



INFLUENCE OF CHARACTERISTICS AND HEALTH CARE RESOURCES ON THE SELECTION OF MATERNAL HEALTH FACILITIES IN LABUHANBATU SELATAN DISTRICT

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Abstract

Based on data from the district/city health profile report in 2022, the maternal mortality rate (MMR) in North Sumatra is 85/100,000 live births, while the maternal mortality rate (AKI) in South Labuhanbatu Regency is 187 cases out of 299,198 live births in 2022. The 2021-2026 RPJMN target mandates that the maternal mortality rate (MMR) be lowered to 60.8 per 100,000 live births in 2023. The Indonesia government's program in preventing childbirth complications in reducing maternal mortality (MMR) by making a design by setting a target of 95 percent of childbirth in health facilities The

realization of South Labuhanbatu Regency is a regency/city that has not reached the target of childbirth coverage in health facilities in 2023 at the 17th lowest number of 81.88 percent, has not reached the set target. The research was conducted in South Labuhanbatu Regency from May 2024 until it was completed. The purpose of the study is to analyze the influence of health service characteristics and resources in the selection of maternity health facilities in South Labuhanbatu Regency. A type of quantitative research with a cross sectional design. The population is all maternity mothers in the last 6 months of 2023 in South Labuhanbatu Regency as many as 726 maternity mothers and the number of maternal samples in this study is 258 maternity mothers. Data collection through questionnaires. The results of the study showed that there was an influence of knowledge and perception on the selection of maternal health facilities, the variable that had the most dominant influence was perception. It is recommended for women of childbearing age, especially pregnant women, to gather information about the importance of pregnancy checks, delivery aides are health workers and prefer the best place to give birth is a health facility.

keywords : Selection of health facilities, maternity mothers, characteristics

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Introduction

Labor is the process of delivering a baby that has the potential to live outside the uterus, through the vagina, into the outside world. This process is considered normal or spontaneous if the baby is in the head-first position and the delivery progresses without the need for tools or assistance, causing no injury to the mother or baby. Typically, this process takes less than 24 hours (Wijayanti et al., 2022).

The maternal and infant mortality rates in Indonesia remain high. To address this, strategies are needed to increase the safety of mothers and babies, one of which is ensuring that births occur in health facilities with the assistance of a midwife or gynecologist. According to the 2022 health profile report, the maternal mortality rate (MMR) in North Sumatra was 85 per 100,000 live births. Meanwhile, the maternal mortality rate in South Labuhanbatu Regency was 187 cases out of 299,198 live births in 2022. Globally, 7,000 newborns die every day, with 18 per day or 15 per 1,000 live births in Indonesia, while in South Labuhanbatu Regency, the rate was 1.63 per 1,000 live births in 2022. The 2021-2026 RPJMN target mandates a reduction in the maternal mortality rate to 60.8 per 100,000 live births by 2023 (North Sumatra Provincial Health Service, 2022).

The Indonesian government's program to prevent complications during labor aims to reduce maternal mortality by setting a target of 95 percent of births occurring in health facilities. However, by 2022, only 90 percent of births were occurring in health facilities. North Sumatra set a target of 89 percent, with an achievement of 84.6 percent, while South Labuhanbatu Regency set a target of 89 percent but only achieved 81.88 percent. This indicates that the target has not yet been met (Renstra, 2021).

South Labuhanbatu Regency is one of the regions that has not yet achieved its target for births in health facilities, ranking 17th lowest at 81.88 percent, below the set target. One key performance indicator for the South Labuhanbatu District Health Service is the percentage of mothers receiving delivery services, with a target of 89 percent. The maternal mortality rate is closely related to the type of assistance during delivery and the place or facility where the birth occurs, which remains a significant issue in the district. The service's performance reached only 60.38 percent, falling short of the 69 percent target, although it has improved each year (South Labuhanbatu District Health Service, 2022).

According to the 2018 Riskesdas data, the coverage of births assisted by health professionals in rural areas was 72.5 percent, lower than the 91.4 percent in urban areas. In rural areas, 62.7 percent of births occurred at home, compared to 35.2 percent in health facilities. In North Sumatra, 25.3 percent of births occurred at home, while in South Labuhanbatu Regency, 67.3 percent of births took place in health facilities, with only 38.4 percent assisted by health professionals. South Labuhanbatu Regency is one of the regions that has not yet achieved the target for births in health facilities (Dinkes, 2022).

The analysis of maternal deaths by the Directorate of Maternal Health Development at the Ministry of Health of the Republic of Indonesia shows that maternal mortality is closely linked to the type of assistance during delivery and the place or facility where childbirth occurs. The



Ministry of Health remains consistent in enforcing the policy that all deliveries must take place in health service facilities (North Sumatra Provincial Health Service, 2022).

Based on a preliminary survey conducted through interviews with mothers who gave birth at home, it was found that some mothers chose home births due to previous behavior, the expectation of a spontaneous birth, and concerns about being advised to undergo a cesarean section because their first delivery was by cesarean. These mothers felt that the six-year gap since their first birth was sufficient for a normal delivery, leading them to prefer home birth.

There is still a significant gap between urban and rural areas, with a higher percentage of facility-based births in urban areas (93.76 percent) compared to rural areas (85.51 percent). This discrepancy may be due to the greater number of health facilities in urban areas compared to rural regions (Central Statistics Agency, 2022). This is one of the reasons South Labuhanbatu Regency was chosen as the research location, as it still faces challenges with non-facility-based births.

A suitable theory to explore the influence of characteristics and health services on the choice of health facilities for childbirth is necessary. Preliminary data shows that the trend of choosing health facilities for childbirth is driven by the desire to receive better healthcare services. However, some mothers choose to give birth at home for various reasons, including personal characteristics (age, education, occupation, knowledge, attitudes, perceptions) and the availability of health services (availability of health facilities, health professionals, and accessibility).

Methods

This study uses a quantitative method with a cross-sectional design. The research was conducted in South Labuhanbatu Regency, with the research period spanning from August 2023 to June 2024. The study population consisted of 726 mothers who gave birth in South Labuhanbatu Regency in the last six months of 2023. The study employed proportional stratified random sampling with accidental sampling techniques. After performing calculations using the Slovin formula, the sample size was determined to be 258 mothers. This study utilized primary data collected through questionnaires and documentation. The data analysis was conducted using multiple linear regression tests.

Results

Description of Characteristics and Resources for Health Services in the Selection of Maternity Health Facilities in South Labuhanbatu Regency

Characteristics of Mothers in South Labuhanbatu Regency. Based on the study results, all 258 respondents (100%) answered "yes" to the question, "Is the ideal age for a first birth between 21-35 years?" This indicates that all respondents are aware that the age range of 21-30 years is considered safe for giving birth. All 258 respondents (100%) also answered "yes" to the question, "Is maternal age a risk factor in childbirth?" This shows that all respondents understand that age can be a risk factor in the childbirth process. Additionally, all 258 respondents (100%) agreed with the statement, "Is it best to have childbirth attended by a healthcare professional



(doctor or midwife)?" This suggests that all respondents recognize the importance of having a healthcare professional present during childbirth. However, 132 respondents (51.2%) did not agree with the statement, "Is a health check-up one of the ways to prevent complications during childbirth?" This indicates that some respondents are still not regularly seeking check-ups with midwives. A total of 250 respondents (96.9%) answered "yes" to the question, "Should complaints during pregnancy and childbirth be consulted with healthcare professionals?" This implies that almost all respondents are aware that consulting a healthcare professional is necessary when issues arise during pregnancy and childbirth. Similarly, 250 respondents (96.9%) agreed with the statement, "Is the most effective delivery carried out at a health center, hospital, or maternity clinic?" This indicates that nearly all respondents understand that the most effective deliveries occur in healthcare facilities.

The distribution of knowledge among mothers giving birth is presented in the following table:

Table 1. Distribution of knowledge among mothers giving birth in South Labuhanbatu District

Knowledge	Total	%
Good	212	82.2
Enough	46	17.8
Total	258	100

Attitude. Based on the research results regarding the attitudes of mothers toward choosing a place of childbirth in South Labuhanbatu Regency, the distribution of responses is as follows 137 respondents (53.1%) agreed with the statement "During pregnancy, routine check-ups with healthcare professionals are necessary." 258 respondents (100%) agreed with the statement "If you experience symptoms like a cold, immediately contact a midwife as the childbirth assistant." 87 respondents (33.7%) did not agree with the statement "When pregnant, plan to give birth in a health facility." This indicates that 87 mothers still plan to give birth at home. 147 respondents (57%) did not agree with the statement "Choose to give birth in a health facility because it is close to the mother's home." 173 respondents (67.1%) did not agree with the statement "If the mother's pregnancy is normal, she will give birth in a health facility." 140 respondents (54.3%) agreed with the statement "A mother will choose to give birth in a health facility if the midwife advises against a home birth." 175 respondents (67.8%) did not agree with the statement "A mother will give birth in a health facility without considering whether it is her first pregnancy or not."

The distribution of attitudes among mothers in South Labuhanbatu Regency is presented in the following table:

Table 2. Distribution of attitudes *among* mothers giving birth in South Labuhanbatu Regency

Attitude	Total	%
Good	134	51.9
Enough	40	15.5
Not enough	84	32.6

Perception. Based on the study results, the perceptions of mothers in South Labuhanbatu Regency



regarding childbirth are as follows 138 respondents (53.5%) agreed with the statement, "Midwives at health facilities are not patient enough during childbirth." 157 respondents (60.9%) agreed with the statement, "Young and unmarried midwives are not skilled in assisting childbirth." 159 respondents (61.6%) disagreed with the statement, "Giving birth at home is more comfortable because there is no need to carry many items or supervise other children." 176 respondents (68.2%) agreed with the statement, "Giving birth at home is safe, and nothing dangerous has ever happened during home births." 133 respondents (51.6%) agreed with the statement, "Childbirth is a natural event and can be assisted anywhere." 180 respondents (69.8%) agreed with the statement, "All pregnant women are at risk of an emergency during childbirth." 253 respondents (98.1%) disagreed with the statement, "Giving birth in a health facility does not require a lot of money."

The distribution of perceptions among mothers in South Labuhanbatu Regency is presented in the following table:

Table 1. Distribution of perceptions among mothers giving birth in South Labuhanbatu Regency

Perception	Total	%
Good	136	52.7
Enough	40	15.5
Not good	82	31.8
Total	258	100

Overview of Health Service Resources in South Labuhanbatu Regency.

The health service resources in this study are categorized into two main areas: the availability of health facilities and the quality of healthcare services.

Availability of Health Facilities, based on the study results 201 respondents (77.9%) answered "yes" to the question, "Is there a health center in your neighborhood?" This indicates that a majority of respondents have access to a health center in their vicinity. 217 respondents (84.1%) answered "no" to the question, "Is there a clinic or hospital in your neighborhood?" This suggests that clinics or hospitals are not readily available in most respondents' neighborhoods. 152 respondents (58.9%) answered "yes" to the question, "Is there a midwife practice in your neighborhood?" This indicates that a midwife's practice is still accessible to some respondents. 228 respondents (88.4%) answered "yes" to the question, "In your opinion, how adequate are the delivery facilities, including the maternity room, medical equipment, inpatient care, midwifery services, baby room, and waiting area at the health center?" This suggests that the health centers are well-equipped to provide childbirth services.

The distribution of the availability of health facilities for mothers in South Labuhanbatu Regency is presented in the following table:

Table 4. *Distribution of availability of maternal health facilities in Labuhanbatu Regency*

Availability Health Facilities	Total	%
Complete	120	46.5
Enough	84	32.6
Incomplete	54	20.9



Healthcare Services. Based on the study results 188 respondents (72.9%) agreed with the statement, "Midwives, nurses, and doctors are responsive and attentive when serving mothers during pregnancy check-ups." This indicates that healthcare providers are generally responsive and attentive during prenatal care. 165 respondents (64%) disagreed with the statement, "Midwives, nurses, and doctors are friendly and show care and concern for mothers." This suggests that some healthcare providers may lack friendliness and care towards mothers. 211 respondents (81.8%) agreed with the statement, "Midwives, nurses, and doctors provide clear and easy-to-understand information during pregnancy check-ups." This shows that healthcare providers are effective in communicating important information during prenatal care. 149 respondents (57.8%) agreed with the statement, "Midwives, nurses, and doctors maintain a clean and tidy appearance when serving mothers during pregnancy check-ups." This indicates that most healthcare providers present themselves in a clean and tidy manner during prenatal care.

The distribution of healthcare services for mothers in South Labuhanbatu Regency is presented in the following table:

Table 5. Distribution of maternal health care services in South Labuhanbatu Regency

Health Personnel Services	Total	%
Good	188	72.9
Enough	70	27.1
Total	258	100

Overview of Accessibility in South Labuhanbatu Regency

Accessibility. Based on the study results 190 respondents (73.6%) answered "no" to the questions, "Is the location of the health center strategically placed relative to the residential areas?" and "Is the location of the health center easily reachable from your home?" This indicates that the health center locations are neither strategically placed nor easily accessible for most respondents. 171 respondents (66.3%) answered "yes" to the question, "Does obtaining health services at the health center incur significant transportation costs?" This suggests that accessing health services requires considerable transportation expenses.

The distribution of accessibility for mothers in South Labuhanbatu Regency is presented in the following table:

Table 6. Distribution of accessibility for mothers giving birth in South Labuhanbatu Regency

Accessibility	Total	%
Easy	68	26.4
Enough	103	39.9
Difficult	87	33.7
Total	258	100

Analysis Bivariate

Purposeful Analysis to determine the relationship between independent variables (knowledge, attitude, perception, availability of health facilities, quality of healthcare services, and



accessibility) and the dependent variable (choice of health facility for childbirth), crosstabs and chi-square tests were conducted. The decision rule is: if the p-value is less than 0.05, then it can be concluded that there is a significant relationship between the independent variables (knowledge, attitude, perception, availability of health facilities, quality of healthcare services, and accessibility) and the dependent variable (choice of health facility for childbirth). The results of the crosstabs and chi-square tests are presented as follows.

Relationship Between Knowledge and Choice of Health Facility for Childbirth

The analysis of the relationship between knowledge and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:

Table 7. Relationship Between Knowledge and Choice of Health Facility for Childbirth in South Labuhanbatu Regency

Knowledge	Election Maternal Health Facilities				Total		P
	Health Facilities		Non Health Facilities				
	n	%	n	%	n	%	
Good	139	96.5	73	64	212	82.2	0.0001
Enough	5	3.5	41	36	46	17.8	

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between knowledge and the choice of health facility for childbirth in South Labuhanbatu Regency.

Connection Between Attitude and Choice of Health Facility for Childbirth. The analysis of the relationship between attitude and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:

Table 8. Relationship Between Attitudes and Choice of Maternal Health Facilities in South Labuhanbatu Regency

Attitude	Choice of Maternal Health Facilities				Total		P
	Health Facilities		Non Health Facilities				
	n	%	n	%	n	%	
Good	117	81.2	17	14.9	134	51.9	0.0001
Enough	15	10.4	25	21.9	40	15.5	
Not enough	12	8.3	72	63.2	84	32.6	

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between attitude and the choice of health facility for childbirth in South Labuhanbatu Regency.



Connection Between Perception and Choice of Health Facility for Childbirth

The analysis of the relationship between perception and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:

Table 9. Relationship between perceptions and selection of maternal health facilities in South Labuhanbatu Regency

Perception	Election Maternal Health Facilities				Total	P
	Health Facilities		Non Health Facilities			
	n	%	n	%	n	%
Good	121	84	15	13.2	136	52.7
Enough	11	7.6	29	25.4	40	15.5
Not enough	12	8.3	70	61.4	82	31.8

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between perception and the choice of health facility for childbirth in South Labuhanbatu Regency.

Connection Between Availability of Health Facilities and Choice of Health Facility for Childbirth. The analysis of the relationship between the availability of health facilities and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:

Table 10. Relationship between Availability of Health Facilities and Choice of Maternal Health Facilities in South Labuhanbatu Regency

Availability Health Facilities	Election Maternal Health Facilities				Total	P
	Health Facilities		Non Health Facilities			
	n	%	n	%	n	%
	Complete	99	68.8	21	18.4	120
Enough	38	26.4	46	40.4	84	32.6
Incomplete	7	4.9	47	44.2	54	20.9

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between the availability of health facilities and the choice of health facility for childbirth in South Labuhanbatu Regency.

Connection Between Quality of Healthcare Services and Choice of Health Facility for Childbirth. The analysis of the relationship between the quality of healthcare services and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:



Table 11. Relationship between Health Personnel Services and Selection of Maternal Health Facilities in South Labuhanbatu Regency

Health Personnel Services	Election Maternal Health Facilities				Total		P
	Health Facilities		Non Health Facilities				
	n	%	n	%	n	%	
Good	133	92.4	55	48.2	188	72.9	0.0001
Enough	11	7.6	59	51.8	70	27.1	

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between the quality of healthcare services and the choice of health facility for childbirth in South Labuhanbatu Regency.

Connection Between Accessibility and Choice of Health Facility for Childbirth. The analysis of the relationship between accessibility and the choice of health facility for childbirth in South Labuhanbatu Regency can be seen in the table below:

Table 2. The Relationship between Accessibility and Selection of Maternal Health Facilities in South Labuhanbatu Regency

Election Maternal Health Facilities					Total	P
Accessibility	Health Facilities		Non Health Facilities		n	%
	n	%	n	%		
Easy	62	43.1	6	5.3	68	26.4
Enough	70	48.6	33	28.9	103	39.9
Difficult	12	8.3	75	96.2	87	33.7

Based on the data analysis using the chi-square test, a p-value of 0.0001 ($p < 0.05$) was obtained. This indicates that there is a significant relationship between accessibility and the choice of health facility for childbirth in South Labuhanbatu Regency.

Multivariate Test

A multiple logistic regression analysis was conducted to determine the variables that influence the choice of health facility for childbirth. Variables that show a significance level of $p < 0.05$ are considered to have a significant impact.

Table 13. Results of Regression Logistics

Variable Independent	P Value	Information
Knowledge	0.0001	Relate
Attitude	0.0001	Relate
Perception	0.0001	Relate



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Availability Health Facilities	0.0001	Relate
Health Personnel Services	0.0001	Relate
Accessibility	0.0001	Relate

The chi-square test results show that all the variables mentioned above have p-values above α (0.05). For the variables attitude, perception, availability of health facilities, and accessibility, which were initially measured using three categories, they were converted into two categories each for the multiple logistic regression analysis. In this study, the less significant dummy categories were combined into the "sufficient" category. The results of the multiple logistic regression analysis can be seen in the table below.

Table 14. Multiple Logistic Regression Analysis of the Influence of Characteristics and Health Service Resources on the Choice of Maternal Health Facilities in South Labuhanbatu Regency

Model	Variable	B	Exp (B)	95% CI for EXP B		P-Value
				Lower	Upper	
1	Constant	-7,553				
	Knowledge	1,317	3,730	1,145	12,152	,029
	Attitude	,339	1,403	,270	7,281	,687
	Perception	2,529	12,540	2,183	72,049	,005
	Availability power health	.125	1,054	,387	2,870	,918
	Service power health	,053	1,134	,435	2,951	,797
	Accessibility	,657	1,929	,652	5,702	,235
2	Constant	-7,551				
	Knowledge	1,332	3,787	1,206	11,895	.023
	Attitude	,352	1,422	,279	7,235	,672
	Perception	,2,533	12,595	,2,200	72,100	,004
	Availability power health	.138	1,147	,454	2,903	,771
	Accessibility	,658	1,931	,653	5,711	,234
3	Constant	-7,498				
	Knowledge	1,345	3,837	1,229	11,979	.021
	Attitude	,353	1,424	,280	7,251	,671
	Perception	2,812	13,631	2,574	72,190	,020
	Accessibility	,672	1,957	,665	5,763	,223
4	Constant	-7,462				
	Knowledge	1,348	3,849	1,235	11,999	,020
	Perception	2,929	18,712	8,130	43,068	,000
	Accessibility	,681	1,976	,672	5,810	,216



5	Constant	-6,650				
	Knowledge	1,307	3,694	1,217	11,216	.021
	Perception	3,225	25,114	12,113	52,192	,000

The final results of the multivariate analysis indicate that the dominant variables influencing the choice of health facility for childbirth in South Labuhanbatu Regency are knowledge and perception. Specifically, the odds ratio (OR) for knowledge is 3.694, and for perception is 25.144. This means that respondents with inadequate knowledge are 3 times more likely to be at risk of not choosing a health facility for childbirth, while those with poor perception are 25 times more likely to face the same risk. The perception variable has the highest influence on the choice of maternal health facility in South Labuhanbatu Regency, with a 95% confidence interval (CI) of 3.694 to 25.144.

The results from the multivariate data analysis were then used in a multiple logistic regression model to determine the probability of choosing a health facility for childbirth based on the related variables. According to the results, respondents with inadequate knowledge and poor perception have an 89% chance of not choosing a health facility for childbirth, with the remaining 11% influenced by other variables not covered in this study.

Discussion

Characteristics of Maternity Mothers

The characteristics of mothers giving birth, as seen from age, indicate that the most dominant age group is between 20 and 35 years, with 199 respondents (77.1%). Respondents over 35 years old number 59 (22.9%).

Regarding education, the most common level of education among respondents is intermediate, including middle and high school, with 238 respondents (92.2%). In contrast, only 6 respondents (2.3%) have a low level of education, such as elementary school. In terms of employment, the majority of respondents are unemployed or housewives, with 132 respondents (51.2%). The remaining 126 respondents (48.8%) are employed.

Choice of Place for Childbirth

The study results show that 144 respondents (55.8%) prefer to give birth in a health facility, while 114 respondents (44.2%) choose to give birth outside a health facility with the assistance of a health worker. This indicates that in South Labuhanbatu Regency, there is still a significant number of mothers choosing non-health facility options for childbirth.

Knowledge about Choosing Health Facilities

The study reveals that all respondents (258, 100%) correctly identified that the ideal age for childbirth is between 20 and 35 years to avoid risks to the mother or fetus. This shows that mothers are aware of the dangers associated with childbirth at ages below 20 or above 35.

However, knowledge about prenatal check-ups being best conducted by health professionals was correctly answered by only 141 respondents (54.7%), while 117 respondents (45.3%) answered incorrectly. This suggests that not all mothers understand that the best prenatal care



should involve health professionals. Regarding home birth, 158 respondents (61.2%) incorrectly believe that it is safe, whereas 100 respondents (38.8%) provided the correct answer. This indicates a lack of adequate knowledge about the safety of home births. The level of knowledge among 212 respondents (82.2%) was categorized as good, while 46 respondents (17.8%) had adequate knowledge. This suggests that not all mothers possess sufficient knowledge about choosing health facilities for childbirth.

Attitude towards Choosing Health Facilities

The univariate analysis shows that attitudes towards choosing a health facility for childbirth are generally good. For example, 137 respondents (53.1%) agreed that routine pregnancy checks should be done with a health professional, while 121 respondents (46.9%) did not agree. This reflects the awareness of the importance of prenatal checks with health professionals.

Out of 134 respondents (51.9%) had a good attitude, 40 respondents (15.5%) had an adequate attitude, and 84 respondents (32.6%) had an inadequate attitude. This demonstrates that not all mothers have a good attitude towards choosing health facilities for childbirth.

Perception of Choosing Health Facilities

The analysis of perceptions regarding the choice of health facilities shows that most respondents have a good perception. Specifically, 136 respondents (52.7%) were in the good perception category, while 40 respondents (15.5%) were in the adequate category, and 82 respondents (31.8%) were in the inadequate category.

Availability of Health Facilities

The availability of health facilities, as an effort by the government to ensure equitable access across areas, is expected to facilitate access to health services, including childbirth services in South Labuhanbatu Regency. The results show that 120 respondents (46.5%) rated the availability of health facilities as complete. In contrast, 84 respondents (32.6%) found the availability adequate, and 54 respondents (20.9%) considered it insufficient.

Health Service Quality

Regarding the quality of health services, 188 respondents (72.9%) rated the service quality as good, while 70 respondents (27.1%) rated it as adequate.

Accessibility

Accessibility, which refers to the ability to access and use facilities, shows that the most dominant category is adequate, with 103 respondents (39.9%). Additionally, 87 respondents (33.7%) found accessibility difficult, and 68 respondents (26.4%) found it easy.

The Relationship Between Characteristics and Health Service Resources on the Choice of Maternal Health Facilities in South Labuhanbatu Regency

Connection between Characteristics and Resources to Choice of Maternal Health Facilities

Andersen and Davidson's (2001) theory suggests that individual characteristics, such as knowledge, attitudes, and perceptions, are foundational in determining actions related to choosing a childbirth facility. The study shows a significant relationship between knowledge (p-value =



0.0001) and the choice of health facilities, indicating that mothers with inadequate knowledge are less likely to choose health facilities.

The chi-square test results show a p-value of 0.0001 ($p < 0.05$), leading to the conclusion that there is a connection between knowledge and the choice of health facilities for childbirth in South Labuhanbatu Regency.

Connection between Health Service Resources and Choice of Health Facilities

The chi-square test results indicate a significant connection between the availability of health facilities (p-value = 0.0001) and the choice of health facilities for childbirth. This suggests that the availability of health facilities is considered good, as supported by the results showing a majority of respondents reporting complete availability. The study also indicates that health service quality is generally good, with most respondents rating the service quality positively.

Connection between Accessibility and Choice of Health Facilities

The chi-square test results show a significant relationship between accessibility and the choice of health facilities for childbirth (p-value = 0.0001). The study indicates that accessibility is generally adequate, with a majority of respondents rating it as such.

Influence of Characteristics and Resources on Choice of Health Facilities

The multivariate test results show that the variables knowledge (OR = 3.694) and perception (OR = 25.144) significantly influence the choice of health facilities. Among these, perception has the greatest influence, with an odds ratio of 25.114. This means that mothers in South Labuhanbatu Regency with a good perception of health facilities are almost 25 times more likely to choose a health facility for childbirth compared to those with an inadequate perception.

Conclusion

There is a relationship between maternal characteristics (knowledge (p-value = 0.0001), attitude (p-value = 0.0001), and perception (p-value = 0.0001)) and the choice of health facilities for childbirth in South Labuhanbatu Regency. Similarly, there is a relationship between health service resources (availability of health facilities (p-value = 0.0001) and quality of health services (p-value = 0.0001)) and the choice of health facilities for childbirth in South Labuhanbatu Regency. Additionally, accessibility (p-value = 0.0001) is related to the choice of health facilities for childbirth in the same region. The most influential factors in the choice of health facilities for childbirth in South Labuhanbatu Regency are knowledge and perception. The final multivariate analysis indicates that the dominant variables influencing the choice of childbirth facility in the region are knowledge (OR = 3.694) and perception (OR = 25.144).



References

- BPS Labuhanbatu Selatan. (2024). Kabupaten Labuhanbatu Selatan Dalam Angka. In *Badan Pusat* (Vol. 17). BPS Kabupaten Labuhanbatu Selatan.
- Dinkes. (2022). *Profil Kesehatan Provinsi Sumatera Utara*.
- Kemenkes RI. (2020). Pedoman Pelayanan Antenatal Terpadu 2020 Ed. 3. In *Kementerian Kesehatan Republik Indonesia: Vol. III* (Issue 3). <https://repository.kemkes.go.id/book/147>
- Renstra. (2026). *Rencana Strategis Dinas Kesehatan Kabupaten Labuhanbatu Selatan 2021-2026*.
- Riskesdas. (2018). Laporan Riskesdas 2018 Kementrian Kesehatan Republik Indonesia. In *Laporan Nasional Riskesdas 2018* (Vol. 53, Issue 9, pp. 154–165). [http://www.yankes.kemkes.go.id/assets/downloads/PMK No. 57 Tahun 2013 tentang PTRM.pdf](http://www.yankes.kemkes.go.id/assets/downloads/PMK_No_57_Tahun_2013_tentang_PTRM.pdf)
- Wijayanti, I. T., Aningsih, B. S. D., Hesti, N. P., Utami, S. W., & Intarti, W. D. (2022). Asuhan Kebidanan Pada Persalinan. In *K-Media* (1st ed.). K-Media. e-repository-stikesmedistra-indonesia.ac.id

