

Effect of Marketing Mix Strategy (Product, Place, Promotion, and Price) on Outpatient Patient Satisfaction

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ABSTRACT

Background: Patient satisfaction is an indicator of how well a patient is treated in medical practice, from the point of view of service quality and from how happy the patient is with the services provided. One of the marketing strategies that can be used is the 4P marketing mix that includes a combination of variables or core activities in the marketing system, such as products, distribution, promotions, and prices. This study aimed to analyze the effect of 4P marketing mix strategy on patient satisfaction.

Subjects and Method: A cross-sectional study was conducted at Nur Hidayah Hospital, Bantul, Yogyakarta, Indonesia. A sample of 203 patients selected using a simple random sampling. The dependent variable was patient satisfaction. The independent variables were product, place, promotion, and price. Data collection was carried out using a questionnaire and analyzed by path analysis using the STATA 13 application.

Results: Marketing mix strategy directly increased patient satisfaction ($b = 0.92$; 95% CI = 0.87 to 0.98; $p < 0.001$). Product ($b = 0.63$; 95% CI = 0.54 to 0.72; $p < 0.001$), place ($b = 0.52$; 95% CI = 0.41 to 0.63; $p < 0.001$), promotion ($b = 0.65$; 95% CI = 0.55 to 0.74; $p < 0.001$), and price ($b = 0.76$; 95% CI = 0.68 to 0.83; $p < 0.001$) showed positive and significant loadings, indicating that all four components are strong constructs representing the marketing mix strategy.

Conclusion: Marketing mix strategy directly increases patient satisfaction.

Keywords: marketing mix strategy, patient satisfaction, place, price, product, promotion

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BACKGROUND

In Indonesia, most hospitals have set their own specifications and advantages. All hospitals have a similar goal: to meet the needs of patients and provide the best service. Fierce competition between companies in the

healthcare sector, including hospitals, has created fierce competition between companies engaged in this industry. Each hospital strives to continuously improve the quality of its services in order to compete in an increasingly tight market (Putra et al., 2021).

In the midst of increasingly fierce competition in the healthcare industry, healthcare managers need to prioritize efforts to achieve high or optimal patient satisfaction levels as a step to improve service quality. To achieve better levels of satisfaction, healthcare managers need to identify factors that affect patient satisfaction, which is an important assessment of the quality of healthcare services (Tierney, 2017).

Patient satisfaction is an individual's perception of the quality of his or her treatment experience, including factors such as treatment outcomes, communication and attitudes of nurses and doctors, staff responsiveness, facility cleanliness, information about medications, discharge information, overall assessment of services provided, pain management, and other factors. Patient satisfaction assessments allow for the comparison of different services, aiding in tracking service quality and finding areas for improvement (Ginter et al., 2018).

According to the Regulation of the Ministry of Health of the Republic of Indonesia in 2016, the minimum standard of patient satisfaction must exceed 95%. If it is found that health services have a patient satisfaction level below 95%, then the health service is considered not to meet the minimum standards or not of good quality (Ministry of Health of the Republic of Indonesia, 2016).

According to the World Health Organization (WHO) in 2021, data shows that Sweden has the highest level of patient satisfaction, with a satisfaction index of 92.37%, followed by Finland (91.92%), Norway (90.75%), the United States (89.33%), and Denmark (89.29%). Meanwhile, the lowest patient satisfaction rates were recorded in Kenya (40.4%) and India (34.4%). In Southeast Asia, only about 35% of healthcare users are satisfied with the services provided, while 55% express dissatisfaction (Shilvira et al., 2023).

An effective marketing strategy needs to be understood by hospitals, as consumer behavior needs to be understood as well. It is included in consumer behavior which includes individuals, groups, and organizations with the aim of meeting their needs and desires. Basically, several stages in the purchase decision-making process will go through several stages in the purchase decision-making process, namely by identifying problems, searching for information, and evaluating various alternatives (Kotler and Keller, 2018). One of the marketing strategies that can be used to determine consumer behavior in patient satisfaction assessment is by using the concept of 4p marketing mix.

The concept of the 4P marketing mix has 4 main elements, namely Product, Place, Promotion, and Price. A product is a combination of goods and services presented by a company to its intended consumers. A place is a place where patients can find, use, access or purchase available products or services. Promotion is a hospital's effort to influence prospective patients by using various marketing references. Price is the amount of money that must be spent by consumers to obtain the desired product or service (Suprayitno et al., 2023).

Based on the 2023 Nur Hidayah Hospital quality indicator report, the satisfaction standard set at this hospital is >76.61%. In the last 3 months in October, patient satisfaction reached 86%, in November it reached 84%, and in December it reached 86%. This study aimed to analyze the effect of 4P marketing mix strategy on patient satisfaction.

SUBJECTS AND METHOD

1. Study Design

This was a cross-sectional study conducted at Nur Hidayah Hospital, Bantul, Yogyakarta, Indonesia, in March-May 2024.

2. Population and Sample

The study population is 300 patients from Nur Hidayah Bantul Hospital. A sample of 203 patients was randomly selected.

3. Research Variables

The dependent variable was patient satisfaction. The independent variables were product, place, promotion, and price.

4. Operational Definition of Variables

Product is the patient's perception of the product or service in the hospital. Data were collected using questionnaires. Data measurement uses a continuous scale.

Place is the patient's perception of a strategic place in the hospital. Data were collected using questionnaires. Data measurement uses a continuous scale.

Promotion is the patient's perception of marketing activities that disseminate information about services in the hospital. Data were collected using questionnaires. Data measurement uses a continuous scale.

Price is the patient's perception of the overall cost that the patient must spend to get services at the hospital. Data were collected using questionnaires. Data measurement uses a continuous scale.

5. Study Instrument

The study instrument used for the data collection was a questionnaire.

6. Data Analysis

Univariate analysis was carried out to see the frequency distribution of the characteristics of the subject of the research variables. Bivariate analysis was carried out to see the difference in the mean of the two groups. Multivariate analysis in this study uses path analysis using the STATA 13 program.

7. Research Ethics

Research ethics include consent sheets, anonymity, confidentiality, and ethical feasibility. The ethical feasibility of this study comes from the Health Research Ethics Committee of Dr. Moewardi Surakarta with the number: 766/III/HREC/2024.

RESULTS

1. Sample Characteristics

Table 1 shows that the gender of most of the respondents is male 135 people (66.5%), age over or equal to 45 years as many as 105 people (51.72%), non-school education, elementary, junior high school, high school as many as 184 people (78.33%), respondents work as civil servants, self-employed, entrepreneurs as many as 111 people (54.68%) and family income < Rp. 1,500,000 as many as 131 people (64.53%).

Table 1. Characteristics of Research Respondents

Characteristics	Frequency (n)	Percentage (%)
Gender		
Female	68	33.5%
Male	135	66.5%
Age		
< 45 years old	98	48.28%
≥ 45 years old	105	51.72%
Education		
≤Senior high school	184	78.33%
Undergraduate/postgraduate	19	21.67%
Occupation		
Not working, student, farmer	92	45.32%
Civil servant, Entrepreneur	111	54.68%
Family Income		
< Rp 1,500,000	131	64.53%
≥ Rp 1,500,000	72	35.47%

Table 2 shows that of the 203 research respondents, the product variable had a mean value (Mean= 9.65; SD= 1.18). The place variable has a mean value (Mean= 6.77; SD= 1.82). The promotion variable has a mean

value (Mean= 8.18; SD= 1.76), the price variable has a mean value (Mean = 9.25; SD= 1.95), and the patient satisfaction variable had a mean value (Mean= 6.78; SD= 1.51).

Table 1. Univariate Analysis Results of The 4P Marketing Mix on Patient Satisfaction

Variable	N	Mean	SD	Min.	Max.
Product	203	9.65	1.18	2	10
Place	203	6.77	1.82	0	8
Promotion	203	8.18	1.76	0	10
Price	203	9.25	1.95	1	10
Patient satisfaction	203	6.78	1.51	1	8

2. Bivariate analysis

Table 3 shows that every increase in one unit of product will be followed by an increase in patient satisfaction by 4.20 units (OR= 4.20; 95% CI= 1.65-10.62; p= 0.002). The place variable for each increase in one unit will be followed by an increase in patient satisfaction by 1.95 units (OR = 1.95; 95% CI= 0.93-4.06;

p= 0.001). The promotion variable for each increase in one unit will be followed by an increase in patient satisfaction by 4.52 units (OR= 4.52; 95% CI= 2.21-9.26; p < 0.001). The variable price for each increase of one unit will be followed by an increase in patient satisfaction by 2.11 units (OR= 2.11; 95% CI= 0.84-5.31; p < 0.001).

Table 3. Bivariate Analysis Results of The 4P Marketing Mix on Patient Satisfaction

Independent Variables	OR	CI 95%		p
		Lower Limit	Upper Limit	
Product	4.20	1.65	10.62	0.002
Place	1.95	0.93	4.06	0.001
Promotion	4.52	2.21	9.26	< 0.001
Price	2.11	0.84	5.31	< 0.001

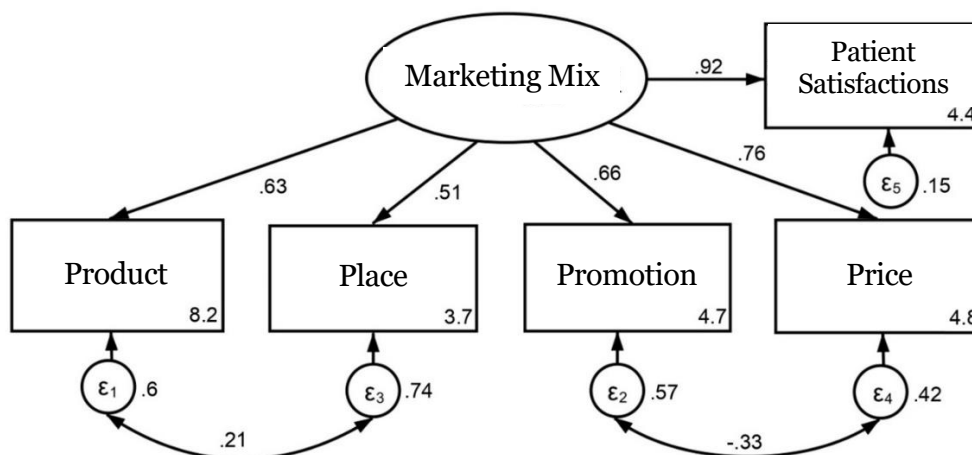


Figure 1. Path analysis of the marketing mix strategy and its effects on patient satisfaction

3. Path analysis

Table 4 shows the results of the pathway analysis with the SEM model consisting of the measurement component of the latent variable of the marketing mix strategy and the structural component of the relationship between the 4P marketing mix and patient satisfaction in the hospital. The table shows that the 4p marketing mix measurement component containing the latent variables of the marketing mix is statistically significant by four "4P" indicators, namely product (b= 0.63; 95% CI = 0.54 to 0.72; p <0.001), place

(b= 0.52; 95% CI = 0.41 to 0.63; p<0.001), promotion (b = 0.65; 95% CI = 0.55 to 0.74; p<0.001), and price (b= 0.76; 95% CI= 0.68 to 0.83; p<0.001). The structural component showed that patient satisfaction was positively influenced by the marketing mix (b= 0.92; 95% CI= 0.87 to 0.98; p<0.001).

This SEM model shows a good model fit with the parameter value: p= 0.199 (>0.050); RMSEA= 0.052 (<0.08); CFI= 0.99 (>0.90); TLI= 0.99 (>0.90); SRMR= 0.020 (<0.05); and CD= 90.6% (>90%).

Table 4. Results of The 4p Marketing Mix Analysis on Patient Satisfaction

Dependent Variables	Independent Variables	Path Coefficient (b)	95% CI		P
			Lower Limit	Upper Limit	
Measurement Components					
Marketing Mix	← Product	0.63	0.54	0.72	<0.001
	← Place	0.52	0.41	0.63	<0.001
	← Promotion	0.65	0.55	0.74	<0.001
	← Price	0.76	0.68	0.83	<0.001
Structural Components					
Patient Satisfaction	← Marketing Mix	0.92	0.87	0.98	<0.001
Log likelihood = -1731.83					

DISCUSSION

1. Effect of product dimension on patient satisfaction

The results of the analysis show that product variables have an indirect and positive influence on outpatient satisfaction through the marketing mix. The positive relationship between products and outpatient satisfaction means that high-quality products increase patient satisfaction by 0.63 times compared to low-quality products. In this study, high hospital quality can increase patient satisfaction that is very satisfied because based on patient complaint questionnaires, pharmacy services make it easier for patients to get medicine, and doctors and nurses are friendly in serving patients.

This research is in line with research conducted by Teresa and Bekele (2016)

reporting that high-quality products increase patient satisfaction by 5.3 times compared to low-quality products. High-quality products and services tend to increase consumers and attract patients to choose and buy health products at the hospital (Ekawati and Andriani, 2022). Research by Sudari et al. (2019) showed that better and best healthcare products have an important role in patient satisfaction.

2. The effect of place on patient satisfaction

The results of the analysis show that place has an indirect and positive influence on outpatient satisfaction through the marketing mix. A positive relationship between place and outpatient satisfaction means that strategic places increase patient satisfaction by 0.52 times compared to non-strategic places. In

this place variable, the strategic location of the hospital and easy access to patients greatly affects the assessment of patient satisfaction.

This finding is consistent with previous studies conducted by Adissu et al. (2020), who reported that strategically located health facilities increased patient satisfaction by 0.56 times compared to those in non-strategic locations. The place variable is a significant predictor of patient satisfaction, as long travel distances are often associated with higher financial costs. Similarly, Tawiye, Assefa, and Zengye (2021) found that the time required for patients to reach healthcare services significantly affects their satisfaction levels. Supporting this, research by Tume, Salgado, and Jaleta (2015) demonstrated that both travel time and distance to health facilities are factors influencing patient satisfaction. Patients who spent more than two hours traveling to health facilities tended to feel uncomfortable and exhibited lower satisfaction levels compared to those who traveled less than two hours.

3. The effect of promotion on patient satisfaction

The results of the analysis show that the promotion variable has an indirect yet positive influence on outpatient satisfaction through the marketing mix. The positive relationship between promotion and outpatient satisfaction indicates that higher levels of promotional activities increase patient satisfaction by 0.65 times compared to lower levels of promotion. Outpatients at Nur Hidayah Hospital who had previously received treatment at the same facility reported satisfactory to very satisfactory responses regarding the promotion variable. This suggests that previous positive experiences enhance patients' perceptions of promotional efforts, as they tend to view the hospital's information dissemination and communication strategies more favorably based on their prior treatment experiences.

This finding is consistent with previous research by Animut et al. (2022), which showed that higher levels of promotion increased patient satisfaction by 2.5 times compared to lower levels of promotion. The promotion variable serves as a key predictor of patient satisfaction because patients often obtain information about hospital services through various promotional channels, including word-of-mouth and direct marketing. According to Singh (2023), promotion reflects the ability of marketing managers to attract customers to the services or products offered. Similarly, a study by Anaba et al. (2020) found a significant association between the availability of health information materials, such as booklets, and patient satisfaction. These findings suggest that effective promotional strategies can enhance patients' awareness, trust, and overall satisfaction with healthcare services.

4. The effect of price on patient satisfaction

The results of the analysis show that the price variable has an indirect yet positive influence on outpatient satisfaction through the marketing mix. The positive relationship between price and outpatient satisfaction indicates that affordable prices increase patient satisfaction by 0.76 times compared to unaffordable prices. In this study, most outpatients at Nur Hidayah Hospital were National Health Insurance (BPJS) participants, who reported satisfactory to very satisfactory responses regarding the price variable. This suggests that the affordability of healthcare services (particularly for (BPJS)-covered patients) plays an important role in enhancing their satisfaction with outpatient services.

Another study conducted by Melesse et al. (2022) showed that affordable prices increased patient satisfaction by 0.59 times compared to unaffordable prices. The price variable is also a predictor of patient satisfaction, as patients who pay at an

affordable price feel more satisfied. This is related to the fact that their expectations of the service can increase when they incur a certain fee for the service. Affordable costs tend to increase satisfaction and attract patients to choose and use health services at the hospital (Goben et al., 2020). Research conducted by Al-Shayban et al. (2020) shows that patients who pay without insurance are less satisfied than patients who pay with insurance.

AUTHOR CONTRIBUTION

Salsabilla Luthfiana Ayu Hafida as a researcher who chose topics, searched, and collected study data. Didik Gunawan Tamtomo and Hanung Prasetya analyzed data and reviewed study documents.

CONFLICT OF INTEREST

There was no conflict of interest in this study.

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