THE INFLUENCE OF MARKETING MIX TO PATIENT SATISFACTION IN HOSPITALS: NARRATIVE REVIEW

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ABSTRACT

Background: Hospitals, as service providers, have a large role in meeting people's needs regarding their health. The increasing growth of hospitals adds to the menu of choices for people to utilize health services according to their needs. This competition has changed the mechanism by which customers are not only users of health services but as determinants of the future and the continuity of a hospital. Marketing activities can help hospitals improve and win the competition. Marketing managers must be able to combine the marketing mix variables appropriately so that all variables can increase consumer's decision and patient satisfaction.

Aims. The purpose of this study was to determine the effect of mix marketing on patient satisfaction at the hospital.

Method: This study was conducted in a literature review by searching for articles and journals related to hospital mix marketing. Search journal articles are done through Google Scholar database with the search year 2010 until 2018. The keywords used are "marketing mix and "hospital." So that six articles will be reviewed.

Results: In the six studies reviewed there was one study that showed that all the mix marketing variables namely product, price, people, place, promotion, process, and the physical evidence had a significant influence on patient satisfaction and the hospital for medical treatment. The significant results are known from the results of statistical tests showing that p-value <0.05. In several other studies, it shows that there are significant variables and some that are not significant for consumer decision and patient satisfaction.

Conclusion: The Marketing mix has an important cost for the decision to choose a hospital. The mix marketing has varied significant influence on consumers’ decision and satisfaction to choose the hospital for medical treatment. By knowing the mix marketing variable that affects customer satisfaction, hospital management, namely the marketing department, can optimize and develop marketing types that can increase public interest so that the target profit of the hospital is achieved.

Keywords: Marketing mix, 7P, Patient satisfaction, Hospital

INTRODUCTION

Hospitals as health care providers are required to continue to improve service quality so that people don't hesitate to place their loyalty. In addition to having social functions, hospitals also have a function to maintain and improve hospital operations. Because all financing for both operational and service quality
improvements depends absolutely on the profits collected. Various ways can be maintained by hospitals to maintain or increase profits, such as maintaining trustworthy customers and increasing the attractiveness of new customers.

The development of information and communication technology provides convenience and freedom for the community to choose the hospital to be targeted to get the best health services. This situation causes competition among hospitals to be increasingly stringent until a mechanism arises in which the community or customers determine the survival of the hospital. So, hospitals need to change their perspective on customers who have only been considered users of health services. Competition in attracting customers makes hospitals compete to provide health services by prioritizing satisfaction with the needs and desires of their customers [11].

Based on several things above, the hospital needs an effort that can show the superiority of the hospital among its competitors, namely by marketing. All marketing activities must be directed at creating superior value for customers. The aim of marketing the hospital is to introduce hospitals to the wider community, to inform as clearly as possible about the facilities and service capabilities of the hospital, to form and foster the image of the hospital through community trust and appreciation of the hospital's ability optimally and also expect an increase in income with increasing patient visits [11].

A hospital marketing manager as a decision maker in their field must have extensive supervision of all aspects of marketing. The task of managers in designing marketing programs is to integrate the best alignment between internal capabilities and the external market environment. The decisions taken mainly concern the marketing mix problem that must be more responsive to market needs namely: product (service product), price (health service tariff), place (location of service), promotion (promotion, communication, marketing) and people (health workers), physical evidence (physical appearance) and process (service process/procedure). These activities need to be combined and coordinated so that the company can carry it out. So, a company not only chooses the best combination but also must effectively coordinate various marketing mixes to carry out marketing programs. The marketing mix is a company that has the desired response from the target market, but more importantly, how to understand the marketing mix from the customer's point of view or perception [2,12].

The marketing mix has an important role in influencing consumers in order to buy products or services offered by the company. The elements of the marketing mix consist of companies that can control consumers. Understanding the marketing mix, according to Buchari Alma, "Marketing mix is a strategy of mixing marketing activities, to look for the maximum combination to bring the most satisfying results." According to Zeithaml and Bitner, "The marketing and communication company has the highest quality in communication with guests and to satisfy guests." Meanwhile, according to Kotler and Armstrong, "Marketing mix is a good marketing tool that is a set of products, pricing, Promotion, distribution, and producing the desired response of the Target market." According to Han and Hwang, hospital marketing must try to increase the target of new patients and revisit old patients because customers are still eager to return and use hospital and clinic facilities and services [7,13].

METHODS
This review was searched in international and nationally accredited electronic journals. Literature search through from google scholar. All references were evaluated to fit the topic of this article. The keywords
were “mix marketing” and “hospital.” The inclusion criteria of the studies are targeted group: hospitals; outcomes: marketing mix; research method quantitative study. The exclusion criteria are non-full paper studies and those with irrelevant writing sketch of the title and abstract. The years of publication were restricted to 2010 – 2018.

![Search Result Protocol](image)

**RESULTS**

The number of articles found using the keywords “mix marketing” and “hospital” reached 159,000. After removing duplicates and filtering out the remaining studies to fit the inclusion and exclusion criteria, six articles were found to be suitable for review.

### Table 1. Review of Articles Selected

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<tr>
<th>No</th>
<th>Author &amp; title</th>
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<tr>
<td>1</td>
<td>Tety Yuliantine; Indasah; Sandu Siyoto (2018) &quot;Analysis of Marketing Mix Characteristics of Marketing Factor 7P (Product, Price, Place, Promotion, Process)&quot;</td>
<td>Analyzing the influence of the 7P marketing mix (product, price, place, promotion, process, people, physical building) on patient satisfaction</td>
<td>Quantitative research with cross sectional method, observation</td>
<td>240 inpatients</td>
<td>Assess the characteristics of respondents with multiple linear regression tests with $\alpha = 0.05$. Assess the influence of 7P on patient satisfaction at the Muhammadiyah inpatient hospital. The most influential variable is physical building ($\beta = 0.442$).</td>
<td>The marketing mix has a significant influence on patient satisfaction at the Muhammadiyah inpatient hospital.</td>
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<td>1</td>
<td>People, Process, Physical Building) to Patient Satisfaction of Inpatient Patient Hospital Muhammadiyah Ahmad Dahlan Kediri City</td>
<td>Satisfaction at inpatient hospitals</td>
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<td>The significant differences in the influence of the marketing mix strategy have varied significant and insignificant influence on the patient satisfaction. Furthermore, the results exhibit that hospital managers might benefit more by placing more emphasis on an integrated service marketing mix strategy and recognizing the patient satisfaction. The result shows that five out of seven variables are significant (health service, promotion, physical evidence, process and personal strategies) on the other hand two variables are insignificant (pricing and distribution strategies).</td>
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<td>2</td>
<td>Ala'Eddin Mohammad Khalaf Ahmad; Abdullah Ali Al-Qarni; Omar Zayyan Alsharqi; Dalia Abdullah Qalai; Najla Kadi. (2013) “The Impact of Marketing Mix Strategy on Hospitals Performance Measured by Patient Satisfaction : An Empirical Investigation on Jeddah Private Sector Hospital Senior Managers Perspective. &quot;</td>
<td>Explore the relationship between research consists of the independent variables represented by marketing mix strategy components (namely health service, pricing, distribution, promotion, physical evidence, process, and personal strategies) and dependent variable which represented by patient satisfaction.</td>
<td>Quantitative</td>
<td>272 managers from 34 private hospitals in Jeddah</td>
<td>Statistical analysis with ANOVA (Analysis of Variance) to find out whether the perceptions of respondents cannot be distinguished or not related to 7P hospital marketing services</td>
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<td>3</td>
<td>Muh. Ryman Napirah; Muh.</td>
<td>This study aims to</td>
<td>Quantitative research with</td>
<td>97 people were</td>
<td>Data were analyzed by</td>
<td>Relationship between marketing mix and</td>
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<td>1</td>
<td>Jusman Rau; Hadijah (2016) &quot;The Relationship Between Marketing Mix And Patient Loyalty In Intensive Care Unit, Anutapura Public Hospital Palu&quot; [5]</td>
<td>determine the relationship between the marketing mix and patient loyalty in the intensive care unit at Anutapura General Hospital, Palu.</td>
<td>cross sectional method</td>
<td>randomly selected without population level considerations</td>
<td>univariate and bivariate at a 95% significance level (p &lt;0.05) on the 7P marketing mix concept (product, price, place, promotion, person, process, and physical evidence)</td>
<td>patient loyalty in the intensive care unit of Anutapura General Hospital of Palu; here the result of chi-square test indicated that there was a relationship of marketing mix product (p= 0.01), price (p= 0.00), promotion (p= 0.04), people (p= 0.00); and no relationship of marketing mix place (p= 0.21), process (p= 1.00), dan physical evidence (p= 1.00) with patient loyalty.</td>
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<td>4</td>
<td>Novendy Yoyada; David Sukardi Kodrat, (2017) &quot;Effect Of Marketing Mix (7P) On Decision Of Consumer Selection In Ny Dental Clinic Of Surabaya City&quot; [7]</td>
<td>Analyze the influence of products, prices, places, promotions, people, physical evidence, processes to purchase decisions. This study uses seven independent variables: product, price, place, promotion, person, physical evidence, process with one dependent variable, namely the purchase decision</td>
<td>Quantitative analysis</td>
<td>92 NY Dental Clinic consumers</td>
<td>By testing the reliability and validity, classic assumption test, t-test and F test, coefficient of determination, and multiple linear regression analysis</td>
<td>Product variable, price, promotion, physical evidence, the process has a positive and significant impact and has the biggest influence on purchasing decisions, while place and person variables have a negative impact and significant influence on purchasing decisions</td>
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<td>5</td>
<td>Lelo Sintani; Yoga Manurung; Nor Sanuri (2017), &quot;The Effect of Marketing Mix and Socioeconomic on the Consumer’s Decision to Choose Medical Treatment at Public Hospital in Kasongan, Central Kalimantan&quot; [8]</td>
<td>Measuring and analyzing the impact of the marketing mix consisting of products, prices, locations, promotions, people, processes and physical, as well as socio-economic evidence on consumer decisions to choose medical treatment at the Kasongan Regional General Hospital</td>
<td>Quantitative analysis, Slovin Sampling formula</td>
<td>90 patients</td>
<td>Primary data and questionnaires are used in data collection with a non-probability sampling approach. Data analysis using multiple linear regression.</td>
<td>Product, location and socio-economic variables have a significant influence on consumer decisions to choose medical treatment at Kasongan Hospital. While the price, promotion, people, process and physical evidence variables have no significant effect. In percentage terms, the marketing and socio-economic mix variables have a relationship to consumer decisions to choose medical treatment at the Kasongan Regional General Hospital only 34.2%, while 65.8% is explained by other variables outside the research model.</td>
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| 6  | Nyayu Rahma; Iwan Stia Budi; Najmah (2014), "Correlation Between Marketing Mix And The Utilization Of Inpatient Unit At Pelabuhan Port Hospital Palembang" [6] | Analyze the relationship between the marketing mix (7P) and the utilization of inpatient services at the Palembang Port Hospital | Quantitative analysis, cross sectional | 80 inpatients | A univariate, bivariate method with chi-square test and multivariate analysis with SPSS program logistic regression analysis test. | 6 variables have a relationship with the utilization of inpatient installations, namely product variables (OR = 6, p-value = <0.0001), price (OR = 10, p-value = 0.0001), place (OR = 5, p-value = 0.001), people (OR = 5, p-value = 0.002), process (OR = 7, p-value = 0.0001), and physical evidence (OR = 8, p-value = 0.0001). The results of multivariate logistic regression analysis, there are
The first research article in the table above is entitled “Analysis of Marketing Mix Characteristics of Marketing Factor 7P (Product, Price, Place, Promotion, People, Process, Physical Building) to Patient Satisfaction of Inpatients at Ahmad Dahlan Muhammadiyah Hospital Kediri City” by Tety Yuliantine; Indasah; Sandu Siyoto. This study aimed to analyze the influence of the 7P marketing mix (product, price, place, promotion, people, process, physical building) on patient satisfaction at hospitals. The research was conducted on 30th October to 31st December 2017 at Muhammadiyah Hospital Kediri with 600 inpatients class I, II, III. The sample size was 240 respondents. The data were collected using questionnaires. Data were analyzed using multiple linear regression test with $\alpha = 0.05$. The result shows that the marketing mix has a significant influence on patient satisfaction at the Muhammadiyah inpatient hospital. The most influential variable is physical building ($\beta = 0.442$) [4].

The second research article by Pravin S. Gosavi; Dr. Mukund Dongare is entitled “A Study of Marketing Mix of Hospital Service”. This study aimed to analyze the marketing mix (7P) and to what extent is this tool useful in the present situation and compare hospitals that are run under different management. The researchers reviewed Columbia Asia Hospital and Aditya Birla Memorial Hospital. Each hospital selected 75 doctors, 150 nursing staff, 35 administrative personnel as the respondents for final analysis. The result shows that evaluation of the relative rankings of 7P in five of the six cases categorized as P was strongly approved, one particular P was only pleasant. Therefore, respondents with the longest working period can better differentiate organizational aspects from those who have a long working period [9].

The third article by Muh. Ryman Napirah; Muh. Jusman Rau; Hadijah is entitled “The Correlation between Marketing Mix and Patient Loyalty in Intensive Care Unit, Anutapura Public Hospital Palu”. This study aimed to determine the correlation between the marketing mix and patient loyalty in the intensive care unit. The result shows chi-square test indicated that there was a correlation of marketing mix product ($p=0.01$), price ($p=0.00$), promotion ($p=0.04$), people ($p=0.00$); and no correlation of marketing mix place ($p=0.21$), process ($p=1.00$), dan physical evidence ($p=1.00$) with patient loyalty [5].

The fourth research article by Novendy Yoyada; David Sukardi Kodrat is entitled "The Effect of Marketing Mix (7P) on Decision of Consumer Selection in NY Dental Clinic of Surabaya City". This study analyzed the influence of products, prices, places, promotions, people, physical evidence, processes to purchase
decisions. This study uses seven independent variables: product, price, place, promotion, person, physical evidence, process with one dependent variable, namely the purchase decision. The main finding that product variable, price, promotion, physical evidence, the process has a positive and significant impact and has the biggest influence on purchasing decisions, while place and person variables have a negative impact and significant influence on purchasing decisions [7].

The fifth research article by Lelo Sintani; Yoga Manurung; Nor Sanuri is entitled "The Effect of Marketing Mix and Socioeconomic on the Consumer’s Decision to Choose Medical Treatment at Public Hospital in Kasongan, Central Kalimantan". This study was measuring and analyzing the impact of the marketing mix consisting of products, prices, locations, promotions, people, processes and physical, as well as socioeconomic evidence on consumer decisions to choose medical treatment at the Kasongan. This study assessed the product, location, and socio-economic variables have a significant influence on consumer decisions to choose medical treatment at Kasongan Hospital. While the price, promotion, people, process, and physical evidence variables have no significant effect. In percentage terms, the marketing and socio-economic mix variables have a correlation to consumer decisions to choose medical treatment at the Kasongan Regional General Hospital only 34.2%, while 65.8% is explained by other variables outside the research model [8].

The sixth research article entitled "Correlation between Marketing Mix and The Utilization of Inpatient Unit at Pelabuhan Hospital Palembang" by Nyayu Rahma; Iwan Stia Budi; Najmah aimed analyze the correlation between the marketing mix (7P) and the utilization of inpatient services at the Palembang Port Hospital. The participants were 80 inpatients. The researchers investigated about 6 variables have a correlation with the utilization of inpatient installations, namely product variables (OR = 6, p-value = <0.0001), price (OR = 10, p-value = 0.0001), place (OR = 5, p-value = 0.001), people (OR = 5, p-value = 0.002), process (OR = 7, p-value = 0.0001), and physical evidence (OR = 8, p-value = 0.0001). The results of multivariate logistic regression analysis, there are four variables that have the most influential marketing mix, namely products (OR = 7, p-value = 0.008), price (OR = 15, p-value = 0.0001), process (OR = 8, p-value = 0.007), and physical evidence (OR = 18, p-value = <0.0001). The marketing mix variables affecting the utilization of inpatient installations This may lead to delays in presentation, specialist assessment, and secondary prevention, and such stroke warning signs should be included in future public health campaigns [6].

**DISCUSSION**

Marketing mix strategy is a necessary strategy in service organizations to ensure these organizations' success. It is vital to marketing the hospitals in the target market and acts on behalf of the whole hospital or with coordination in dealing with hospital performance measured by patient satisfaction. These are the factors that the hospital is attempting to win via the marketing strategy application, and the services delivered [10]. The strategy does not evolve simply by chance but through a planned effort by the hospital management. The link between these factors and the marketing mix strategy components was based on findings from the literature, pilot interviews. The framework suggests that marketing mix strategy as a core construct in this research receives its vital role through the effect of marketing mix strategy on hospital performance measured by patient satisfaction.
The Marketing mix turned out to have an important role in the patient's decision to choose a hospital. No matter how good the quality of a product, price or place in the hospital if the delivery of information to the community is still less effective it will affect the decision of patients to choose hospitals because of the lack of information obtained by the community [12].

1. **Product**

Sujotjo and Radix in Sintani et al. explained that product is goods or services that are offered to get attention, purchase, or consumed in order to meet the needs and desires of the community. Consumers are not only buying physical or service of the product, but also the benefit and value of the product. Product is an important element in marketing program [8]. Babu and Rajalakshmi also said a product of hospital service is quite broad, covering issues related to emergency service, ambulance service, diagnostic service, pharmacy service, and 24-hour service [8]. Based on all study above shows that the product has a significant positive effect and correlation to patient satisfaction and loyalty [4,5,6,7,8,14]. With these results, it can be concluded when the product is developed, then the decision of hospital selection will increase, and vice versa.

2. **Price**

Palmer defined that the price strategy should be integrated and consistent with the other marketing mix strategies in the organization to achieve the organization objectives [14]. Some researchers, namely Lovelock and Keller have suggested that pricing is the only factor of the marketing mix strategy that produces revenues for the organization, whereas all the others are related to expenses [14]. Costs play a significant part in the pricing of health services. Managers must consider corporate objectives as well as costs when setting hospital prices. Purely covering costs is unsatisfactory because the hospital needs to meet its monetary objectives and generate a profit. in addition to cost consideration, hospital pricing strategy is usually influenced by consumer price elasticity [14]. According to the studies above, there are four studies showed that price variable has a significant effect on the satisfaction [4,5,6,7]. With these results, it can be concluded if there is a suitability price with consumers, then the decision hospital selection will increase, and vice versa [7].

3. **Place**

Location planning is one of the first steps to be taken before the company starts operating. The purpose of location planning is to determine the location of a company or place of business as best as possible in order to operate or run the process of production/service smoothly, low operating costs, the ability to compete with companies and enable future expansion, even in this era of globalization, Location planning can make a complex problem. Various location alternatives that must be considered by looking at the borders of the country because of the planning of the location of a business/company [7]. According to three studies, that place has a significant negative effect on hospital selection decisions [5,7,14]. However, there are three studies showed that place has a significant effect on satisfaction [4,6,8]. With these results, it can be concluded that Place partially does not have any significant effect on consumers’ decisions to choose a hospital, and vice versa.

4. **Promotion**

According to Kotler, promotion is a tool used for communication with target markets that are persuasive. Marketing must also communicate with customers on a promotional basis. Elements of promotion mix of
advertising, sales promotion such as exhibitions, awards, demonstrations, public relations [7]. There are four studies that promotion has a significant positive effect on the performance of hospitals [4,5,7,14]. Two studies others indicated that promotion had no significant effect on consumer’s decision-making to get medical treatment at the hospital [6,8]. This finding means that the policy of promotion, including counseling activities, community activities, and direct information from officers to the patient when examined or treated, did not influence the decision of consumers to choose a hospital as their medical treatment. With these results, it can be concluded that Promotion partially had a significant effect on consumers’ decisions to choose a hospital and vice versa.

5. People

According to Lupiyoadi and Hamdani People are all actors who play an important role in the presentation of services so that it can affect a buyer’s perception. All employee attitudes and actions, how to dress employees, and the appearance of employees influence the success of service delivery. Booms and Bitner explained that service marketing has long stressed the importance of staff and particularly customer contact staff as crucial components in delivering a high-quality service and contributing to overall customer satisfaction. It is widely argued that the overall quality of the delivered service for organizations such as health services is influenced, among other things, by the nature of the correlation between the customer and health providers. Avlonitis and Indounas found that if the doctor has significant discretion in meeting customer needs, and evaluation of the interaction is largely based on the attributes of experience and credence [7,14]. Based on the studies above, four of six that there are significant influence people on patient satisfaction [4,5,6,14]. With these results, it can be concluded that People partially had a significant effect on consumers’ decisions to choose a hospital and vice versa.

6. Process

The process is one of the crucial elements of the expanded marketing mix components in services that should be a distinct strategic element. Collier in Ahmad et al. this is because the process may influence the initial customer decision to purchase a service and affect the level of customer satisfaction [14]. The top management challenges across four service industries were maintaining quality of service, hiring employees, and employee training based on Zeithaml and Bitner [14]. The results indicated that there was a significant effect of the process on patient satisfaction on four studies above [4,6,7,14]. With these results, it can be concluded that Process partially had a significant effect on consumers’ decisions to choose a hospital and vice versa.

7. Physical evidence

Work area appearance relates only to the non-design aspects of the service environment, which are inherently variable. These aspects include such things as cleanliness and tidiness or the general appearance of the service location on a day-to-day basis. Health services have several unique characteristics, which have crucial implications for marketing strategy. Physical evidence aids health services to tangibles the high degree of intangibility based on Wangenheim and Bay’on [14]. The results showed that there is a significant effect of physical evidence on patient satisfaction on four studies above [4,6,7,14]. On the other hand, two studies had no significant influence on consumer decisions to choose medical treatment [5,8]. With these results, it can be concluded that Physical evidence partially had a significant effect on consumers’ decisions to choose a hospital and vice versa.
CONCLUSIONS

The Marketing mix has an important cost for the decision to choose a hospital. The mix marketing has varied a significant influence on consumer decision and satisfaction to choose the hospital for medical treatment. By knowing the mix marketing variable that affects customer satisfaction, hospital management, namely the marketing department, can optimize and develop marketing types that can increase public interest so that the target profit of the hospital is achieved. Likewise, the variables that do not provide significant influence, so that hospitals can form better strategies so that these variables influence community satisfaction and interest. If the entire hospital understands the shortcomings and not yet optimal marketing department, hospital management can work together and coordinate to develop marketing priorities that are appropriate to the needs and target market.

REFERENCES


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