungus Health Center work area in 2020. This type of research is analytical design using the Cross-sectional study approach. This study was conducted from January 2020 to December 2020 in the Bungus Health Center work area in 2020, with a population of 149 people, a research sample of 53 respondents, data collection techniques, namely primary data, sampling techniques, simple random sampling techniques. Data processing techniques with editing, coding, data entry, tabulating, cleaning. Data analysis with univariate analysis and bivariate analysis with Chi-Square test.

This research was obtained by almost all respondents with good childbirth achievement with a percentage of 66%, as many as 52.8% of respondents with good education, 54.7% of respondents with good knowledge, 58.5% of respondents with good infrastructure, and 56.6% of respondents with the support of good health officers. Based on the results of data analysis, there is a relationship between education and childbirth achievement (p = 0.004), there is a relationship between knowledge and labor achievement (p = 0.011), there is a relationship between infrastructure and childbirth achievement (p = 0.018), and there is a relationship of health worker support with labor achievement (p = 0.031).

It can be concluded that education, knowledge, infrastructure, support of health workers. The

most ideal place for giving birth is a health facility with equipment and personnel who are ready to help if birth complications occur. At least in health facilities such as community health centers that are able to provide basic emergency obstetric and neonatal services.

**Keywords:** Achievement of childbirth; health facilities; knowledge

## INTRODUCTION

The maternal mortality rate in the world every day is 830 live births and the infant mortality rate in the world is 7000 live births every day, increasing due diseases/complications related to pregnancy and childbirth and babies are still a major health problem in the world. 1 Maternal and infant health problems are an important issue because MMR in Indonesia is still high. The infant mortality rate (IMR) was 34/1000 live births in 2007 to 32/1000 live births in 2012. However, the maternal mortality rate (MMR) actually showed an increase, namely from 228 in 2007 to 359 per 100,000 live births in 20122.

A preliminary study conducted by researchers in the Bungus Community Health Center working area showed that from the register book of the coordinating midwife, data on births from January 2020 to September 2020 showed that there were 149 births. The number of women giving birth in health facilities was 110 people (73.82%) and in non-health facilities was 39 people

(26.17%), it can be seen that the number of women giving birth in non-health facilities was still at the Bungus Health Center in 2020.

Judging from the data above, the percentage of mothers who give birth at home is still there (1.9%) while according to the Ministry of Health, there should be no more mothers giving birth at home but all giving birth in health facilities (100%).<sup>3,4</sup> The Bungus Health Center has adequate facilities and facilities, and has a safe birthing place. However, people still give birth at home, because the distance from home to the health center is still far, with the community's education level being low and the average population working as farmers, fishermen and casual workers.

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The factors that influence the achievement of childbirth refer to Lawrence Green's theory in Notoadmodjo that the factors that influence a person's health behavior are predisposing factors, enabling factors and reinforcing factors. Predisposing factors include education, knowledge. Enabling factors include infrastructure.<sup>5</sup> Reinforcing factors include the support of health workers and family support, which are important factors in the process of pregnancy and childbirth, mothers with good family support will motivate the mother more in planning a safe birth, because one of the factors that can influence the psychology of the mother giving birth is birthing place.<sup>5</sup>

## LITERATURE REVIEW

Normal labor according to WHO1 is labor that begins spontaneously with low risk at the beginning of labor and remains so throughout the labor process, the baby is born a posterior spontaneously with presentation at 37-42 complete weeks of gestation. After delivery, mother and baby were in good condition. There are several theories that have revealed the factors that influence behavior, especially behavior related to health, one of which is Lawrence Green's theory, which tries to analyze human behavior that causes health problems. The health of a person or society is influenced by two factors, namely behavioral factors (behavioral causes) and factors outside of behavior (non-behavioral causes).<sup>6</sup>

This theory reveals the determinants of behavior based on analysis of the factors that behavior, especially influence behavior. Among these theories is the theory put forward by Lawrence Green in Soekidjo Notoatmodjo6 which states that a person's behavior is determined by three factors including predisposing factors, these factors knowledge. include education, occupation, number of children, habits, attitudes. Enabling factors, factors that enable or facilitate behavior or actions. This includes the availability of facilities and infrastructure or facilities for health behavior to occur, affordability of health services.

# **MATERIALS & METHODS**

This research uses a descriptive analytical research method, using a cross-sectional design where the researcher wants to know the factors that influence the achievement of childbirth in the Bungus health center working area. The population in this study were all housewives whose births were recorded in the midwifery register book, totaling 149 people who had given birth in the Bungus Community Health Center work area.

# STATISTICAL ANALYSIS

The sampling technique is carried out using simple random sampling, namely a sampling

technique that provides an equal opportunity for each element of the population to be selected as a member of the sample. Random sampling can be done by lottery, taken from birth data in the subdistrict where the birthing mothers are taken one by one. based on the proportion in each working area of the Bungus Teluk Kabung Community Health Center, Padang City

# **RESULT**

Based on the research results, the frequency distribution of respondent factors based on the achievement of childbirth in the Bungus Community Health Center Work Area in 2020 is as follows:

Table 1. Characteristics of Research Respondents

Variable	f	%
Education		
Tall	28	52.8
Low	25	47.2
Knowledge		
Good	29	54.7
Not good	24	45.3
Infrastructure		
Good	31	58.5
Not good	22	41.5
Health Worker Support		
Good	30	56.6
Not good	23	43.4
Childbirth Achievements		
Yes (Health Facilities)	35	66.0
No (Non-Health Facilities)	18	34.0

Based on table 1, it was found that most respondents (52.8%) had higher education. In terms of knowledge, some respondents (54.7%) had good knowledge, while as many as (58.5%) had good infrastructure, 56.6%

had good support from health workers, and 66.0% achieved delivery in a facility. health and childbirth with health workers in the Bungus Health Center work area in 2020

Table 2. Factors that influence education, knowledge, facilities and infrastructure, health workers on achieving delivery in health facilities.

Variable	Childbirth Achievements				T	otal	p-value	OR (95% CI)
	,	Yes	No					
	(Health	Facilities)	(Non-Health Facilities)					
	n	%	N	%	n	%		
Education								
Tall	24	85.7	4	14.3	28	100.0	0.004*	7,636 (2,039-28.60)
Low	11	44.0	14	56.0	25	100.0		
Knowledge								
Good	24	82.8	5	17.2	29	100.0	0.011*	5,673 (1,618-19.88)
Not good	11	45.8	13	54.2	24	100.0		
Infrastructure								
Good	25	80.6	6	19.4	31	100.0	0.018*	5,000 (1,470-17.00)
Not good	10	45.5	12	54.5	22	100.0		
Health Care Support								
Good	24	80.0	6	20.0	30	100.0	0.031*	4,364 (1,298-14.66)
Not good	11	47.8	12	52.2	23	100.0		

Based on table 2, the results show that 85.7% of respondents were highly educated and delivered using health facilities. 82.8% of respondents had good knowledge of achieving delivery using health facilities. 80.6% of infrastructure is good with delivery achieved using health facilities. 80.0% of respondents received support from health

workers by achieving delivery using health facilities. The results of the Chi-Square test show p-value = 0.004 (p < 0.05), this shows that there is a relationship between education and the achievement of childbirth in health facilities in the Bungus Community Health Center working area in 2020 with an Odds Ratio (OR) value = 7.636, which means that

respondents with Low education is 8 times more likely to not give birth in a health facility compared to respondents with higher education.

The results of the Chi-Square test show a p-value (p<0.05), this shows that there is a significant relationship between infrastructure and delivery in health facilities in the Bungus Community Health Center working area in 2020, with an Odds Ratio (OR) = 5,000, which means Respondents

with poor infrastructure are 5 times more likely to not give birth in a health facility compared to respondents with good infrastructure. The results of the Chi-Square test show a p-value (p<0.05), this shows that there is a significant relationship between the support of health workers and the achievement of childbirth in health facilities in the Bungus Community Health Center working area in 2020, with an Odds Ratio (OR) = 4,

Table 3. Determinant Factors that Influence the Achievement of Childbirth in Medical facility.

Variable	OR	p-value
Infrastructure	1,631	0.014*
Health Care Support	1,496	0.025*
Constant	1,573	0.001

(\*Linear Regression Test)

Based on table 3, it is found that infrastructure is more related, namely with a p-value < 0.05, with an OR value of 1.631. Based on the research results, it was found that infrastructure had a greater influence on achieving delivery in health facilities.

## **DISCUSSION**

Based on the research results, it was found that 85.7% of respondents were highly educated and achieved delivery using health facilities. The results of the Chi-Square test show p value = 0.004 (p < 0.05), this shows that there is a relationship between education and the achievement of childbirth in health facilities in the Bungus Community Health Center working area in 2020, with an Odds Ratio (OR) value = 7.636, which means that respondents with Low education is 8 times more likely to not give birth in a health facility compared to respondents with higher education.

According to Notoatmodjo, the higher a person's education, the more materials, materials or knowledge a person has.<sup>5</sup> Education is needed to obtain information, for example things that support health, so that it can improve health and quality of life. The higher a person's level of education will influence access to information and understanding of a problem which will influence his behavior, especially health

behavior. The results of this research are supported by Oktia's research and it was also found that 39.7% of pregnant women with higher education gave birth in health facilities with p value = 0.001. Childbirth Planning and Complication Prevention (P4K) Program, which is an activity facilitated by village midwives in order to increase the role of husbands, families and communities in planning safe births and preparing to face complications for pregnant women, are the Ministry of Health's breakthrough efforts towards safe and secure births. Based on researchers' assumptions, it was found that as many as 44% of respondents with low education still chose to give birth in health facilities. This can happen because in modern times like now it is very rare for people to give birth at home, such as giving birth to a midwife. This is because of the progress and development of the times where 24-hour delivery services are available in Community Health Centers and the practices of midwives are also spread to remote areas so that the achievement of births in health facilities is very good and can reduce the maternal mortality rate during childbirth. is a breakthrough effort by the Ministry of Health in order to achieve safe and secure childbirth.6

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Research results can be seen that 82.8% of respondents have good knowledge of achieving delivery using health facilities. Chi-Square test results show p-value = 0.011(p<0.05), this shows that there is a relationship between knowledge and achieving delivery in health facilities in the region. Bungus Community Health Center work in 2020, with an Odds Ratio (OR) = 5.673, which means that respondents with poor knowledge are 6 times more likely to not give birth in a health facility compared to respondents good knowledge. with Education level greatly influences changes in attitudes and healthy living behavior. A higher level of education will make it easier for a person or community to absorb information and implement it in daily behavior and lifestyle, especially in terms of health.7

Lack of knowledge is caused by low maternal education and also the lack of information received by mothers both from print and electronic media regarding choosing the right place to give birth. Mothers with good knowledge will understand that a safe place to give birth is not at home, namely in a health facility (private practice midwife/hospital), while mothers who have less knowledge will think that choosing a place to give birth at home is safer.<sup>8</sup>

Education level, especially women's education level, has an influence on health (Ministry status of Health. 2018). Knowledge is one of the predisposing factors so that knowledge plays a role in shaping human behavior. So, in choosing a place of birth, knowledge about birth and place of birth is a very important domain for shaping a mother's behavior in choosing a place of birth. Mothers with less knowledge will more likely choose to give birth in a non-health facility (home). This is because mothers do not know that during labor complications can occur at any time and if they give birth at home and experience complications, they cannot be handled properly.<sup>9</sup>

The research results showed that 80.6% of the facilities and infrastructure were good with delivery achieved using health facilities. The results of the Chi-Square test show p-value = 0.01 (p<0.05), this shows that there is a relationship between infrastructure and delivery in health facilities in the Bungus Community Health Center working area in 2020, with an Odds Ratio (OR) = 5,000 which means that respondents with poor infrastructure are 5 times more likely to not give birth in a health facility compared to respondents with good infrastructure.

Infrastructure is something that can be used as equipment to achieve aims and objectives, while infrastructure is something that is a supporting factor in the implementation of an activity process so that things can be classified as facilities and infrastructure. Infrastructure means all types of equipment, work equipment and facilities that function as main/auxiliary tools in carrying out work, and also for purposes related to work. Completeness of complete infrastructure to support childbirth will be a mother's consideration when choosing a place to give birth. <sup>10</sup>

In this study, there were still mothers who lived in urban areas who chose to give birth in non-health facilities even though there was easy access to health facilities. This is likely due to the high cost of giving birth in urban health facilities so that the mother's decision in choosing to give birth in a health facility is dependent on family income. very Household income is generally measured according to a proxy for household expenditure, so that to determine the level of income is done by measuring the amount of household expenditure. In this study, it was found that there was a significant relationship between economic status and the choice of delivery in a health facility, This means that mothers whose economic status is not poor have a tendency to choose to give birth in a health facility compared to mothers who have a poor economic status. The same thing was also shown by Sari's research which stated that the level of family income plays a role in determining the choice of place of birth.<sup>11</sup>

Based on the research results, it was found that 80.0% of respondents received support from health workers by achieving delivery using health facilities. The results of the Chi Square test show p-value = 0.031 (p < 0.05), this shows that there is a relationship between the support of health workers and the achievement of childbirth in health facilities in the Bungus Health Center work area in 2020, with an Odds Ratio (OR) value = 4.364, which means that respondents those with poor health worker support were 4 times more likely to not give birth in a health facility compared to respondents with good health worker support.

The important role of health workers in efforts to reduce maternal mortality rates in Indonesia is supported by health facilities in accordance with government policies that support efforts to reduce maternal mortality rates, namely increasing access and quality of health services through strategies to increase equitable, affordable and fair health services with a focus on increasing utilization. health facilities, by establishing partnerships with the community and the private sector.<sup>12</sup> According to Tuilan's research results in the Makale Community Health Center working area, it shows that there is a relationship between availability of resources and delivery assistance services by health workers. This is because the majority of respondents had a good response to the availability resources. From the research results it is known that the availability of health workers, Health facilities and funds greatly influence a person's delivery assistance services by health workers. Most respondents thought that health workers were very helpful in the birthing process. Health workers who are always ready whenever needed will encourage mothers to choose health workers as birth attendants even though there is a dukun near the mother's house. 13,14

Based on the results of the multifarious test. it was found that infrastructure was more related, namely with a p-value = 0.014. With an OR value of 1.631. Based on the research results, it was found that infrastructure had a greater influence on achieving delivery in health facilities. The Ministry of Health stated that one of the important components in implementing health development is health facilities that are able to support various health service efforts both at the individual and community levels. The service facilities in question are all types of equipment, work equipment and other facilities that function as main/auxiliary tools in carrying out work.<sup>3</sup>

The most ideal place for giving birth is a health facility with equipment and personnel who are ready to help if birth complications occur. At least in health facilities such as community health centers that are able to provide basic emergency obstetric and services. According neonatal Notoatmodjo, distance is an important factor for people to utilize health services. The low level of utilization of health service facilities can be influenced by the distance where they live. People are more likely to use facilities around where they live. Based on the results of the research and theory above, the researchers concluded that the low number of births in health facilities was due to the distance where the birthing mother lives far from the health facility that provides birth services. Most of their residences are >1 km. The long distance prevents giving birth at these health facilities, the equipment available in health facilities such as the local Puskesmas is not complete.<sup>15</sup>

# **CONCLUSION**

Based on the results of this research, several things can be concluded regarding the factors that influence the achievement of childbirth in health facilities in the working area of the Bungus Community Health Center, namely as follows: There is a frequency distribution of childbirth achievement in the good category, namely at the level of education, knowledge, infrastructure, support from

health workers. There are both in the working area of the Bungus Community Health Center. There is an influence on normal birth factors where infrastructure provides significant results with a P value <0.05 and influences the achievement of childbirth in health facilities in the Bungus Community Health Center working area.

**Declaration by Authors** 

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