


# Consumer Behavior and Marketing Mixed on Improving Decision-Making for Birth with Quality of Delivery Services as Variable Intervening

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Article information	Abstract
<p><b>Article history:</b> Received: July 16<sup>th</sup>, 2023 Revised: August 05<sup>th</sup>, 2023 Accepted: August 20<sup>th</sup>, 2023</p> <p><b>Corresponding author:</b> Name: Wijayanti Address: Jalan Arjuna Utara No.9, Kebon Jeruk, Jakarta 11510 E-mail: <a href="mailto:wijayntmail@gmail.com">wijayntmail@gmail.com</a></p> <p>International Journal of Nursing and Health Services (IJNHS), Volume 6, Issue 4, August 20<sup>th</sup>, 2023 DOI: <a href="https://doi.org/10.35654/ijnhs.v6i1.749">10.35654/ijnhs.v6i1.749</a> E-ISSN: 2654-6310</p>	<p><b>Background:</b> Excellent service quality needs to get immediate attention in providing services in hospitals; for this reason, it is essential to improve service quality as a marketing strategy. <b>Objective:</b> This study aims to analyze the effect of consumer behavior and marketing mix on the decision to select a delivery setting at <i>Kartika Pulo Mas</i> Hospital. <b>Method:</b> The quantitative and cross-sectional study was conducted from October 2022 - November 2022. A total of 50 patients as respondents were involved. <b>Result:</b> The results showed that consumer behavior, marketing mix, and service quality significantly affected the decision to choose a place of delivery at <i>Kartika Pulo Mas</i> Hospital. <b>Conclusion:</b> In conclusion, consumer behavior and marketing mix significantly affect decision-making in selecting an area of delivery at <i>Kartika Pulo Mas</i> Hospital, with the quality of delivery services as an intervening variable. <b>Recommendation:</b> The findings are input for hospital management to develop marketing strategies to improve consumer behavior in the form of consumer trust and also improve the marketing mix and quality of delivery services. Thereby, decision-making in choosing a place of delivery could improve.</p> <p><b>Keywords:</b> consumer behavior, marketing mixed, service quality, delivery system</p>
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## Background

Decision-making to select the resources and services available can vary significantly for the delivery process (1). In the United States, most (98.4%) of women give birth in hospitals, with 0.99 percent giving birth at home and 0.52 percent giving birth in freestanding birth centers (2).

In one hospital in Indonesia, it was shown that antenatal care patients were not followed by the use of delivery facilities at Kartika Pulo Hospital. In 2019 the ANC rate was 4040, but deliveries were 1275. but in 2020, it also experienced a decrease in deliveries from Ante Natal Care 4853, with 1425 deliveries at the hospital.

The process of childbirth is one of the critical events and is always remembered in the life of women. Today women have much more choices about how and where to deliver their babies than previously. Women and their families also decide where to find health services for antenatal care and labor (3).

Several factors were associated with the delivery service choice, including traditions, birth expectations, and perceptions of control, need, and quality of maternity care at a particular birthing location (4). A previous study further discussed that informed consumers assist them in choosing an ideal place of birth (5).

Hospitals also need to know consumer behavior in implementing the right marketing strategy. In addition, the marketing mix also influences consumer purchase intentions. The marketing mix is a concept to achieve the company's planned goals. This is a tool to reach the target market, which has a vital role in influencing consumers to be able to use the products or services offered by the company.

A study conducted in Indonesia confirmed that maternal behaviors focused on identifying needs, seeking information, and evaluating alternatives impact the choice of delivery place (6). Another study also mentioned that people who were

aware of their need to conduct antenatal care would initiate to activate the decision process by using antenatal care services (7).

A previous study also suggested that a marketing program emphasizing quality of care and high comfort standards directed to expectant mothers offers the delivery place for birth (8).

Even though some studies showed the positive effect of consumer behavior, marketing mix program, and quality of care on choosing delivery places among mothers. Few studies describe those factors' impact simultaneously on choosing a delivery place in Indonesia. Therefore, this study will focus on this issue to understand and deeply predict the factors associated with decision-making in choosing delivery.

## OBJECTIVE

This study aims to analyze the effect of consumer behavior and marketing mix on the decision to select a delivery setting at *Kartika Pulo Mas* Hospital.

## METHOD

### Design

A quantitative study with a cross-sectional study was applied in this study to examine the correlation between consumer behavior and marketing mix on the decision to select a delivery setting. This study was conducted at *Kartika Pulo Mas* Hospital, between October to November 2022

### Sample, Sample Size, and Sampling Technique

Fifty antenatal care patients were involved in this study. A total sampling technique was applied in this study, with the second semester of pregnancy as the inclusion criteria. The reason for using this technique is due to a limited population.

### Instrument for data collection

Decision Making Choosing Place of Delivery was used to measure the using the

questionnaire. This questionnaire consisted of 3 dimensions including. 1) stability on a product; 2) habits in buying a product; 3) giving recommendations to people else. This questionnaire also has 11 items questions and uses the Likert scale such as Strongly Agree=4, Agree=3, Disagree=2, and Strongly Disagree=1.

Quality of services was measured using the questionnaire focused on service quality. This questionnaire consisted of 5 dimensions, including 1) Tangible, 2) reliability, 3) responsiveness, 4) assurance, and 5) empathy. The Likert scale was used, including Strongly Agree=4, Agree=3, Disagree=2, and Strongly Disagree=1.

A consumer behavior questionnaire was used to measure the attitudes or actions taken by consumers because of consumer trust and confidence in the quality of hospitals. This questionnaire also has 10 items questions and uses the Likert scale such as Strongly Agree=4, Agree=3, Disagree=2, and Strongly Disagree=1.

A marketing mix questionnaire measured the marketing variables hospitals use to achieve hospital marketing goals. This questionnaire consisted of 7 dimensions, including 1) product, 2) price, 3) place, 4) promotion, 5) process, 6) people, and 7) physical evidence. This questionnaire also has 16 items questions and uses the Likert scale such as Strongly Agree=4, Agree=3, Disagree=2, and Strongly Disagree=1.

All the instruments were validated by distributing 30 samples for testing. The Cronbach alpha also showed all the instruments were reliable such as 1) the consumer behavior questionnaire was 0.924; 2) the marketing mix questionnaire was 0.63; 3) the quality of services questionnaire was 0.952; 4) and the decision-making on the delivery questionnaire was 0.579.

### Data collection process

Data were collected within one month. All variables were measured using a valid and reliable questionnaire. The

confirmation process is also done when some answers from the respondents are unclear. All respondents willing to participate in this study should sign the informed consent. The completeness of the questionnaire will be analyzed using computer software. IRB Universitas Esa Unggul, Jakarta, has approved this study.

### Data analysis

The descriptive analysis was used to describe the characteristic of respondents and the perceptions of respondents based on the questionnaire. The regression analysis using the path analysis was used to measure the association between the dependent variable with independent variables. The F-test was to test the hypothesis simultaneously between the variables. T-tests also examine the independent variable's effect on the dependent variable partially with a significant level of 0.05.

## RESULT

### Characteristic of respondents

Table 1 describes the characteristic of respondents. The result found that more than half (54%) of respondents have >30 years old. More than half of the respondents (60%) were Muslims. Some graduated from the bachelor level (46%) and diploma level (42%). The lowest level of education was a master's degree (4%). Regarding the occupational background varied, including private officer (38%), entrepreneurship (38%), and 14% of them are homemakers. Only 4 % of them are government officers. Based on the pregnancy history, almost half of the respondents are in their Third pregnancy (48%), followed by their Fourth pregnancy (42%). Some of them have two children (48%). Only 18% of them have one child.

**Table 1. Characteristic of Respondents**

No	Variables	n	%
1	Gender		
	≤ 30 year	27	54
	> 30 year	23	46

<b>2</b>	<b>Religion</b>		
	Moslem	30	58
	Catholic	7	35
	Protestant	13	7
<b>3</b>	<b>Occupation</b>		
	Housewife	7	14
	Government officer	2	4
	Private officer	19	38
	Entrepreneurship	19	38
	Other	3	6
<b>4</b>	<b>Education background</b>		
	Diploma	21	42
	Bachelor	23	46
	Master	2	4
	High school	4	8
<b>5</b>	<b>Number of children</b>		
	One child	9	18
	Two children	24	48
	Three children	17	34
<b>6</b>	<b>Pregnant</b>		
	Second pregnancy	3	6
	Third pregnancy	24	48
	Fourth pregnant	21	42
	Fifth pregnancy	5	4

### The effect of consumer behavior and marketing mix on the quality of services simultaneously.

Table 2 describes the effect of consumer behavior and marketing mix on the quality of services. The results found a significant impact of consumer behavior and marketing mix on the quality of services simultaneously (F score = 7.937; p-value < 0.05).

Table 2. The effect of consumer behavior and marketing mix on the quality of services simultaneously

Model		Mean square	F	p-value
<b>1</b>	Regression	23.811	7.937	.000
	Residual	25.569	.556	
	Total	49.380		

### The effect of the mentoring function on patient safety culture, consumer behavior, and marketing mix on the quality of services partially

Table 3 partially shows the mentoring function's effect on patient safety culture, consumer behavior, and marketing mix on the quality of services. The finding explained that all variables, including quality of services, Marketing mix, and Consumer Behavior, significantly affect the decision-making of delivery used.

Table 3. The effect of the mentoring function on patient safety culture, consumer behavior, and marketing mix on the quality of services partially

Model	B	t	p-value	
<b>1</b>	(Constant)	-18.382	-3.965	.000
	Quality of services	.231	3.822	.000
	Marketing mix	.226	3.985	.000
	Consumer behavior	.177	2.458	.018

a. variable Dependent: Decision making

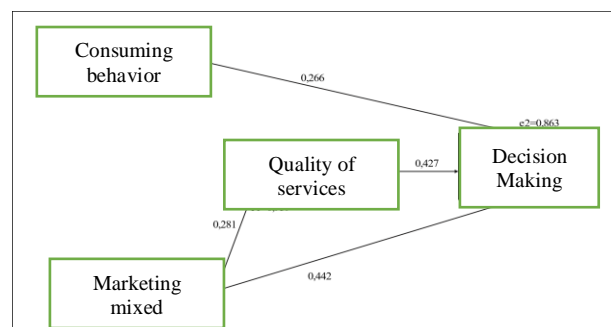
### Model Adjusted R-Square

Table 4 shows the R-Square value with an R Square value of 0.255. This indicates the influence of consumer behavior variables, marketing mix, and service quality on decision-making by 25.5%.

Table 4. Model Summary

Model	R	R Square	Adjusted R-Square
<b>1</b>	.505	.255	.240

The path analysis model showed the direct and indirect effects between the dependent and independent variables. Details of the explanation are explained in Figure 1



## DISCUSSION

The results of this study indicated that the variables of consumer behavior, marketing mix, and delivery service quality significantly affect the decision to choose a place of delivery simultaneously.

It was consistent with a previous study that mentioned a relationship between consumer behavior factors consisting of four elements in it (social, personal, psychological, and cultural factors) with customer decisions in choosing inpatient services (9). Another study also confirmed that consumer behavior factors, including cultural, social, personal, and psychological factors, influence the consumer decision-making process (10)

Marketing mixed is also associated with choosing a place of delivery. It was consistent with a study describing how the marketing mix influenced consumer decision-making (11). A study also described the role of marketing mix according to the 7Ps model, "specialty of health service providers controls the selection of a hospital in the low-income country (12).

Another factor, such as the quality of services, positively affects patients' hospital selection. The company's success in providing quality services to its customers is primarily determined by the approach used, namely the SERVQUAL (Service Quality) model (13). However, another study mentioned that 31.3% of mothers were satisfied by the existing labor and delivery care which is indicated low. It was due to a real difference in the quality of services provided, study setting, or socio-economic characteristics of the population (14).

A study conducted in Ethiopia showed that mothers' delivery services satisfaction level was 80%. Hospital administrators and health professionals must improve delivery service satisfaction by minimizing waiting time, maintaining privacy, and securing waiting areas (15). By increasing the

quality of services, the mother would select the hospital to deliver the birth

## CONCLUSION

In conclusion, consumer behavior and marketing mix significantly affect decision-making in choosing a place of delivery at Kartika Pulo Mas Hospital, with the quality of delivery services as an intervening variable. Consumer behavior does not have a significant influence on service quality, and the marketing mix has an impact on service quality. Whereas for each variable, both the independent variable, namely consumer behavior, and the combination, as well as the intervening variable, service quality, significantly influence the dependent variable, namely decision-making in choosing a place of delivery.

The findings in this study can be used as input for hospital management to develop marketing strategies to improve consumer behavior in the form of consumer trust and also improve the marketing mix and quality of delivery services so that later they can improve decision-making in choosing a place of delivery at Kartika Pulo Mas Hospital.

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