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The Relationship Between the Health Service Marketing Mix and the Decision to Choose a Place of Delivery Among Mothers in Rantau Nangka Village, Sungai Pinang Subdistrict, Banjar Regency

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Abstract

Childbirth is a complex physiological process influenced by medical, social, and cultural factors. The choice of delivery place significantly affectss the safety of both mother and baby. Although nationally there has been an increase in deliveries at healthcare facilities, many mothers in rural areas still choose to give birth outside official facilities. In Rantau Nangka Village, Banjar Regency, deliveries outside healthcare facilities rose from 30% in 2020 to 54.37% in 2024. This decision is influenced by various factors that can be analyzed through the marketing mix approach (product, price, place, promotion, people, process, and physical evidence). To analyze the relationship between the marketing mix and the decision in choosing the place of delivery. A quantitative cross-sectional study conducted in Rantau Nangka Village (October 2024–June 2025) with a total sample of 35 third-trimester pregnant women. Data were collected using a closed-ended Likert scale questionnaire and analyzed using the Chi-Square test. The majority of respondents rated the elements of product (60%), promotion (57.1%), price (60%), people (91.4%), process (94.3%), and physical evidence (62.9%) as good. Eighty percent chose to deliver in healthcare facilities. There was a significant relationship between place of delivery and product (p=0.006), promotion (p=0.010), price (p=0.006), and physical evidence (p=0.003). No significant relationship was found with place (p=0.735), healthcare personnel (p=0.546), and process (p=0.446). Several elements of the marketing mix significantly influence the decision of delivery place. Therefore, targeted promotion strategies and service quality improvements in rural areas are needed to increase deliveries at healthcare facilities.

Keywords

Marketing Mix, Delivery Place Decision, Health Facilities, Pregnant Women, Rural Health Services.

Introduction

Childbirth is an important stage that determines the safety of mothers and babies. This process is not only influenced by medical conditions, but also by social, cultural, economic, and psychological factors (WHO, 2021). The choice of place of delivery is a crucial decision, as it is directly related to the availability of safe and quality medical services.

Globally, around 81% of births occur in health facilities (WHO, 2020), and in Indonesia the figure reaches 85% (Riskesdas, 2018). However, in rural areas, births outside official facilities are still quite high. Some reasons cited by mothers include the comfort of giving birth at home, belief in the natural process, financial constraints, and family support.

In Rantau Nangka Village, Banjar Regency, South Kalimantan, the trend of childbirth in health facilities has actually declined. Data from the Banjar Health Office shows that childbirth in health facilities fell from 70% in 2020 to 45.63% in 2024, while 54.37% occurred outside of official facilities (Dinkes Banjar, 2024). However, childbirth without professional medical personnel increases the risk of serious complications, such as bleeding and infection (Khan et al., 2014; WHO, 2016).

To understand this phenomenon, the 7P marketing mix approach was used. The seven elements include product, price, place, promotion, people, process, and physical evidence. This approach has been widely used in evaluating health services and consumer behavior (Kotler & Keller, 2019).

This study aims to analyze the relationship between marketing mix elements and the decisions of pregnant women in their third trimester in choosing a place to give birth in Rantau Nangka Village. The results of this study are expected to provide strategic input to improve safe delivery services, especially in rural areas.

Methods

This study uses a quantitative approach to determine the relationship between the marketing mix (7Ps) and the choice of delivery location by pregnant women.

The research was conducted in Rantau Nangka Village, Banjar Regency, from October 2024 to June 2025, with 35 pregnant women in their third trimester as respondents. All pregnant women were included in the sample (total sampling).

The independent variables included the 7Ps: product, price, place, promotion, people, process, and physical evidence. The dependent variable was the place of delivery (in a health facility or outside a health facility).

Data were collected through closed questionnaires and interviews (primary data), as well as documents such as health center data and pregnant women's registers (secondary data).

Data analysis included univariate analysis to examine respondent characteristics and bivariate analysis with the Chi-Square test to determine the relationship between variables. Results were considered significant if p < 0.05.

Results and Discussions

Based on the research conducted in Rantau Nangka Village, the research results are

presented as follows:

Univariate Analysis

Marketing Mix Product Criteria

Table 1 Product- Criteria from the Marketing Mix

No	Product Category	f	%
1	Not Good	14	40
2	Good	21	60
Total		35	100

Source: Primary data 2025

Based on Table 1, the majority of respondents (60%; n=21) rated the marketing mix in the *product* category in health services as good. Forty percent (n=14) of respondents rated this category as poor.

Marketing Mix *Place* Criteria

Place Criteria *Table*

No	Place Category	f	%
1	Not Good	17	48.6
2	Good	18	51.4
Total		35	100

Source: Primary data 2025

Based on Table 2, it shows that 51.4% (n=18**)** of respondents rated the *Place* category as good**,** and 48.6% (n=17) rated it as not good**.**

Promotion Criteria

Table Promotion Criteria

No	Promotion Category	f	%
1	Not Good	15	42.9
2	Good	20	57.1
Total		35	100

Source: Primary data 2025

Based on Table 3, it can be seen that of the 35 respondents, 57.1% (n=20) rated the promotion of services as good, while the other 42.9% (n=15) rated it as not good**.**

Price Criteria

Table 4 Price Criteria

No	Price Category	f	%
1	Less Suitable	14	40

2	Suitable	21	60
Total		35	100

Source: Primary data 2025

Based on Table 4, out of 35 respondents, 60% (n=21) felt that the price of health services was appropriate, while 40% (n=14) felt that it was inappropriate.

People Criteria

Table 5. People Criteria

No	Product Category	f	%
1	Not Good	3	8.6
2	Good	32	91.4
Total		35	100

Source: Primary data 2025

Based on Table 5 from 35 respondents, it was found that the majority of respondents, namely 91.4% (n=32), rated health workers (doctors, midwives, nurses) as good, while only 8.6% (n=3) rated them as poor.

Table 6. Process Criteria

No	Product Category	f	%
1	Not Good	2	8.6
2	Good	33	94.3
Total		35	100

Source: Primary data 2025

Based on Table 6, out of 35 respondents, *94.3% (n=33)* rated *the service process* as *good*, while only *5.7% (n=2)* rated it as poor, reflecting that the service flow is considered efficient by the community.

Physical Evidence Criteria

Table 7. Physical Evidence Criteria

No	Physical Evidence Category	f	%
1	Poor	13	37.1
2	Good	22	62.9
Total		35	100

Source: Primary data 2025

Based on Table 7, out of 35 respondents, 62.9% (n=22) stated that the physical condition of the facilities (cleanliness, comfort, completeness of facilities) was in the good category, while 37.1% (n=13) rated it as still not good.

Chosen place of delivery

8 's Table of Childbirth Locations for Pregnant Women

No	Birthing Facility Category	f	%
1	Non-Health Facility	7	20
2	Health Facilities	28	80
Number		35	100

Source: Primary data 2025

Based on Table 8, it is known that the majority of mothers, namely 80% (n=28), chose to give birth in health facilities, while the other 20% (n=7) still gave birth at home. Marketing Mix Criteria

Bivariate Analysis of Marketing Mix

Product Category with Place of Delivery

Table 9: Relationship between Marketing Mix *Product* Category and Place of Delivery among Pregnant Women in Their Third Trimester in Rantau Nangka Village

Product Category	Place of Delivery				Total		p-value
	Non-Health Facility		Health Facility				
	f	%	f	%	f	%	
Poor	6	85.7	8	28.6	14	40	0.006
Good	1	14.3	20	71.4	21	60	
Total	7	100	28	100	35	100	

Primary Data Source 2025

Based on Table 9, of the total 35 respondents who chose to give birth in non-health facilities, 85.7% (n = 6) rated the *product* element as poor, while among mothers who gave birth **in** health facilities (faskes), 71.4% (n = 20) rated the *product* element as good with a p-value of 0.006, indicating a statistically significant relationship.

Place Category with Place of Delivery

Table 10 Relationship between the Place Marketing Mix Category and Place of Delivery among Third Trimester Pregnant Women in Rantau Nangka Village

Place Category	**Birthing Center**				**Total**		**p-value**
	Non-Health Facility		**Health Facility**				
	f	%	f	%	f	%	
Not Good	3	42.9	14	50	17	48.6	0.735
Good	4	57.1	14	50	18	51.4	
Total	7	100	28	100	35	100	

Primary Data Source 2025

Based on Table 10, out of a total of 35 respondents, 7 respondents in non-health facilities, 57.1% (n = 4) rated the *place* aspect as good, and 42.9% (n = 3) rated it as poor. And of the 28 respondents who gave birth in health facilities, 50% (n = 14) rated *the place* as good, and the other 50% rated it as poor. There was no significant relationship between the place of birth and the assessment of *the place* category (p = 0.735).

Promotion Category with Place of Delivery

Table11: Relationship Between the Marketing Mix Category of Promotion and Place of Delivery Among Third-Trimester Pregnant Women in Rantau Nangka Village

Promotion Category	**Birthing Location**				**Total**		**p-value**
	Non-Health Facility		**Health Facility**				
	f	**%**	**f**	**%**	**f**	**%**	
Poor	6	85.7	9	32.1	15	42.9	0.010
Good	1	14.3	19	67.9	20	57.1	
Total	**7**	**100**	**28**	**100**	**35**	**100**	

Primary Data Source 2025

Based on Table 11, out of a total of 35 respondents, 7 respondents who gave birth in non-health facilities (non-health facilities), 85.7% (n = 6) rated the promotion of childbirth services as less than good (), and out of 28 respondents who gave birth in health facilities**,** the majority (67.9% or 19 people) rated the promotion as good. With a P-value of 0.010, there is a significant relationship between the place of delivery and the assessment of the *promotion* category.

***Price* Category with Place of Delivery in Rantau Nangka Village**

12 Table Relationship between the Price Marketing Mix Category and Place of Delivery in Pregnant Women in the Third Trimester

Price Category	**Birthing Location**				**Total**		**p-value**
	Non-Health Facility		**Health Facility**				
	f	**%**	**f**	**%**	**f**	**%**	
Less Suitable	6	65.7	8	28.6	14	40	0.006
As expected	1	14.3	20	71.4	21	60	
Total	**7**	**100**	**28**	**100**	**35**	**100**	

Primary Data Source 2025

Based on Table 12, out of a total of 35 respondents, 7 respondents who gave birth outside of health facilities, the majority (85.7% or 6 people) considered the price of services at health facilities to be inappropriate, and out of 28 mothers who gave birth at health facilities, 71.4% (n = 20) considered the price of services to be appropriate, and only 28.6% (n = 8) considered them

inadequate. There was a significant relationship between the place of delivery and the assessment of the *price* category (p = 0.006).

People Category with Place of Delivery in Rantau Nangka Village

Table13 Relationship between the People Marketing Mix Category and Place of Delivery in Third Trimester Pregnant Women

People Category	Place of Delivery				Total		p-value
	Non-Health Facility		Health Facility				
	f	%	f	%	f	%	
Not Good	1	14.3	2	7.1	3	8.6	0.546
Good	6	85.7	26	92.9	32	91.4	
Total	7	100	28	100	35	100	

Primary Data Source 2025

Based on Table 13, out of a total of 35 respondents, 7 mothers who gave birth in non-health facilities, 6 people (85.7%) still rated health workers as good, and only 1 person (14.3%) rated them as poor. Among the 28 mothers who gave birth in health facilities, 26 people (92.9%) also rated the *people* category as good, and only 2 people (7.1%) rated them as poor. With a p-value of 0.546, there is no statistically significant relationship.

Process Category with Delivery Location in Rantau Nangka Village

Table14: Relationship between the Process Category of the Marketing Mix and the Place of Delivery for Pregnant Women in the Third Trimester

Process Category	Birthing Facility				Total		p-value
	Non-Health Facility		Health Facility				
	f	%	f	%	f	%	
Not Good	0	0	2	7.1	2	5.7	0.446
Good	7	100	26	92.9	33	94.3	
Total	**7**	**100**	**28**	**100**	**35**	**100**	

Primary Data Source 2025

Based on the data in Table 14, out of 35 respondents, **7** respondents who gave birth outside health facilities, all (100%) rated the service process as good. And out of 28 respondents who gave birth in health facilities, most (92.9%) also rated the service process as good, and only 2 people (7.1%) rated it as poor. With a p-value of 0.446, there is no significant relationship.

Physical Evidence Category with Place of Delivery in Rantau Nangka Village

Table15 Relationship between the Marketing Mix Category of Physical Evidence and Place of Delivery for Pregnant Women in the Third Trimester

Physical Evidence Category	Birthing Facility				Total		p-value
	Non-Health Facility		Health Facility				
	f	%	f	%	f	%	
Poor	6	85.7	7	25	13	37.1	0.003
Good	1	14.3	21	75.0	22	62.9	
Total	7	100	28	100	35	100	

Data Source 2025

Based on Table 15, it was found that of the 13 respondents who rated *physical evidence* as "poor," **85.7% (n = 6)** chose to give birth in **non-health facilities** (non-health facilities). Conversely, of the 22 respondents who rated *physical evidence* as "good," 75.0% (n = 21) chose to give birth in a health facility. The statistical test results show a p-value of 0.003, which means there is a statistically significant relationship.

Discussion

Univariate Analysis

Most respondents in Rantau Nangka Village rated the marketing mix of health services positively, especially in terms of people (91.4%) and process (94.3%). This reflects high trust in medical personnel and smooth service, in line with the findings of Safi'i et al. (2021) and Ginting (2021) that these two aspects greatly influence patient satisfaction.

The aspects of product**,** price, and physical evidence also received good ratings from the majority of respondents (>60%), indicating that the services, prices, and facilities are adequate. This is in line with Budiman & Achmadi (2023) and Zebua et al. (2024), who stated that these three elements contribute to increased patient satisfaction and loyalty.

However, the aspects **of place** (51.4%) and **promotion** (57.1%) were considered less than optimal. This indicates the need for improvements in service access and promotional strategies. Simbolon et al. (2022) stated that the effectiveness of location is highly dependent on infrastructure and management, while Rao et al. (2020) assessed that hospital promotion is often not maximized.

In terms of delivery locations, most pregnant women in their third trimester (80%) choose health facilities. However, 20% still give birth outside of health facilities, indicating non-medical barriers such as culture, geographical access, and negative perceptions. This is in line with the findings of Putri & Rahmawati (2022) and Susanti (2019). Although national policy (Minister of Health Regulation No. 97 of 2014) already encourages safe childbirth in health facilities, a community-based educational approach is still needed to be more responsive and sustainable.

Bivariate Analysis

The chi-square test results indicate that out of the seven elements of the marketing mix (7P), four elements—product, promotion, price**,** and physical evidence—have a significant relationship with the choice of delivery location by pregnant women in their third trimester in Rantau Nangka Village (). Meanwhile, the other three elements—place, people, and process—do not show a

significant relationship.

a. **Product (p = 0.006)**

Positive assessments of service quality, facilities, and staff competence made mothers more likely to choose to give birth at health facilities. Service quality is an important factor in creating a sense of security (Lestari et al., 2021; Wulandari & Yuliana, 2020).

b. **Promotion (p = 0.010)**

The lack of promotion meant that mothers were unaware of the benefits or existence of delivery services at health facilities. Effective promotion through education and the media can increase the utilization of health facilities (Nuraini et al., 2021; Prasetyo & Wulandari, 2019).

c. **Price (p = 0.006)**

The perception that the cost is not commensurate with the service causes mothers to choose non-health facilities. Transparency and price suitability with service quality are very influential (Zeithaml, 1988; Haryanti et al., 2019).

d. **Physical Evidence (p = 0.003)**

Cleanliness, comfort, and the physical condition of health facilities influence mothers' decisions. Adequate facilities increase trust and preference for health facilities (Fitriani & Santoso, 2021; Zeithaml et al., 2018).

e. **Place (p = 0.735)**

Location and accessibility do not have a significant effect. Service quality and price are more decisive factors in a rural context (Putri & Rahmawati, 2022).

f. **People (p = 0.546)**

Although health workers are rated highly, this is not sufficient to differentiate decisions on where to give birth. Positive perceptions of human resources need to be supported by other aspects (Nurhayati et al., 2020).

g. **Process (p = 0.446)**

Good service flow is not enough to influence the choice of place of delivery. Factors such as comfort, culture, and cost are more dominant (Wahyuni & Nugroho, 2021; Yulianti et al., 2020).

Conclusion

This study concludes that several elements of the health service marketing mix — namely product, promotion, price, and physical evidence — significantly influence the decision of pregnant women in Rantau Nangka Village to choose a place of delivery. The results show that the quality of services, effective promotional efforts, affordability of service costs, and adequate physical conditions of health facilities play a crucial role in encouraging mothers to give birth in healthcare institutions. On the other hand, the elements of place, people, and process do not show a significant relationship with delivery place choice, indicating that accessibility, staff performance, and service flow alone are insufficient to determine decisions without support from other key aspects. The findings highlight the importance of strengthening promotion strategies, improving service quality,

and ensuring supportive physical infrastructure, especially in rural areas, to increase the number of safe deliveries in healthcare facilities and reduce maternal and infant health risks.

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