Analysis of The Influence of The Marketing Mix on The Satisfaction of Patients with Type 2 Diabetes Miletus Installation at Hajj General Hospital, Makassar

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ABSTRACT

Marketing mix is a set of marketing tools used by companies to achieve marketing objectives. The marketing mix consists of nine components, namely product, price, place, promotion, people, process, physical evidence, performance, and strength. This study aims to determine the effect of the marketing mix on patient satisfaction with type 2 diabetes mellitus inpatient installations in public hospital in the Hajj area of Makassar, the type of research used was an analytical survey with a quantitative approach using cross sectional. The sample in this study was type 2 diabetes mellitus patients in the inpatient installation at the Hajj area general hospital as many as 81 people who were obtained by the probability sampling method, collecting data using a questionnaire instrument. Processing data using the Chi-Square test and multivariate logistic regression analysis. Based on the results of the study, there is an influence between the process (Process). Promotion, Place, and Power on patient satisfaction with type 2 diabetes mellitus in inpatient installations. The results of the multivariate analysis showed that the most dominant variable was placed (exp β = 19,093). The conclusion of several influential variables that are most related to patient satisfaction with the marketing mix, namely the place variable, which is the most important factor in patient satisfaction. It is hoped that the Haji Makassar Hospital will pay more attention to the services needed by the community in general, especially the location in terms of the number of rooms, parking and waiting rooms that are more adequate.

Key words: Product, Price, Process, Promotion, Place, Power, Satisfaction.

INTRODUCTION

The hospital is one of the health service providers in a complete and comprehensive manner (covering promotive, preventive, curative and rehabilitative) and always strives to provide quality services and has competitiveness to achieve the highest degree of public health which provides outpatient, inpatient care, and emergency¹ in (RI law No. 44 of 2009).

Patient satisfaction or the quality of service provided by the hospital affects hospital marketing, if the hospital provides good quality it will definitely bring in many customers, consumers experience various levels of satisfaction or dissatisfaction after experiencing each service according to the extent to which consumer expectations are met or exceeded, marketing at the hospital is also increasing.²

Marketing mix is a set of marketing tools used by companies to achieve marketing objectives. The marketing mix consists of nine components, namely product, price, place, promotion, people, process, physical evidence, performance and strength. These key components of the marketing mix play an important role as agency strategies and policies to achieve consumer satisfaction.³ The concept of the traditional marketing mix put forward by Jerome McCarthy in Kotler & Keller (2018) consists of 4Ps namely product, price, place and promotion. Furthermore, according to Zeithaml & Bitner (2010) states that service

marketing needs an expanded marketing mix with the addition of 3 non-traditional marketing mix elements, namely people (people/officers), process (process), and physical evidence (physical evidence), then develop into 9P, namely strength (Power) and hospital performance (Performance).⁴

The results of the Batubara and Wibowo Research with the research title the influence of marketing mix to patient satisfaction in hospitals can be seen that there is a relationship between product marketing mix (p = 0.01), price (p = 0.00), promotion (p = 0.04), people (p= 0.00); and there is no correlation between marketing mix location (p = 0.21), process (p = 1.00), and physical evidence (p = 1.00) with patient loyalty. Diabetes Mellitus is one of the noncommunicable diseases which is the highest cause of death in the world, this disease also reduces the sufferer's work productivity which results in reduced income, as well as reduced quality of life for sufferers due to complications of the disease.

According to the International Diabetes Federation 537 million adults (20-79 years) are living with diabetes - 1 in 10. This number is predicted to increase to 643 million in 2030 and 783 million in 2045, diabetes causes at least USD 966 billion dollars in health spending experienced a 316% increase over the past 15 years 541 million adults have Impaired Glucose Tolerance (IGT), which puts them at high risk of type 2 diabetes (IDF, 2021). Diabetes cases in various countries, namely the African part



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is estimated to have increased by 24 million diabetics, 61 million in Europe, 51 million in North America and the Caribbean, 32 million in South and Central America, 73 million in North Africa and the Middle East. parts of southeast Asia as many as 90 million, and the western pacific as many as 206 million.⁷

In Indonesia in 2021, 537 million adults (20-79 years) or 1 in 10 are living with diabetes, including type 1 and type 2 diabetes, as well as diagnosed and undiagnosed diabetes. This figure is predicted to increase to 643 million in 2030 and 784 million in 2045. This year, diabetes is responsible for 6.7 million deaths in 2021 - 1 person every 5 seconds. Based on these data, more than 4 out of 5 (81%) adults with diabetes live in low- and middle-income countries. The results of the 2018 Riskesdas show that the prevalence of diabetes mellitus in Indonesia based on a doctor's diagnosis at the age of ≥ 15 years is 2%. This figure shows an increase compared to the prevalence of diabetes mellitus in residents ≥ 15 years old in the 2013 Riskesdas results of 1.5%. However, the prevalence of diabetes mellitus according to the results of blood sugar examination increased from 6.9% in 2013 to 8.5% in 2018. This figure shows that only about 25% of people with diabetes know that they have diabetes (Ministry of Health, Republic of Indonesia, 2020).

Based on data from the South Sulawesi Provincial Health Office, data on the distribution of Diabetes Mellitus based on routine PTM reports in South Sulawesi Province in 2017 show that the highest diabetes mellitus cases were in Makassar City with 5322 cases, in 2019 there were 6271 cases, in 2020 there were 5367 cases and in 2021 as many as 4530 cases. (Ministry of Health RI., 2020).

Type 2 Diabetes Mellitus is the 7th highest disease in the Makassar Hajj Regional General Hospital, related to data from the Makassar Hajj Regional General Hospital for the last 4 years in 2018 the number of patients was 162 people, with a total of 54 male patients and a total of 108 female patients, in 2019 the number of patients increased by 419 people with 178 male patients and 311 female patients, in 2020 the number of patients was 152 people with 81 male patients and 71 female patients, type 2 diabetes mellitus is the seventh most common disease in the Haji Makassar Regional General Hospital. In 2021 there were 102 people diagnosed with type 2 DM, and there were 46 people diagnosed with male gender and 56 people diagnosed with female gender. As for the number of inpatient visits, there were 102 patients (2021 Hajj Hospital data).

MATERIALS AND METHOD

This research is a quantitative research and the type of research used is an analytic survey with a quantitative approach using cross sectional. The sample in this study were type 2 diabetes mellitus patients in the inpatient installation at the Haji area general hospital as many as 81 people who were obtained by the probability sampling method. Data collection used a questionnaire instrument. Data processing used the Chi-Square test. This questionnaire consists of 10 sub-statements, including: location (for example, the location of the Haji Makassar Hospital is strategic because it is in the city center $\alpha = 0.060$), Promotion (for example, I have heard that even participating in social activities carried out by the Haji Makassar Hospital such as free checkups, counseling especially for people with type 2 diabetes mellitus α = 0.031), Process (for example the administrative process at the Haji Makassar Hospital is very easy $\alpha = 0.045$), and Strength (for example the Makassar Haji Hospital is able attract people to seek treatment at this hospital $\alpha = 0.015$). After obtaining approval, the researcher collected data by filling out a questionnaire based on the respondents' answers during the interview. Data processing used IBM SPSS Statistics 22 using the Chi-Square test and then continued with multivariate logistic regression analysis.

RESULTS

The general characteristics of the respondents include the age group, gender, last education, and marital status of the respondents which can be seen in following table 1.

Table 1. Shows that most of the research subjects were female, namely 57 people (70.4%). Based on the age of the respondents who were studied more in the age group of 30-39 years totaling 23 people (28.4%). Based on the education level of respondents with an undergraduate degree, there were 25 people (30.9%) and based on the marital status of the respondents studied, more respondents with married status were 70 people (86.4%).

Table 2 shows that the majority of respondents are satisfied with hospital services (93.5%), most are satisfied with hospital marketing products (95.1%), and on average are satisfied with the prices provided by hospitals (74.1%), in terms of location according to strategic respondents (79.0%), in terms of health workers (people) (98.8%), the

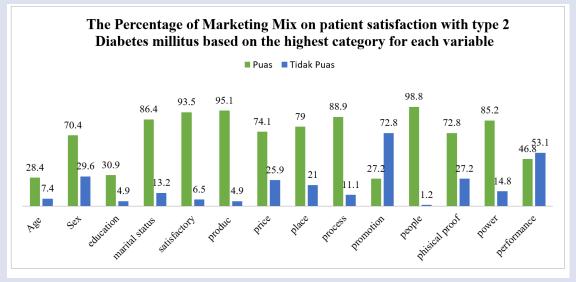


Figure 1: Percentage of marketing mix on patient satisfaction with Type 2 diabetes mellitus based on the highest category for each variable

Note: The highest age category that is satisfied with the marketing mix is the age category "30-39 years", the highest gender category is "female", the highest education level category is "S1" and the lowest is "D3", the highest marital status category is "Married", Satisfaction Category "Satisfied".

Table 1: Distribution of characteristics of type 2 diabetes mellitus patients at Haji hospital in Makassar city in 2023.

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Characteristics	Frequency (n=81)	(%)	
Age			
30-39 year	23	28.4	
40-49 year	13	16.0	
50-59 year	22	27.2	
60-69 year	17	21.0	
≥ 70 year	6	7.4	
Sex			
male	24	29.6	
Female	57	70.4	
Education			
basic school	14	17.3	
Junior high school	16	19.8	
senior high school	22	27.2	
Diploma	4	4.9	
Bachelor	25	30.9.	
Marital status			
Marriage	70	86.4	
Not/ Yet Marriage	11	13.6	
Total	81	100.0	

Table 2: Distribution of respondents based on the variables examined at the Hajj hospital in Makassar city in 2023.

Variable	Frequency (n = 81)	Percent (%)
Satisfaction	· · · · · ·	
Satisfy	76	93.5
Not Satisfy	5	6.5
Product		
Good	77	95.1
Less good	4	4.9
Price		
Achievable	60	74.1
Less Achievable	21	25.9
Place		
Strategic	64	79.0
Less Strategic	17	21.0
Promotion		
Enough	22	27.2
Less	59	72.8
People	80	98.8
Good	00	
Less	1	1.2
Process		
Good	72	88.9
Less good	9	11.1
Physical Evidence		
good	59	72.8
Less good	22	27.2
Power	69	85.2
Good	12	14.8
Less good		
Performance Good	38	46.8
Less good	43	53.1
Total	81	100.0
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promotion given by the hospital is lacking (72.8%), the administration process at the hospital is good (88.9), the condition of the hospital is good (72.8%), in terms of the hospital's strength or attractiveness to patients, it was good (85.2%), and the hospital's performance was not good (53.1%).

Figure 1 shows that all respondents who have a sense of satisfaction and dissatisfaction with the marketing mix (marketing mix) Based on bivariate analysis it is known that satisfaction with Place (p < 0.060), Promotion (p < 0.031), Process (Process) (p<0.045) and Power (0.015) have an effect while Product Satisfaction (p>1.000), Price (p>0.600), People (P>1.000), Physical Evidence (Physical Evidence) (P>1.000), and Hospital Performance (P>1.000) have no effect on the marketing mix for patients with type 2 diabetes mellitus.

The results of bivariate statistical tests among 9 marketing mix variables on patient satisfaction with type 2 diabetes inpatient installation at the Haj Makassar General Hospital found that 4 variables include: place variable with p value = 0.060 > 0.05, promotion variable with p value = 0.031 > 0.05, the process variable with a value of p = 0.045 > 0.05 and the power variable with a value of p = 0.015 > 0.05 This means that there is a significant influence between the place, promotion, process and power variables on the level of patient satisfaction with type 2 diabetes in the inpatient setting stay at the Haj Makassar Regional General Hospital, while the product variable with a value of p = 1.000 > 0.05, the price variable with a value of p = 0.600 > 0.05 This means that there is no significant effect on patient satisfaction with type 2 diabetes mellitus

The table above shows that the place variable is statistically significant p>0.05. This means that the place variable has the most influence on patient satisfaction, seen from the value of exp β where is greater than the three variables namely promotion, process and strength with an exp value of β 19,093.

DISCUSSION

The effect of place on patient satisfaction with type 2 diabetes mellitus

Location is the location of the hospital and the distance that must be covered, so that it has an impact on calculating the travel time to reach it. Location places more emphasis on patient care services that need help in the context of curing disease.⁸

Location is the position where the service is offered, so that it is in a place and time that suits the needs of consumers. The closer the location of a hospital, the more patients who come. Demographically, the location of the Haji Makassar Hospital is in the city center but access to public transportation is very difficult to find such as public transportation, at the Haji Makassar Hospital the parking area is not large enough which results in visitors to the hospital parking on the side of the road which causes congestion, but many patients are out of town who have referrals at the Makassar Hajj Hospital.

The statistical test results show that the p value obtained is p = 0.060 < 0.05 at a significance level of 95%, then H0 is rejected or Ha is accepted so that it can be interpreted that there is a significant effect between location on patient satisfaction at the Hajj Hospital in Makassar City. Place in general means distribution which is an effort so that the products offered can be in a place and time that suits consumer needs. In a hospital, this variable can be interpreted as a place where health services are provided, along with feelings of comfort, security and friendliness felt by consumers. For patients, a place is a convenience or convenience for patients to access and obtain hospital services related to strategic locations, facilities, referral systems and others.

The effect of promotion on patient satisfaction with type 2 diabetes mellitus

Promotion is a form of communication or marketing activity that seeks to disseminate information, influence or persuade and increase the target market for hospitals and their products so that they are willing to accept, buy, and be loyal to the products offered by the

Table 3: Bivariate analysis of venue marketing mix on satisfaction of type 2 diabetes patients in inpatient installations at Haji Makassar hospital in 2023.

	Patient Satisfaction			Total			
Variable	Satisfy		Not Satisf	Not Satisfy		— Total	
	n	%	n	%	n	%	P Value
Place							
Strategic	62	96,9	2	3,1	64	100	
Less Strategic	14	82,4	3	17,4	17	100	0.060
Promotion							
Enough	22	100	0	0	22	100	
Less	54	91,5	5	8,5	59	100	0.031
Process							
Enough	68	94,4	4	5,6	72	100	
Less	8	88,9	1	11,1	9	100	0.045
Power							
Enough	66	95,7	3	4,3	69	100	
Less	10	83,3	2	16,7	12	100	0.015
Product							
Enough	72	93,5	5	6,5	77	100	1.000
Less	4	100	0	0	4	100	1.000
Price							
Affordable	57	95,0	3	5,0	60	100	0.600
Less affordable	19	90,5	2	9,5	21	100	0.000

Table 4: Multivariate logistic regression analysis of marketing mix place, promotion, process and strengths on patient satisfaction with type 2 diabetes inpatient installation at Haji hospital Makassar Tahun 2023.

Variable	В	S.E	Wald	Df	Sig.	Exp (B)
Tempat	2.949	1.292	5.208	1	0.022	19.093
Promosi	20.813	6889.491	0.000	1	0.998	10.935
Proses	-2.226	1.890	1.378	1	0.239	0.108
Kekuatan	2.853	1.426	4.001	1	0.045	17.344

hospital concerned. Based on the results of research and interviews, it was stated that there was a need for additional media such as pamphlets on diabetes mellitus, brochures on hospitals with the aim of introducing a product to consumers. Promotion can be done with the communication mix or messages conveyed by the company to consumers. The promotion process can be in the form of publications or it can also be in the form of bonuses given to consumers.

The statistical test results show that the p value obtained is p = 0.316 < 0.05 at a significance level of 95%, then H0 is rejected or Ha is accepted so that it can be interpreted that there is a significant influence between promotion on patient satisfaction at the Haji General Hospital in Makassar City. Promotional activities in hospitals are a form of marketing communication activities that seek to disseminate information, influence and remind target markets to be willing to accept and buy the products offered. The more promotions about hospital facilities, the more people tend to choose the hospital.

The influence of the process on patient satisfaction with type 2 diabetes mellitus

The service process is a series of procedures, a routine mechanism in which a service is delivered to consumers. He by holding a process of handling health problems, supporting services and administrative services that are fast, efficient and optimal so that they can support the products/services they sell. The researcher believes that the Haji Makassar Hospital has paid attention to the standard aspects of health services provided to all visiting patients, one of which can be seen starting from registration if the patient does not understand, visitors can ask the officer directly and then the officer will direct what services will be needed.

Based on the results of the interviews, there is information about the schedule mechanism provided in carrying out health services, namely the flow at the time of registration which still makes some patients confused, if hospital visitors feel unclear then visitors can ask the officers directly then visitors will be directed according to the shift schedule existing doctor.

The statistical test results show that the p value obtained is p=0.454 <0.05 at a significance level of 95%, then H0 is rejected or Ha is accepted so that it can be interpreted that there is a significant influence between the process on patient satisfaction at the Haji General Hospital in Makassar City.

The effect of power on patient satisfaction with type 2 diabetes mellitus

Power are efforts made in order to take advantage of opportunities that arise from regulations regarding business being carried out or it can also be interpreted as recognizing, fostering relationships with parties that have influence on the market. Power here includes the strength of the brand or product itself that is created in the minds of consumers and is able to make the product strong in the market.

The statistical test results show that the p value obtained is p=0.156<0.05 at a significance level of 95%, then H0 is rejected or Ha is accepted so that it can be interpreted that there is a significant influence between strength and patient satisfaction at the Haji General Hospital in Makassar city.

The effect of product on patient satisfaction with type 2 diabetes mellitus

Products are anything that can be offered to consumers to get attention, purchased, used, or consumed that can satisfy the wants or needs of all producers such as patients. Word of mouth (WOM) is the behavior of influencing others in the form of conveying information about the product, whether goods or services to others.¹³

Based on the results of the research interviews conducted, it was found that services were provided in accordance with applicable procedures without distinguishing one patient from another and were swift in providing existing services to patients when they first entered the hospital until the patient was discharged, administering drugs in the form of metformin, glibenclamide, acarbose, injections insulin within 3-4 times a day and other tests for clinical trials, namely by asking for your full name and date of birth before taking action.

The effect of price on patient satisfaction with type 2 diabetes mellitus

Price is an element of the marketing mix that can determine the profitability of a product. Things to consider in setting hospital service rates are operational costs, profits, competition and changes in market demand.

Based on the results of research and interviews, it is stated that hospital service rates should not exceed market prices, because this results in patients being reluctant to use our products. Low rates are not necessarily a good strategy, as they can result in losses for the hospital. It is necessary to observe the price before the product enters the market. the cheaper the hospital rates, the tendency of patients to choose that hospital will increase

CONCLUSION

Place: There is a significant effect on patient satisfaction with type 2 diabetes mellitus because patients have to wait a long time to get inpatient rooms, especially VIP rooms because they are still relatively lacking, and parking is relatively narrow for the category of hospitals that have many referral patients and access Public transportation is hard to find in the Haji Makassar Hospital area.

Promotion: There is a significant effect on patient satisfaction with type 2 diabetes mellitus due to lack of information about the hospital not providing brochures, pamphlets to patients so they do not know the latest information about the hospital, and there is no counseling about diabetes mellitus to patients while the disease DM is one of the highest diseases in Haj Makassar General Hospital,

Process: There is a significant influence on patient satisfaction with type 2 diabetes mellitus because the information provided by staff at the hospital is not understood by patients and patient families, the administrative process is too convoluted so that the patient's family is difficult to complete the administration, as well as irregular queue processes.

Power: There is a significant influence on patient satisfaction with type 2 diabetes mellitus because most patients know the image of the hospital based on family information not from the hospital itself, lack of disclosure regarding the quality of the hospital.

Product: Has no significant effect on patient satisfaction with type 2 diabetes mellitus because patients are satisfied with what is provided with service efforts, insulin injections and regular administration of diabetes mellitus drugs by officers.

Price: Does not have a significant effect on patient satisfaction with type 2 diabetes mellitus because the average patient already uses health

insurance in the form of BPJS and diabetes medication is relatively affordable.

REFERENCES

- Marpaung DN, Ernawaty, Prayoga D, Lailiyah S. Literature review: Implementasi Bauran Pemasaran 7P Terhadap Tingkat Kepuasan Pasien Di Rumah Sakit. VisiKes J Kesehatan. 2021;20(1):127-37.
- Risah Wandah. Hubungan Pemasaran Rumah Sakit (Marketing Mix 7p) Terhadap Tingkat Kunjungan Pasien Diabetes Melitus Type 2 Di Rumah Sakit Umum Daerah Haji Makassar Tahun. 2021.
- 3. Udju A, Romeo P, Kenjam Y. The Correlation between Marketing Mix and Customer Satisfaction in the General Poly Unit at Bhayangkara Hospital, Kupang. Lontar: J Comm Health. 2021;3(3):103-13.
- Azizah N. Pengaruh Bauran Pemasaran Terhadap Proses Keputusan Pasien Memilih Layanan Kesehatan (Studi Kasus di Instalasi Rawat Jalan Rumah Sakit Umum Daerah Tugurejo). Jurusan Ilmu Kesehatan Masyarakat Fakultas Ilmu Keolahragaan Universitas Negeri Semarang. 2019.
- Batubara NQ, Wibowo A. Proceedings of International Conference on Applied Science and Health ICASH-PT015 The Influence Of Marketing Mix To Patient Satisfaction In Hospitals: Narrative Review. 2019;4:1124-34.
- Surhatini, Nurhadinda. Jurnal Kesehatan. J Kesehatan Yamasi Makasar. 2020;4(1):98-110.
- IDF. International Diabetes Federation. International Diabetes Federation. 2021. https://diabetesatlas.org/
- Arismen, Sulistiadi W, Chalik A. Srategi Bauran Pemasaran Pelayanan Kesehatan RSD Kol. Abundjani Bangko di Era Jaminan Kesehatan Nasional (JKN). J Administrasi Rumah Sakit Indonesia. 2019;5(2):97-103.
- Nawawi N, Ahmad LOAI, Harun H. Hubungan Bauran Pemasaran (Marketing Mix) dengan Keputusan Pasien Rawat Inap Peserta BPJS Memilih Layanan Kesehatan di Rumah Sakit Umum Santa Anna Kota Kendari Tahun 2020 (2020). J Administrasi Kebijakan Kesehatan. 2020;1(1):1-11.
- Setianingsih A. Hubungan Bauran Pemasaran dan Layanan Pelanggan dengan Loyalitas Pasien. J Ilmu Kesehatan Masyarakat. 2018;7(1):51-62.
- Napira JH. Hubungan Antara Marketing Mix Dengan Loyalitas Pasien Di Intensive Care Unit Rumah Sakit Anutapura Palu. 2022;836(3):125-37.
- Wijaya S, Adriansyah AA. Efektivitas Pelaksanaan Marketing Mix 9P Terhadap Kepuasan Pelayanan Klinik Rawat Jalan Rumah Sakit. J Manajemen Kesehatan Yayasan RS.Dr. Soetomo. 2020;6(1):28.
- Tjintiadewi NK, Rahyuda IK. Pengaruh Kualitas Pelayanan Dan Persepsi Harga Terhadap Kepuasan Dan Wom Pasien Di Rsu Prima Medika. E-Jurnal Manajemen Universitas Udayana. 2018;7(11):6184.
- Kementerian Kesehatan RI. Infodatin tetap produktif, cegah, dan atasi Diabetes Melitus 2020. In Pusat Data dan Informasi Kementerian Kesehatan RI. 2020;1-10.
- Undang undang RI No 44 tahun. UU RI no. 44 Tentang RS. Undang-Undang Republik Indonesia. 2009;1:41.

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