The Impact of Marketing Mix on Patients' Decisions to Get Treatment at PKU Muhammadiyah Blora Hospital

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This study aims to analyze and determine the influence of marketing mix aspects on patients' decisions to seek treatment at PKU Muhammadiyah Blora Hospital. In this study using the census sampling technique, researchers took all inpatients within a predetermined time frame, namely November 2022 – January 2023. The research sample obtained using this method amounted to 180 respondents. The data analysis used is multiple linear regression. The results showed that aspects of the marketing mix including products, prices, locations, promotions, physical evidence, employees and processes had a positive and significant influence on patients' decisions to seek treatment at PKU Muhammadiyah Blora Hospital.

INTRODUCTION

Marketing is a method used by companies in achieving what is expected, this can be done by knowing the needs of patients comprehensively. A good marketing strategy is indeed needed by the company in order to survive in the competitive era, the goal is that in addition to the company can develop also for good service and patient satisfaction. There are several strategies that can be used by a company to keep marketing good, one of which is with the right...
marketing mix. From the patient side, a good marketing mix is one of the considerations for doing treatment to a hospital, from the hospital side itself, of course, with the number of patients, the benefits obtained are also higher. In order for this goal to be achieved, companies compete with each other in finding the right marketing mix for them to use in order to influence patient decision making when seeking treatment.

Good marketing methods will certainly be followed by the success of the hospital in achieving its goals. With this basis, the company will implement the most suitable marketing mix strategy for its company. In this study, the variable that will be assessed is how much influence it has on the patient's decision to seek treatment seen from four points of the marketing mix, namely from product, location, price and promotion.

The hospital caters for the fulfillment of individual needs and values that customers expect. Patient behavior and what patients assess are sources of information on patient satisfaction and dissatisfaction while the ability of service providers and decision makers of service actions is a source of information to develop strategies and tactics for handling patient dissatisfaction (Supriyanto and Ernawaty, 2010).

The hospital marketing process involves marketing planning, marketing decision making and marketing mix strategy formulation (Sreenivas, 2013). Amaria (2013) in his research in Romania showed that the 30% marketing mix plays an important role and contributes positively among the steps of elaboration of the health service marketing process in hospitals.

The results of Mahendro's research (2016) explained that the marketing mix that has an influence on the loyalty of inpatients at PKU Muhammadiyah Bantul Hospital is in the form of physical buildings and service processes. As for price, location and promotion have no significant effect. From Rifki's research (2013) in his research at PKU Muhammadiyah Kotagede said that the variables of the promotion and service marketing mix have a good effect, while for products and locations do not have a significant effect. From several studies that have been conducted, researchers are interested in conducting a similar study at PKU Muhammadiyah Blora Hospital to prove how much influence the marketing mix has with the choice of patients to come to the hospital.

In this study, PKU Muhammadiyah Blora Hospital was used as the object of research because previously there was no similar research, also because of its strategic location to be reached by the community. The researcher hopes that this research can help the hospital in making decisions in the marketing area so that the number of patient visits can increase, while the management also hopes that this research can be the basis for making the right decision.

The hypotheses formulated are:

**H1 :** Product related to the patient's decision in carrying out treatment at PKU Muhammadiyah Blora Hospital

**H2 :** Price is related to the patient's decision in doing treatment at PKU Muhammadiyah Blora Hospital

**H3 :** Location is related to the patient's decision in conducting treatment at PKU Muhammadiyah Blora Hospital

**H4 :** Promotion is related to the patient's decision in conducting treatment at PKU Muhammadiyah Blora Hospital

**H5 :** Physical evidence related to the patient's decision in conducting treatment at PKU Muhammadiyah Blora Hospital

**H6 :** Employees are related to the patient's decision in carrying out treatment at PKU Muhammadiyah Blora Hospital

**H7 :** The process is related to the patient's decision in carrying out treatment at PKU Muhammadiyah Blora Hospital

**METHODS**

In this quantitative research, the ultimate goal is to find out the truth of a theory or hypothesis regarding the relationship between the marketing mix and the decision of patients to seek treatment at a hospital, if it is proven to be influential then the hypothesis can be accepted or if the results are not appropriate then a review can be carried out. This study was intended to determine how much influence the level of influence between the marketing mix (product, price, location, promotion, physical evidence, employees and processes) with the patient's decision to seek treatment at PKU Muhammadiyah Blora Hospital.

In this study using the census sampling technique, researchers took all inpatients within a predetermined time frame, namely November 2022 – January 2023. Sampling based on incidental conditions, where patients are encountered and willing to fill out the questionnaire form thoroughly. The research sample obtained using this method amounted to 180 respondents. The data collection technique carried out is a questionnaire. In this study, questionnaires will be given to patients who are inpatient at PKU Muhammadiyah Blora Hospital. To measure what was assessed in this study using the Likert scale. On the Likert scale, research subjects answered the question with either strongly agree, agree, neutral, disagree or strongly disagree.

This analysis is a developed multiple linear regression analysis, the function of which is to assess whether there is a linkage or influence on some independent variable with an already determined bound variable. In this study, the dependent variable is the patient's treatment decision while the independent variable is the marketing mix (product, price, location, promotion, physical evidence, employees and processes). The multiple regression equation used is:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + \epsilon \]

**Information:**

- **And :** Patient Decision
- **a :** Constant Value
- **b1 – b7 :** Double correlation coefficient
- **X1 :** Product
- **X2 :** Price
- **X3 :** Location (place)
- **X4 :** Promotion
- **X5 :** Physical evidence
- **X6 :** Employee (people)
- **X7 :** Process
- **And :** Standard error

**RESULTS AND DISCUSSION**

**Respondent Overview**

In this chapter will be discussed about the results of data obtained in research and hypothesis testing previously proposed, Research conducted at PKU Muhammadiyah Blora Hospital. The sample or respondents in the study amounted to 180 patients of PKU Muhammadiyah Blora Hospital.
The Impact of Marketing Mix on Patients’ Decisions to Get Treatment at PKU Muhammadiyah Blora Hospital

Description of respondents by gender

In a service the number of customers varies by gender, as in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Man</td>
<td>75</td>
<td>41.67</td>
</tr>
<tr>
<td>2</td>
<td>Woman</td>
<td>105</td>
<td>58.33</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>180</td>
<td>100</td>
</tr>
</tbody>
</table>

The table above describes the distribution of customer frequency by gender. In the male sex, there were 75 respondents (41.67%), while the female sample was 105 people (58.33%). This condition can be interpreted that in this study the sample frequency is based on the sex of the majority of women.

Description of respondents by age

In this study, it was found that the youngest age encountered and assessed was able to express opinions about their decisions, namely the age over 17 years. Based on the results of the calculation above, the age of respondents can be grouped as table 2 below:

<table>
<thead>
<tr>
<th>No</th>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 20 years</td>
<td>15</td>
<td>8.33</td>
</tr>
<tr>
<td>2</td>
<td>21 - 30 years</td>
<td>39</td>
<td>21.67</td>
</tr>
<tr>
<td>3</td>
<td>31 - 40 years</td>
<td>50</td>
<td>27.78</td>
</tr>
<tr>
<td>4</td>
<td>41 - 50 years</td>
<td>43</td>
<td>23.89</td>
</tr>
<tr>
<td>5</td>
<td>&gt; 50 years</td>
<td>33</td>
<td>18.33</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>180</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: appendix of data processing results

The table above describes the distribution of patient frequency by age. Respondents aged between 31 - 40 years as many as 50 people or (27.78%). Thus the majority of respondents are between 31 - 40 years old. This indicates that the patient has emotional maturity when deciding to get health services at PKU Muhammadiyah Blora Hospital.

Description of respondents by education

In a service the number of customers varies based on education, as in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High school equivalent</td>
<td>49</td>
<td>27.22</td>
</tr>
<tr>
<td>2</td>
<td>Diploma (D3)</td>
<td>50</td>
<td>27.78</td>
</tr>
<tr>
<td>3</td>
<td>Bachelor (S1)</td>
<td>58</td>
<td>32.22</td>
</tr>
<tr>
<td>4</td>
<td>Graduate</td>
<td>23</td>
<td>12.78</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>180</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: appendix of data processing results

The table above describes the distribution of customer frequencies by education. Respondents who have high school education / equivalent there are 49 people (27.22%), respondents who have Diploma (D3) education there are 50 people (27.78%), respondents who have Bachelor (S1) education level of 58 people (32.22%). The respondents who had a postgraduate education level amounted to 12 people (12.78%) Such conditions can be interpreted that in this study the sample frequency based on education the majority are educated at the undergraduate level.

Description of respondents by occupation

In a study on patient decisions at PKU Muhammadiyah Blora Hospital involving 180 respondents who varied based on occupation, as in the table below:

<table>
<thead>
<tr>
<th>No</th>
<th>Work</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Private</td>
<td>23</td>
<td>12.78</td>
</tr>
<tr>
<td>2</td>
<td>TNI/POLRI</td>
<td>27</td>
<td>15.00</td>
</tr>
<tr>
<td>3</td>
<td>PNS</td>
<td>39</td>
<td>21.67</td>
</tr>
<tr>
<td>4</td>
<td>Self employed</td>
<td>42</td>
<td>23.33</td>
</tr>
<tr>
<td>5</td>
<td>SOEs/BUMDs</td>
<td>19</td>
<td>10.56</td>
</tr>
<tr>
<td>6</td>
<td>Other</td>
<td>30</td>
<td>11.11</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>180</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: appendix of data processing results

The table above describes the distribution of respondents’ frequency by occupation. The sample of self-employed people was 42 respondents (23.33%).

Multiple Linear Regression Analysis

This study was to see if there was an influence between independent variables on the patient's decision. From the analysis using SPSS. From the results of data processing, the following results are obtained (table 5).

From table 5 it can be seen that all independent variables studied have a significant effect on the dependent variable. All of the independent variables incorporated into the regression model all had a significant effect on patient decisions. Thus a mathematical equation can be made as follows.

\[ Y = 0.090X_1 + 0.132X_2 + 0.063X_3 + 0.064X_4 + 0.058X_5 + 0.373X_6 + 0.358X_7 \]

Information:

And : patient decision
X1 : product
X2 : price
X3 : location
X4 : promotion
X5 : physical evidence
X6 : official
X7 : process
5. The results of the t-test analysis are as follows:

1. In the product variable, it is known that the coefficient value is 0.090 in a positive direction, which means that if every increase in product value by one unit can affect the increase in patient decisions by 0.090. The variable significance value of the product is 0.036 (< 0.05), which means that the product has a positive and significant effect on patient decisions. Thus, the hypothesis that there is a positive and significant influence between the product and the patient’s decision is acceptable.

2. In the price variable, it is known that the coefficient value is 0.132 with a positive direction, which means that if every increase in the price value by one unit can affect the increase in patient decisions by 0.132. The significance value of the price variable is 0.007 (< 0.05), which means that the price has a positive and significant effect on the patient’s decision. Thus, the hypothesis that there is a positive and significant influence between price and patient decision is acceptable.

3. In the location variable, it is known that the coefficient value is 0.063 with a positive direction, which means that if every increase in the location value by one unit can affect the increase in patient decisions by 0.063. The significance value of the location variable is 0.006 (< 0.05) which means that location has a positive and significant effect on patient decisions. Thus, the hypothesis that there is a positive and significant influence between location and patient decision is acceptable.

4. In the promotion variable, it is known that the coefficient value is 0.064 with a positive direction, which means that if every increase in the promotion value by one unit can affect the increase in patient decisions by 0.064. The significance value of the promotion variable is 0.031 (< 0.05), which means that promotion has a positive and significant effect on patient decisions. Thus, the hypothesis that there is a positive and significant influence between promotion and patient decision is acceptable.

5. In the physical evidence variable, it is known that the coefficient value is 0.058 in a positive direction, which means that if every increase in the value of physical evidence by one unit can affect the increase in patient decisions by 0.058. The value of the significance of the physical evidence has a positive and significant effect on patient decisions. Thus, hypotheses that suggest there is a positive and significant influence between physical evidence and patient decisions are acceptable.

6. In the employee variable, it is known that the coefficient value is 0.373 with a positive direction, which means that if every increase in employee value by one unit can affect the increase in patient decisions by 0.373. The significance value of employee variables is 0.000 (< 0.05), which means that employees have a positive and significant influence on patient decisions. Thus, the hypothesis that there is a positive and significant influence between employees and patient decisions can be accepted.

7. In the process variable, it is known that the coefficient value is 0.358 with a positive direction, which means that if every increase in the process value by one unit can affect the increase in patient decisions by 0.358. The significance value of the process variable is 0.000 (< 0.05), which means that the process has a positive and significant effect on patient decisions. Thus, hypotheses that suggest there is a positive and significant influence between the process and the patient’s decision are acceptable.

\section*{Test F}

The F statistical test basically shows whether all independent or independent variables included in the model have an influence together on the dependent / bound variable (Ghozali, 2018).

\begin{table}[h]
\centering
\begin{tabular}{lcccc}
\hline
\textbf{Model} & \textbf{Unstandardized Coefficients} & \textbf{Standardized Coefficients} & \textbf{t} & \textbf{Itself.} \\
& \textbf{B} & \textbf{Std. Error} & \textbf{Beta} & \\
\hline
1 & (Constant) & -0.466 & 0.219 & -2.133 & 0.034 \\
Product & 0.089 & 0.042 & 0.900 & 2.112 & 0.036** \\
Price & 0.127 & 0.046 & 1.320 & 2.724 & 0.007* \\
Location & 0.068 & 0.024 & 0.630 & 2.786 & 0.006* \\
Promotion & 0.066 & 0.030 & 0.640 & 2.178 & 0.031** \\
Physical evidence & 0.069 & 0.033 & 0.580 & 2.102 & 0.037** \\
Official & 0.327 & 0.041 & 0.373 & 7.965 & 0.000* \\
Process & 0.310 & 0.037 & 0.358 & 8.419 & 0.000* \\
\hline
\end{tabular}
\caption{Multiple Regression Analysis}
\end{table}

\textit{Keterangan: * sig 1%, ** sig 5%}
\textit{Source: Primary data processed}

The F test table above shows statistical test results with a significance of 0.000. Provided that the significance value is less than 0.05 means that there is a significant influence of
the independent variables together on the dependent variable. In other words, the components of the marketing mix including Process, Price, Location, Physical evidence, Promotion, Product, Employee together influence Patient Decisions.

**Determination Coefficient Test**

The coefficient of determination (R2) measures how limited the model's ability to explain the variation of the dependent variable is. A value close to one means that the independent variables provide almost all the information needed to predict the dependent variable. The coefficient of determination of this study is addressed in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.979a</td>
<td>.959</td>
<td>.957</td>
</tr>
</tbody>
</table>

Source: Primary data processed

The table above shows that the adjusted R2 value obtained is 0.957, or equal to 95.7 percent. This situation shows that the independent variable, namely the marketing mix component including Process, Price, Location, Physical evidence, Promotion, Product, Employee contributed 95.7 percent influence on the level of the dependent variable, namely patient decisions. The remaining 4.3 percent were influenced by other variables not mentioned in the study.

**DISCUSSION**

**The Effect of the Product on the Patient’s Decision**

The results showed that the hypothesis that there is a positive influence between the product and the patient’s decision has been proven. This is evidenced by a significance value of less than 0.05 (0.036 < 0.05). This result is in accordance with research conducted by Ulfah, et al (2011), which resulted in that the product affects patient decisions. Product according to Kotler and Armstrong (2001) is everything that is offered to the market to get attention, bought, used and that can satisfy consumer desires. For hospital services can be interpreted as service efforts offered to achieve the hope of recovery in patients. So that the better and more complete the product facilities of a hospital, the more patients will decide to choose health services at the hospital.

**The Effect of Price on Patient Decisions**

The results showed that the hypothesis that there is a positive influence between the product and the patient’s decision has been proven. This is evidenced by a significance value of less than 0.05 (0.036 < 0.05). This result is in accordance with research conducted by Ulfah, et al (2011), which resulted in that the product affects patient decisions. A tariff is an amount of money charged on a product, or the sum of the value that consumers exchange for certain benefits, for using a service. Rates are one of the information that must be conveyed to hospital patients, because by providing tariff information, patients can compare services with the amount of rates. The more affordable the hospital rate, the more patients tend to choose the hospital.

**The influence of location on patient decisions**

The results showed that the hypothesis that there is a positive influence between location and patient decision has been proven. This is evidenced by a significance value of less than 0.05 (0.006 < 0.05). This result is in accordance with research conducted by Ulfah, et al (2013), which resulted in that location influences patient decisions. Location is a position for service offerings, so that it can be in a place and time that suits consumer needs. Within a hospital, this variable can be interpreted as a place of health care. So the closer the location of a hospital, the more patients come. These results show that according to patients, matters related to the place at PKU Muhammadiyah Blora hospital are the determining factors for their decisions. The location of the hospital, which includes complete medical support facilities, a comfortable, easy to reach place and a large enough parking area influences the patient’s decision to use outpatient services at Bina Sehat hospital. Tjiptono (2008) stated that the location of service companies affects the decision to select buyers.

**The influence of promotion on patient decisions**

The results showed that the hypothesis that there is a promotional influence between the product and the patient’s decision has been proven. This is evidenced by a significance value of less than 0.05 (0.031 < 0.05). This result is in accordance with research conducted by Azizah & Bambang (2020), which resulted in that promotion affects patient decisions. Promotions are usually done to introduce or notify a product to consumers. Promotion can be in the form of communication mix in the form of activities to deliver company messages to consumers. Activities can be in the form of advertising (Advertising) and word to mouth, namely word of mouth information. Advertising, which is a form of presentation or promotion in the form of impersonal communication (impersonal communication) used by certain companies through the media by making payments in certain amounts. Word of mouth will provide experience in purchasing these services to others. The experience of service users varies, so the information obtained can be positive or negative. In hospitals, promotional activities are a form of marketing communication activities that seek to disseminate information, influence, remind the target market to be willing to accept, and buy the products it offers. So that the more promotion about the facilities of a hospital, the more people tend to choose the hospital.

**The Effect of Physical Evidence on Patient Decisions**

The results showed that the hypothesis that there is a positive influence between physical evidence and patient decisions has been proven. This is evidenced by a significance value of less than 0.05 (0.037 < 0.05). This result is in accordance with research conducted by Azizah & Bambang (2020), which resulted in that physical evidence affects patient decisions. Physical evidence in service companies such as hospitals can be in the form of the appearance of facilities, service staff to assess the quality of the services concerned. The intangible characteristics of services cause patients to be unable to assess a service before consuming it. This causes the risk that consumers perceive in
purchasing decisions to be even greater. Therefore, one element in the marketing mix for efforts to reduce risk is to offer physical evidence of services. Hospital facilities, including clean and comfortable waiting rooms, canteens available and easy to reach, clean and maintained toilets and ATM support facilities influence patients' decisions to use outpatient services at PKU Muhammadiyah Blora hospital. As a service service, the intangible element cannot be separated from hospital services. So it is difficult to see the physical condition of the services to be provided. But this can be supported by looking at the physical evidence of a good building, a comfortable and clean building, and so on. Although it does not directly describe the health services provided, it can support the creation of a good image and mood about the hospital.

Employee Influence on Patient Decisions

The results showed that the hypothesis that there is a positive influence between employees and patient decisions has been proven. This is evidenced by a significance value of less than 0.05 (0.000 < 0.05). This result is in accordance with research conducted by Ulfa et al (2011), which resulted in that employees influence patient decisions. People or participants are all actors who enjoy offering services, therefore affecting the perception of buyers. Employees or Expertise in carrying out hospital operational activities is an important element in the production of services and service delivery to provide added value, to be more competitive for the hospital. So that the more reliable hospital staff, the more patients will decide to choose health services at the hospital.

These results show that according to patients, matters related to PKU Muhammadiyah Blora hospital staff are the determining factors for their decisions. Hospital staff, in this case speed in serving, clarity in providing information both by pharmacy officers and by doctors influence patient decisions.

The influence of the process on the patient’s decision

The results showed that the hypothesis that there is a positive influence between the process and the patient’s decision has been proven. This is evidenced by a significance value of less than 0.05 (0.000 < 0.05). This result is in accordance with research conducted by Azizah & Bambang (2020), which resulted in that the process influences patient decisions. Service is the process of meeting needs through the activities of others directly. Services in this case are services from doctors and hospital staff to inpatients. The more friendly and reliable doctors and hospital staff are in providing professional services, the more patients have a tendency to choose the hospital.

CONCLUSIONS AND SUGGESTIONS

The results of research and discussion that have been presented based on research data, the following conclusions can be drawn; The product has a positive and significant effect on the patient’s decision. Price has a positive and significant effect on the patient’s decision. Promotional has a positive and significant effect on the patient’s decision. Physical evidence has a positive and significant effect on the patient’s decision. Employees have a positive and significant influence on patient decisions. The process has a positive and significant influence on the patient’s decisions. Based on the description of research variables, there are several indicators that must be improved in order to achieve maximum results, including; Need to improve the quality and quantity of facilities, such as toilet conditions for patients. And Provide free drug delivery facilities according to regional affordability.

Acknowledgment

Technical assistance and advice can be described at the end of the text. Then the names of individuals that are included in this section, the author is responsible for the written consent of every person who communicates personally or recognized by the individual in the text.

REFERENCES


