
The Patient Perception about Marketing Mix on Utilization of Inpatient Service at Dolopo Hospital 2017

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ABSTRACT

The hospital marketing mix is a group of variables that can be controlled and used by hospitals to influence the reaction of customer. The aims of this study to determine the effect of the patient's perception of the marketing mix on the utilization of inpatient services at Dolopo Hospital 2017. The background of this study was the low rate of BOR at Dolopo District General Hospital in 2014 amounted to 43.96%, when viewed from the standard health department. The BOR at the Dolopo Hospital not meet with the standard of Health Department, the ideal BOR if the rate of BOR reaches 60.85%. This research used quantitative method with Cross-sectional approach. The research sample in this study was 122 inpatient in Dolopo Hospital. This research used probability sampling with simple random sampling method. The results of this research was patient perception about good marketing mix and utilization of inpatient service as much as 53 respondent (40.2%), and 4 respondent (3.3%) said good marketing mix and bad utilization of inpatient service, while about bad marketing mix and good inpatient service was 8 respondent (6.6%), and 61 respondent (61.6%) showed bad marketing mix and bad inpatient service, the p-value of this research was 0.000 (there was significant effect between patient perception about marketing mix on utilization of inpatient service at Dolopo District General Hospital with r-value of 0.752 which meant the result was strong. The recommended suggestion was that Dolopo district public hospitals should be more responsive in responding to patient complaints and improving the hospital's internal environment for the sake of patient convenience. Besides that, the hospital may provide a suggestion box and conducting customer satisfaction surveys on a regular basis

Keywords: Patient perception, Marketing mix, Patient decision**INTRODUCTION**

Hospital as a part of health services was managed not only based on social-economic, but nowadays it become the industry or business.⁽¹⁾ The health services of hospital have been organized by government or private sector which provide the individual health care including promotive, preventive, curative and rehabilitative with inpatient, outpatient and emergency care. Hospital has the competitive health services including maternity clinic, integrated specialist doctor, alternative medicine clinic, etc.⁽²⁾ In Madiun District, there are a lot of private hospital which reflect that society have many choices to consider their health services. The effectiveness of marketing sometimes did not meet with patient's expectation. The marketing strategy was done to guide the manager the way how to deliver the product/services to consumer and how to motivate consumer to buy.⁽³⁾ Hospital needs to be designed to attract interest by using the tools, namely marketing mix.⁽⁴⁾ The response of consumer also plays the important role to show the behavior including the process to look for, buy, use, evaluate, and decide the product or services they need. To consider the decision, consumer is influenced by environmental variables such as culture, community reference and social determinants.⁽⁵⁾ The loyal consumer can be showed by their consistence to use the product; even though they promote the product to others. The characteristics of loyal consumer including regular using, buy other products, show the resistance and refuse the competitor.⁽⁶⁾ Dolopo District General Hospital is the transformation of community health care Dolopo. It is the type C hospital which has facility and capability of medical services at least 4 basic specialists. To survive, that hospital should provide the satisfaction services compare with the competitor. Hospital performance measurement can be recognized by some indicators: *Bed Occupancy Rate (BOR)*, *Avarage Lenght of Stay (ALOS)*, *Bed Turn Over (BTO)*, *Turn Over Internal (TOI)*, *Net Death Rate (NDR)*, *Grass Death Rate (GDR)*, dan average visit per day.⁽⁷⁾ According to standard of BOR in hospital, the Dolopo's hospital has not fulfilled the ideal standard which by 60-85%.⁽⁷⁾ The hospital data revealed that in 2012, BOR of Dolopo hospital only 39.87% and increased to be 56.16% in 2013 and decreased to be 20.3% in 2014.

Goals

This research aimed to analyze the influence of patient perception about marketing mix and inpatient services utilization in Dolopo District General Hospital, Madiun District in 2017. In particular, this research will describe the patient perception about mix marketing including: product, price, promotion, place, participation, process, and physical evidence. Additionally, it also will describe the utilization of inpatient services and examine the association of patient perception and utilization of inpatient services.

Hypothesis

There are any association between marketing mix and utilization of inpatient services in Dolopo District General Hospital in 2017.

METHODS

This study was quantitative research which showed the data by number.⁽⁸⁾ This cross-sectional study used the analytical observational to analyze the determinants of phenomena. The study employed 175 inpatients according to monthly data in Dolopo District General Hospital in April 2017. To calculate the sample, it used the *slovin* formula.⁽⁸⁾ Probability sampling was used to choose the sample without give the same probability for all population.⁽⁹⁾ Independent variable in this study is the perception of patient about mix marketing and the dependent variable is the utilization of inpatient services. Based on component of mix marketing, there are 7 parameter measurements including product, price, distribution, promotion, people, process, and physical evidence.⁽¹⁰⁾ It will be categorized into good if the score more than or equal mean and vice versa. The utilization of inpatient services consists of 5 steps: introduce the needs, look for information, evaluation of choice, buy and behavior after buy. By using the questionnaire, it will be categorized into good if the score more than or equal mean. The data will be analyzed by univariate and bivariate. Univariate analysis will be served by table of distribution frequency, central tendency or graphic.⁽¹¹⁾ Bivariate analysis used the Product Correlation of Pearson Moment with significant level 0.05.

RESULTS

General Description of Dolopo District General Hospital

Dolopo District General Hospital was established at July, 18th 2011 according to Deputy Decision. It has large area 23,000 m² and large hospital building 7,500 m². It provides the services including: out patients installation, inpatient installation, emergency unit, supporting unit (laboratory, pharmacy, nutritionist unit, radiology unit, and maintenance unit). Dolopo hospital has 116 bed consists of VVIP:1, VIP:2, Class 1: 4, Class 2: 15, Class 3: 94. It located in Madiun District with high mobility of villagers. The vision and mission of Dolopo hospital are to realize the center of health services and integrated transfer in Madiun District.

Descriptive Analysis Result

The descriptive analysis in this study described the characteristics inpatient of sample including age, sex, educational level and occupation. In detail, the data was showed in table 1. Regarding age, almost a half of respondents were in age 26 to 35 years old which means they were in reproductive age. The proportion between male and female showed not that different, it showed that 53.3% of them were female and the rest were male. The majority of respondent attended and graduated from junior high school (90.2%) while only 3.3% of them graduated from senior high school. According to occupation of respondent, around a fourth of them worked as farmer and another a fourth were house wife.

Table 1. The characteristics of inpatient in Dolopo hospital

No	Characteristics	Frequency	Percentage
1.	Age		
	- 15 to 25 years	13	10.7
	- 26 to 35 years	60	49.2
	- 36 to 45 years	30	24.6
	- 46 to 55 years	9	7.4
	- 56 to 65 years	7	5.7
	- more than 65 years	3	2.5
2.	Sex		
	- Male	57	46.7
	- Female	65	53.3
3.	Educational level		
	- Not graduated from elementary school	1	8
	- Graduated from elementary school	7	5.7
	- Graduated from junior high school	110	90.2
	- Graduated from senior high school	4	3.3
4.	Occupation		
	- Civil servant/ army/ police	9	7.4
	- Private sector	18	14.8
	- Entrepreneur	20	16.4
	- Farmer	35	28.7
	- House wife	33	27.0
	- Students	6	4.9
	- Others	1	8

Perception of Inpatient about Mix Marketing Product in Dolopo Hospital

Table 2. Perception of inpatient about mix marketing product in Dolopo hospital

No	Characteristics	Frequency	Percentage
1.	Product		
	- Good	54	44.3
	- Not Good	68	55.7
2.	Price		
	- Good	41	33.6
	- Not Good	81	66.4
3.	Promotion		
	- Good	53	43.4
	- Not Good	69	56.6
4.	Place		
	- Good	83	68.0
	- Not Good	39	32.0
5.	People		
	- Good	37	30.3
	- Not Good	85	69.7
6.	Perception		
	- Good	69	56.6
	- Not Good	53	43.4
7.	Physical evidence		
	- Good	49	40.2
	- Not Good	73	59.8

The perception of inpatient about mix marketing product in Dolopo Hospital in this study was explained by product, price, promotion, place, people, perception and physical evidence. The more detail information is described in the table 2.

Perception of Inpatient about Mix Marketing Product in Dolopo Hospital are explained by table above. In term of product, price, promotion, people, and physical evidence more than a half of respondents reported not good perception. The largest percentage was showed by characteristics of people, by 69.7%. Other characteristics including place and perception were explained a good perception. The characteristics of place had the large percentage (68%) which means that the location of Dolopo hospital is strategies to access.

Table 3. The overall mix marketing characteristics of inpatient in Dolopo hospital

No	Overall mix marketing	Frequency	Percentage
1.	Good	53	43.4
2.	Not Good	69	56.6
Total		122	100.0

The overall characteristics of mix marketing revealed that more than a half of respondents reported not good perception about inpatient services in Dolopo Hospital (56.6%). Furthermore, the rest which 43.4% reported the good perception about mix marketing of inpatient services.

The Utilization of Inpatient Services

Table 4. The utilization of inpatient services

No	Utilization of Inpatient Services	Frequency	Percentage
1.	Good	57	46.7
2.	Not Good	65	53.3
Total		122	100.0

The utilization of inpatient services in this study found that more than a half of respondents reported not good utilization according to services in inpatient unit (53.3%).

Bivariate Analysis Result

The bivariate analysis in this study revealed the positive correlation between perception about mix marketing and utilization of inpatient services in Dolopo Hospital in 2017.

Table 5. The crosstab between perception of inpatient about mix marketing and utilization of inpatient services in Dolopo hospital in 2017

No.	Mix Marketing	Utilization of Inpatient Services				Total	%	Sig	Correlation
		Good	%	Not good	%				
1	Good	49	40.2	4	3.3	53	43.4	0.000	0.752
2	Not good	8	6.6	61	50.0	69	56.6		
Total						122	100.0		

Good mix marketing and utilization of inpatient services was 53 respondents (40.2%). Good mix marketing but not good utilization inpatient services was 4 respondents (3.3%). However, not good mix marketing and good services was 8 respondents (6.6%). Not good mix marketing and not good utilization was 61 respondents (50.0%). The correlation test of product moment found the strong significance with $r = 0.752$. The role of determinants coefficient and other coefficients are $KP=r^2.100\%=0,752^2.100\%=56\%$ which means that the influence of perception of inpatient about mix marketing and utilization inpatient services was 56% and the rest was affected by other variables.

DISCUSSION

Perception of Inpatient about Marketing Mix

The univariate analysis regarding product showed the majority of them reported not good product from Dolopo Hospital. Product can be physic, service, people, place, organization and idea.⁽¹²⁾ One way to differentiate the health service is to serve the health services with high quality and higher than competitors. The tendency of patient is to compare the services they got and the services they expected.⁽¹³⁾ The perception of patient in this study based on respondent's experience during inpatient treatment in Dolopo Hospital.

The price of inpatient services in this study found the not good in majority of respondents. the perceive not good price during inpatient in Dolopo Hospital. Usually, the price has to be worth it between price and services.⁽¹²⁾ Good performance and maximal services will be the first priority of patient, even though the price remains high. The price needs to be consider based on standard by Madiun local government and the legislative in local level.

The not good perception was also found in promotion. More than a half of respondents reported Dolopo Hospital did not do the good promotion. The concept of promotion in hospital consist of kind of services, how they be motivated and distribution information among patient. Public relation may be importance to communicate the staff to change the perception, opinion, belief and behavior system. The place of transaction has the important meaning because environmental will send the value and usefulness to patient.

Regarding people, patient mostly reported the not good perception in term of people. Human resources are the important essential element in production and services to add the value and competitiveness. In services marketing has the characteristics including responsive, assurance, empathy. Staff needs to be polite and friendly, safety and belief.⁽¹⁴⁾

The good perception according to process was reported by more than a half of respondents. Process is the description of all activities including procedure, work schedule, mechanism and regular things where the services given to consumer.⁽¹³⁾ The goodness of process in Dolopo Hospital describes the effective and efficient process in all step-in inpatient services. It still needs the improvement to increase the satisfaction of patient.

Physical evidence in mix marketing in this study reported most respondent felt not good. Physical evidence is physical environmental where the services created and interacted with consumer.⁽¹³⁾ Design and location arrangement of facilities is the important aspect which affect by atmospheres.

The utilization of Inpatient Service in Dolopo Hospital

According to univariate analysis, more than a half of respondents felt not good with the services. The utilization of services is the utilization health service facilities including inpatient, outpatient, home visit and others.⁽¹⁵⁾ Inpatient service is a part of medical doctor services to treat patient during sickness period.⁽¹⁶⁾ Patient will be loyal if health services given them the high quality of services. The overall determinants which might affect the quality of hospital including human resources, service facility, tools, and equipment.

The Association between Marketing Mix with Utilization of Inpatient Services in Dolopo Hospital in 2017

There was found the significant association between mix marketing and utilization of inpatient services. Mix marketing is the component to gain the goals of marketing to encourage consumer to utilize the service.⁽¹⁴⁾ The number of respondents who felt not good were more than who felt good. It might because the expectation of patient is higher than the reality. The association between perception of mix marketing and utilization of inpatient services revealed that patient paid more attention mix marketing including product, price, promotion, place, participant, process, and physical evidence served by hospital.

CONCLUSION

Regarding the statistical test, it can be concluded that majority of respondent reported not good in term of mix marketing's product, price, promotion, people and physical evidence while they reported good in term of mix marketing's place. Most respondent also reported not satisfaction in term of inpatient services in Dolopo Hospital. There was high association between mix marketing and inpatient services with significant level 0.000.

Recommendation to Dolopo Hospital are to encourage the promotion, quality, and performance of staff, add the supporting facility. Additionally, it will be better to conduct the satisfaction survey to understand the patient's needs. Dolopo Hospital, Madiun Local Government and Legislative in District Area should work

together to evaluate the price to monitor the economic condition, market segmentation, hospital financial and market survival of hospital.

REFERENCES

1. Jacobalis S. Selected Collection of Posts About Indonesian Hospitals in Historical Dynamics, Transformation, Globalization, and National Crisis (Kumpulan Tulisan Terpilih Tentang Rumah Sakit Indonesia Dalam Dinamika Sejarah, Transformasi, Globalisasi, Dan Krisis Nasional). Yayasan Penerbitan IDI; 2000.
2. Hartono B. Health promotion in health centers and hospitals (Promosi kesehatan di puskesmas dan rumah sakit). Jakarta: Rineka Cipta; 2010.
3. Koontz H, Weihrich HEINZ. Un a perspectiva global. Editorial McGraw-Hill; 1994.
4. Sulistyadi K, et al. Journal of Business Economics and Entrepreneurship (Jurnal Ekonomi Bisnis dan Kewirausahaan). Jurnal Ekonomi Bisnis dan Kewirausahaan. 2014;3(1).
5. Tafdilla AS. The Perception Patients about Marketing Mix of the Decision Outpatients Choose Health Services at District General Hospital Majenang in 2015. Undergraduate Thesis. Semarang: Faculty of Sport Science, Semarang State University; 2015.
6. Sabarguna BS. Hospital service management based on information systems (Manajemen pelayanan rumah sakit berbasis sistem informasi). Yogyakarta: Konsorium 1320 Rumah Sakit Islam DIY; 2005.
7. MoH-RI. Health department strategy plan (Rencana strategi departemen kesehatan). Jakarta: MoH-RI; 2005.
8. Nursalam. Methodology of Nursing Research (Metodologi Penelitian Ilmu Keperawatan). Jakarta: Salemba Medika; 2013.
9. Sugiyono. Quantitative, Qualitative, and R&D Research Methodologies (Metodologi Penelitian Kuantitatif, Kualitatif dan R&D). Bandung: Alfabeta; 2014.
10. McCarthy G, Albee E. Macmillan International Higher Education; 1987.
11. Saryono M, et al. Methodology of Qualitative and Quantitative research in Health Field Metodologi Penelitian Kualitatif dan Kuantitatif Dalam Bidang Kesehatan). Yogyakarta: Nuha Medika; 2013.
12. Kotler P. Management of Marketing (Managemen Pemasaran). Jakarta: Erlangga; 2008.
13. Lupiyoadi R. Service Marketing (Pemasaran Jasa). 2014.
14. Supriyanto, Ernawaty. Marketing of Health Service Industry (Pemasaran Industri Jasa Kesehatan). Bandung: Alfabeta; 2010.
15. Depkes. Peta Kesehatan Indonesia. Pusat Data dan Informasi Depkes RI. 2007
16. Azwar A. The Introduction of Health administration (Pengantar Administrasi Kesehatan). Jakarta: Binarupa Aksara; 1996.