

Literature Review

Factors Influencing Word-of-Mouth Behaviour at Outpatient Department

Faktor yang Berperan pada Perilaku Word-of-Mouth pada Pelayanan Rawat Jalan

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Abstract

Objective: To determine the factors that influence the word-of-mouth behavior of patients seeking treatment at YPK Mandiri Hospital, Jakarta.

Methods: This study uses a quantitative approach. Data were obtained using online questionnaire distributed to patients receiving outpatient treatment at YPK Mandiri Hospital from July – September 2021. A convenience sampling technique was used in this study. Data analysis was performed using the Partial Least Square-Structural Equation Modelling (PLS-SEM) approach using SmartPLS software.

Results: There were 162 respondents obtained in this study, most of them (96.3%) consisted of female with the highest age group being 26-30 years (40.1%). The factors studied were doctor's expertise, doctor's communication, nursing, ancillary, and administration services, hospital reputation, and the physical structure and facilities of the hospital. Results showed that doctor's expertise, doctor's communication, hospital reputation, and physical structure and hospital facilities affect word-of-mouth behavior with standardized path coefficient of 0.199, 0.204, 0.339, and 0.212; as well as p-values of 0.044, 0.046, 0.00, and 0.008, respectively. Meanwhile nursing, administration, and support services is not supported with standardized path coefficient of 0.054 and p-value of 0.469, which indicated that it does not affect word-of-mouth behavior.

Conclusion: Doctor's communication, hospital reputation, and the physical structure and facilities of the hospital are related to word-of-mouth behavior. On the other hand, nursing, ancillary, and administrative services are not related to word-of-mouth behavior.

Keywords: ancillary services, doctor communication, doctor expertise, hospital physical structure, hospital reputation, word-of-mouth.

Abstrak

Tujuan: Untuk mengetahui faktor yang memengaruhi perilaku word-of-mouth pasien yang berobat di RS YPK Mandiri, Jakarta.

Metode: Penelitian ini menggunakan pendekatan kuantitatif. Data diperoleh dengan menggunakan kuesioner online yang dibagikan kepada pasien rawat jalan di RS YPK Mandiri periode Juli – September 2021. Teknik convenience sampling digunakan dalam penelitian ini. Analisis data dilakukan dengan pendekatan Partial Least Square-Structural Equation Modeling (PLS-SEM) menggunakan software SmartPLS.

Hasil: Responden yang diperoleh dalam penelitian ini adalah sebanyak 162 subjek, sebagian besar (96,3%) berjenis kelamin perempuan dengan kelompok usia terbanyak adalah 26-30 tahun (40,1%). Faktor yang diteliti adalah expertise dokter, komunikasi dokter, pelayanan keperawatan, penunjang, dan administrasi, reputasi rumah sakit, dan struktur fisik dan kelengkapan rumah sakit. Hasil penelitian menunjukkan bahwa expertise dokter, komunikasi dokter, reputasi rumah sakit, serta struktur fisik dan kelengkapan rumah sakit berpengaruh terhadap perilaku word-of-mouth dengan standardized path coefficient 0,199, 0,204, 0,339, dan 0,212; serta nilai p masing-masing 0,044, 0,046, 0,00, dan 0,008. Sementara itu pelayanan keperawatan, administrasi, dan penunjang tidak didukung dengan standardized path coefficient 0,054 dan p-value 0,469 yang mengindikasikan bahwa faktor tersebut tidak berpengaruh terhadap perilaku word-of-mouth.

Kesimpulan: Expertise dokter, komunikasi dokter, reputasi rumah sakit, dan struktur fisik dan kelengkapan rumah sakit berpengaruh terhadap perilaku word-of-mouth. Pelayanan keperawatan, penunjang, dan administrasi tidak berpengaruh terhadap perilaku word-of-mouth.

Kata kunci: expertise dokter, komunikasi dokter, pelayanan penunjang, reputasi rumah sakit, struktur fisik rumah sakit, word-of-mouth.

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INTRODUCTION

By efforts done to improve or develop a business, the role of marketing in advertising products is very important. With increased sales, a service can progress and develop further. Therefore, various ways were carried out to increase marketing to increase the number of customers. One way to increase sales that are widely known today is through word of mouth (WOM).^{1,2} Word of mouth is one of the methods that play a vital role in marketing a product, whether goods or services.¹ As the name implies, this method is carried out by passing information directly from people to people, where this circulating information can be in a negative or positive connotation and is and promoted to the public's circle.³

The role of word of mouth has become a prominent activity in our daily life, where we will instinctively come to a trusted workshop recommended by a friend, or try a restaurant recommended by our family. This is a common occurrence because when a person intends to try something new, they will seek information about the said new thing, and often from people they trust or are closest to. The same thing happens when a patient attempts to choose the doctor they want to visit. Often, they seek opinions from people around them for alternative options. A study has also stated that 70% of people in America rely on the advice of those around them while choosing a doctor for treatment.⁴

In the health industry, WOM behavior is influenced by the level of patient satisfaction, which comes from various factors including the quality of the doctors working in the hospital, the quality of the equipment used, the doctor's communication skills, the reputation of the hospital, and so on.^{5, 6} So far, various existing studies have been carried out by the experts of the general hospital setting, and on this occasion, the researcher intends to replicate similar research in the setting of a mother and child hospital, in Jakarta.

YPK Mandiri Hospital is one of the maternal and child hospitals that has been established since 1960. Most of the patients at YPK Mandiri Hospital choose to seek treatment at this hospital due to recommendations from their parents or relatives and friends. In this case, word-of-mouth behavior plays a major role in efforts for service marketing at YPK Mandiri Hospital. In this regard, it is very important to be able to

convince customers or patients to carry out this word-of-mouth behavior. On this occasion, the researcher wants to find out more about the factors that influence word-of-mouth behavior at YPK Mandiri Hospital patients.

Literature Review and Hypotheses

Relation between Doctor's Expertise and Word of Mouth Behavior

Prior study has found that doctors' expertise was directly influenced by patient satisfaction⁶. A similar result was found in another study where a doctor's expertise could increase patient satisfaction, and decrease malpractice claims⁷. This finding could be explained because with the increase in doctors' expertise, so will the ability to handle a case, hence decreasing complaints felt by patients. This phenomenon will result in increased patient satisfaction. Likewise, with the increase in expertise, the incidence of unwanted cases will quickly decrease, which in turn will decrease malpractice claims by doctors. Patients' satisfaction will then influence word-of-mouth behavior. According to this theory, the first hypothesis that we can propose is: H₁: Doctor's expertise affects word-of-mouth behavior.

Relation between Doctors' Communication Skills and Word-of-Mouth Behavior

Previous study has stated that the interaction or communication between doctors and their patients has a crucial role in determining the level of patients' satisfaction⁸.

This also sometimes instigates a suggestive effect on patients' adherence to treatment, giving positive effects on increasing recovery rate. Similarly, another study found that doctors' interpersonal communication skills were shown to increase patients' satisfaction rate towards hospitals' or doctors' services⁹. The quality of provided communication often was evaluated on allocated time by doctors for *visits*, delivering clear explanations about diagnosis, and planning on treatment. Increasing satisfaction will then imply word-of-mouth behavior among patients. Based on the data above, the second proposed theory is:

H₂: Doctor's Communication Skill affects word-of-mouth behavior

Relation between nursing, ancillary, and administration services with Word-of-Mouth Behavior

The quality and adequacy of a service are often judged by the level of patient satisfaction.

Another thing that was also found to affect satisfaction was nursing, administration, and ancillary services. Nursing has a major role in providing emotional and psychological support to patients and their families in various conditions, for example supporting patients when receiving their diagnosis, and ensuring the best service is provided to patients. Nursing parties are also expected to have professional knowledge and behavior and can provide informational, emotional, and practical support.¹⁰

In addition to nursing support, other supports in health facilities also affect the level of patient satisfaction, such as professional and trained customer service facilities, quick and clear administrative processes, and so on.⁸ Based on data stated above, we composed our third hypothesis as follows:

H₃: Nursing, ancillary, and administration services affects Word-of-Mouth Behavior
Relation between Hospital Reputation and Word-of-Mouth behavior

Nowadays it is easy for patients to find out about the reputation of the hospital and the doctors where the patient will seek treatment. This is also supported by the increasing number of competing health facilities, both private and public. Good service quality of a hospital enhances the good reputation of the hospital, and a good reputation will increase patient satisfaction and help to assure patients' loyalty to the health facility.⁵

The identical theory was stated in a preceding research¹¹, where they found that a good reputation of a health facility increases patient confidence and also a sense of security (from the possibility of mismanagement / medication); resulting in increased patient satisfaction and also WOM behavior. Based on data provided above, we concluded our fourth hypothesis as follows:

H₄: Hospital Reputation affects Word of Mouth behavior

Relation between Physical Structures and Facilities of Hospital with Word-of-Mouth Behavior

Prior studies found that the physical structures of hospitals could influence the level of patients' satisfaction¹². A good room layout can facilitate patient activities in health facilities, thereby increasing the patient's level of comfort. Another study has also found that good decoration or display quality also played a role in patient satisfaction.¹³ However, it is still the quality of the service itself that most influences their

satisfaction.

In a previous research, similar findings has also been stated, where the quality of the room affects patient satisfaction, and hence supports a health facility to be memorable and exceptional in the eyes of the patient¹. Based on the data above, we constructed the fifth hypothesis as follows:

H₅: The physical structure and facilities of the hospital affects word-of-mouth behavior

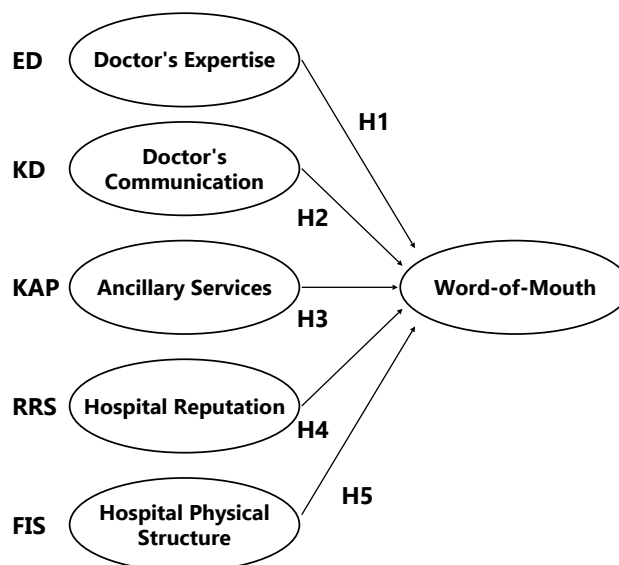


Figure 1. Study Model^{2, 5, 6, 10, 13}

METHODS

The purpose of this study was to determine the factors that influence the word-of-mouth behavior of patients seeking treatment at YPK Mandiri Hospital, Jakarta. This study has 5 independent variables, namely: doctor's expertise, doctor's communication, nursing, axillary, and administrative services, hospital reputation, and hospital physical structure and facilities. The dependent variable in this study was the patient's word-of-mouth behavior.

The method used in this study is a quantitative approach. Data collection was taken using a questionnaire instrument that was filled out by outpatients online in Google Form after the patient was treated. The target population in this study were patients receiving outpatient treatment at YPK Mandiri Hospital, Jakarta, during the period July – September 2021. Sampling was done using the convenience sampling technique. The number of samples was calculated and determined to be 160 samples.

The measurement instrument used in this study is a Likert scale which produced interval

data: strongly agree, agree, neutral, disagree, and strongly disagree. Questions in the questionnaire were adapted from research¹⁴ Statistical analysis was performed using Partial Least Square-Structural Equation Modelling (PLS-SEM) with SmartPLS software.

Respondent’s Profile

There were 162 respondents obtained in this study. In Table 1, the profile of the respondents is presented. Most of them (96.3%) are female. The highest age group was 26-30 years (40.1%) followed by 31-35 years (33.3%). The most visited specialists were obstetrics and gynecology (77.1%) followed by pediatricians (14.2%).

Table 1. Respondents’ Profile

Statement	Frequency	(%)
Gender		
Male	6	3.7
Female	156	96.3
Age Group (y o)		
< 20	5	3.1
21-20	17	10.5
26-30	65	40.1
31-35	54	33.3
≥35	21	13
Visited Specialist		
Pediatrics	23	14.2
Andrology-Urology	4	2.5
Obstetrics and Gynecology	125	77.1
Internal Medicine	10	6.2

Source: Results of Data Processing

Table 2. Evaluation of Measurement Model¹⁴

Construct	Item	Outer Loading
Doctor’s Expertise (AVE=0.825, CR=0.934)		
ED1	Doctors have the expertise (skills) in their field	0.920
ED2	Doctors are capable to make an accurate diagnosis	0.901
ED3	Doctors are capable to give adequate therapy or treatment	0.904
Doctor’s Communication Skill (AVE=0.812, CR= 0.945)		
KD1	Doctors have a good communication style	0.903
KD2	Doctors can give clear explanations about my disease/condition	0.900
KD3	Doctors pay attention and listen to my complaints	0.896
KD4	I find it easy to communicate with doctors	0.905
Nursing, Ancillary, and Administration sServices (AVE=0.650, CR=0.881)		
KAP1	I feel comfortable with this hospital’s registration service	0.754
KAP2	I feel comfortable with this hospital’s nursing service	0.796
KAP3	I feel comfortable with this hospital’s cashier service	0.820
KAP4	I feel comfortable with this hospital’s pharmacy service	0.852
Hospital’s Reputation (AVE=0.533, CR=0.818)		
RRS1	The reputation of the hospital affects my choice of place of treatment	0.720
RRS2	The number of hospital patients affects my choice of place of treatment	0.594
RR33	The hospital’s treatment outcomes affect my choice of place of treatment	0.857
RRS4	Social media activity (Google Search, Instagram, Website, etc.) affects my choice of place of treatment	0.725

Evaluation of Measurement Model

Evaluation of the measurement model is a test used to assess the validity and reliability of the model. Tests of convergent validity, discriminant validity, and composite reliability were applied in this study. The criteria for convergent validity are loading factor >0.7; average variance extracted (AVE) >0.5, and the discriminant validity must meet the Fornell-Larcker criteria, that is the square root value of the AVE must be greater than the correlation value between variables.¹⁵ The same explanation about the ideal limit of loading factor and AVE¹⁶, that is the value of outer loading between 0.4 to 0.7 is still accepted as long as the AVE value is > 0.5. In this study, a reliability test was conducted using the composite reliability method. If the minimum composite reliability value is above 0.7, then the data is said to be reliable.¹⁷

Hospital's Physical Structures and Facilities (AVE=0.520, CR=0.808)

FIS1	I feel comfortable with the waiting room in this hospital	0.804
FIS2	The ancillary facilities (such as laboratories, radiology, pharmacy) of this hospital are sufficient for my needs	0.804
FIS3	The structure (layout) of the hospital building affects my comfort	0.726
FIS4	The address (location) of the hospital affects my choice of place of treatment	0.510

Word-of-Mouth Behavior (AVE=0.582, CR=0.846)

WOM1	I tell about my treatment experience to relatives/friends	0.808
WOM2	I review/post/tell stories about treatment experiences on my social media (Instagram, Facebook, Twitter, etc.)	0.642
WOM3	I will recommend this hospital to my friends for treatment	0.845
WOM4	I will recommend my doctor to my friends for treatment	0.740

Annotation: AVE=average variance of extracted; CR=composite reliability

Source: Results of Data Processing

The results of the convergent validity test are shown in Table 2, which shows the AVE value of all variables > 0.5, and the outer loading results for convergent validity range from 0.510 to 0.920. The results of the composite reliability test ranged from 0.808 to 0.934. Discriminant validity test has also met the Fornell-Larcker criteria. Thus, the overall results of the measurement model evaluation test have met the predetermined criteria.

Evaluation of Structural Model

In the evaluation of the structural model, the test starts from measuring multicollinearity to find out the relationship between existing independent constructs and the possibility of collinearity. The multicollinearity test was carried out by observing the results of the Variance Inflation Factor (VIF) to detect the presence of collinearity in the independent construct. Hair et al. 16 stated the VIF value must be below 5. If the VIF value exceeds 5, it can be said that the research model has multicollinearity issues. In Table 4 it can be concluded that there are no multicollinearity issues detected in the construct.

Table 4. Collinearity Evaluation

	Word-of-Mouth Behavior
Doctor's Expertise	1.667
Doctor's Communication Skills	1.635
Nursing, Administrative, and Axillary Services	2.180
Hospital's Reputation	1.805
Physical Structures and Facilities of Hospital	2.495

Source: Results of Data Processing

Other than tests conducted for the VIF value, an R-Square test was performed on the structural model. R-Square will describe the extent to which the independent construct describes the

dependent construct. The R-Square test on the word-of-mouth behavior variable is 0.565, which means that the word-of-mouth behavior can be explained by the previous variable by 56.5%.

Hypothesis testing in this study was carried out by looking at the path coefficients by looking at the parameter coefficient values, p-values, and t-statistical significance. P-value and t-statistics appear to indicate the support of a hypothesis. A hypothesis can be said to be significant if the t-statistic value is > 1.65 with a significance level of 5% and p-value <0.05 by considering the direction of the path coefficient.

The hypothesis test shows that hypotheses H1, H2, H4, and H5 are supported, that is doctor's expertise, doctor's communication, hospital reputation, and physical structure and hospital facilities affect word-of-mouth behavior with standardized path coefficient of 0.199, 0.204, 0.339, and 0.212; as well as p-values of 0.044, 0.046, 0.00, and 0.008, respectively. Meanwhile hypothesis H3 is not supported with standardized path coefficient of 0.054 and p-value of 0.469, which indicated that nursing, administration, and support services do not affect word-of-mouth behavior.

DISCUSSION

The result of testing the first hypothesis is that doctor's expertise affects word-of-mouth behavior, hence the results are supported. This is supported by stated that with the increase in the expertise of a doctor, the ability to handle a case will also increase, resulting in a quick decrease of complaints felt by the patients and therefore leading to patient satisfaction.^{6,7,18}

The result of testing the second hypothesis is that doctor's communication affects word-of-mouth behavior, hence the results are supported.

This result is also supported by previous research^{8,9} In contrast to the competence and expertise of doctors which are standardized nationally, the communication skills of each doctor are different and thus become one of the distinguishing factors between doctors. Communication skills played a vital role in the success of medical practice and factors affecting patient satisfaction, adherence, and treatment outcomes¹⁹. Communication skills are also related to the allocation of time given to listening to complaints and answering patients' questions.

The result of testing the third hypothesis is that nursing, administrative, and supporting services affect word-of-mouth behavior, hence the results are not supported. Previous research¹⁰ found that nursing services were related to patient satisfaction, and stated that supporting facilities were also related to patient satisfaction.²⁰ This hypothesis was not supported in our study. One of the reasons underlying these findings is the brief interaction between nurses and patients during outpatient services. Other research stated that nursing and support services play a role in word-of-mouth behavior, especially in emergency and inpatient services.²¹

The result of testing the fourth hypothesis is that hospital reputation affects word-of-mouth behavior, hence the results are supported. This finding is supported by previous research.^{5,11} A hospital with a good reputation will increase patient loyalty to the hospital, and similarly, in our study, it also affects word-of-mouth behavior.

The result of testing the fifth hypothesis is that the physical structure and facilities of the hospital affect word-of-mouth behavior, hence the results are supported. A similar result has been found in a previous study. The physical structure and equipment of the hospital in this study included the comfort of the waiting room, the completeness of the hospital facilities, the structure of the building (layout), and the location of the hospital. Patients will feel more comfortable and satisfied in a one-stop service hospital, meaning that all their needs can be met at the hospital, canceling the obligation to visit other diagnostic facilities or additional procedures outside. The layout, floor plan, and location of the hospital also have to be considered to facilitate the flow of patients for treatment and create a comfortable environment while waiting.^{12,13}

CONCLUSION

Based on the results of data analysis in this study, it can be concluded that doctor's expertise, doctor's communication skills, hospital's reputation, as well as hospital's physical structure and facilities affects patients' *word-of-mouth behavior* at YPK Mandiri Hospital RS, Jakarta. On the other hand, it was also concluded that nursing, *ancillary, and administration services* have no effects on patients' word-of-mouth behavior at YPK Mandiri Hospital RS, Jakarta.

Limitations and Suggestions for Further Research

This study was conducted on patients receiving outpatient treatment at YPK Mandiri Hospital and covered the entire cluster of outpatient services. Therefore, the variables analyzed in this study cannot be generalized to all hospital service units. Suggestions for further studies are researching patient satisfaction with delivery, inpatient service satisfaction, and patient satisfaction in each medical service cluster.

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