



## Pharmaceutical Service Quality and Loyalty at Public Hospital in Bandung Indonesia.

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**Abstract : Introduction:** This study aims at examining the effect of services quality of pharmaceutical service on patient's satisfaction and loyalty on public hospital in Bandung, Indonesia.

**Methods:** The data were collected through questionnaires. It uses Structural Equation Modeling (SEM) to determine the degree of closeness of the examined variables through second order estimation methods of confirmatory factor analysis to determine the effect of direct and indirect independent variable on the dependent variable.

**Results:** the results show that the service quality of pharmaceutical service patient's satisfaction and loyalty of public hospital in Bandung, Indonesia. The results support previous research which states that the service quality of pharmaceutical service influence on patient's satisfaction and loyalty in hospitally.

**Conclusion:** The implication of this study is that the manager of pharmaceutical service needs to improve service quality so that patient's satisfaction and loyalty in hospitally can be improved.

**Keywords :** Service Quality, Pharmaceutical Service, Patient Satisfaction, Loyalty.

### Introduction

In order to give satisfaction to the patient, the pharmacy service becomes one of the factors that affect the realization of the objectives of the policy making. Availability of facilities that support pharmacy services is a factor which is supporting in marketing the product or service. Amenities pharmacy is a form of benefit from hospice services to patient who are given on the basis of a transaction that has been done by both sides.

Their facility pharmacy services is not only an obligation of government, but very necessary, active participation of society, including the private sector as government partners to support each other to improve the health status of the community. The role of government in this case is more focused on the development, regulation and supervision for the creation of equitable health care and the achievement of conditions that harmony and balance between health efforts undertaken by government and society, including the private sector. Private medical care facilities can be hospitals, clinics, polyclinics or clinics, practice together and practice of independent or private. Practice is meant here is a series of activities of health care provided to patients (individuals, families, communities) in accordance with the authority and ability. For service providers, including hospitals, there is one the most important thing in creating a patient satisfaction<sup>1,2,3</sup>. The quality of services as a measure of how good a given level of service able to match the expectations of patients. This is achieved by fulfilling needs and desires of patients and accuracy of delivery to offset expectations Patients<sup>4</sup>.

There is a major factor affecting the quality of service that is expected service and perceived service. This concept is the development of the concept of satisfaction measurement based on technical quality and functional quality<sup>1,2,3</sup>. The technical quality is a primary attribute, such as infrastructure, facilities, healing place while the functional quality includes the attributes of how the delivery of services to patients such as kerahmatan, friendly attitude, waiting time and can be used to improve the quality of pharmacy services in hospitals that can ultimately improve patient satisfaction<sup>5,6,7,8</sup>.

There are a few main characteristics of the services, according to Kotler (2003)<sup>9</sup>, is as follows 1) Intangibility, 2) Inseparability, 3) Variability and 4) Perishability. While the characteristics of hospital services by Pai and Chary (2013)<sup>10</sup> are as follows; 1) Demand for service. The demand for health services can not be on time and sometimes need special attention and need immediate treatment, 2) Inseparability. Patients must come directly to health services, 3) Perishability. When health care is not used then the patient can not be recreated services past and 4) Knowledge disadvantages. Patients do not have much choice but to believe in the clinical need.

Submission of information regarding drug is one form of pharmaceutical services. But most of the information gap in a patient happens to information about issues concerning the availability of pharmaceuticals that reflect a lack of focus on this issue by health professionals<sup>7</sup>. Perception of patients regarding information formed from the pharmacy service hospital image based on experience and references obtained by patients of the ability, attitudes and behavior of hospital providers, which in turn could form the initial perception of the hospital patients that influence patient satisfaction<sup>11,12</sup>. One factor that supports provider in the interaction with patients, associated with positive output in health services as may increase expectations of patients, patient compliance adanyan in healing, can shorten the healing period, and can develop improved general health<sup>13,14</sup>. So the expectations of patients can form images and patient satisfaction when in review the terms of feedback on pharmacy services in hospitals as a form of response of patients after obtaining votes pharmacy services<sup>15</sup>. The hospital mainly government-owned hospitals must be able to be a means for the public health, therefore the health services provided must be qualified in order to satisfy the public as consumers.

One of the main ways of maintaining patient satisfaction by providing higher quality services consistently and meet customer expectations so as to form an optimal patient satisfaction. Research conducted by Chen (2006)<sup>15</sup> shows that there is a significant positive effect on patient satisfaction pharmaceutical services as a whole which needs to be maintained while the tangible attributes pharmacist's attitude needs to be optimized again so it can meningkatkan patient satisfaction. Bunniran (2010)<sup>16</sup> showed there is influence of pharmaceutical services to the satisfaction of patients where interaction pharmacist plays important role in patient loyalty also Khudair & Raza (2013)<sup>11</sup> showed that patient satisfaction on pharmaceutical services is influenced by the service promptness, attitude pharmacist, medical counseling, pharmacy location and waiting area in Qatar hospital then also by Sidharta et al (2016)<sup>8</sup> proved that service quality affected patient satisfaction on pharmaceutical services. Still little research on the quality of existing pharmacy services and research previously has been proved that the quality of health care can provide patient satisfaction in hospitals but do not connect the quality of pharmaceutical services to the patient's loyalty of the hospital so that there is a gap between the quality of pharmacy with the empirical patient's loyalty.

Based on the background and the formulation of the problems that have been described, the research was conducted in order to obtain an overview of facts that the quality of service of Pharmaceutical affect the patient's satisfaction and loyalty at a Public Hospital in Bandung Indonesia.

## Literature Reviews

### Pharmaceutical Service

Pharmaceutical service are forms of service and responsibility of pharmacist in pharmacy work to improve the quality of life of patients (PMK No. 58 2014)<sup>17</sup>. Pharmaceutical service is a collaborative process that aims to identify, prevent and resolve medication issues and problems related to health. So it can be said that the pharmaceutical service is an integral part of the hospital health system oriented to patient care by providing quality drugs including clinical pharmacy services that are affordable for all sections of society.

Pharmaceutical service in terms of providing protection against the patient, function as; 1) Providing information on drugs to other health professionals, the objectives include identifying the results of the treatment

and the ultimate goal of treatment, so that treatment can be accepted for therapy, to apply the use of rational, monitor drug side effects, and determine methods of drug use, 2) to get the medical records to be used medicines are right, 3) Monitor usage oabt whether effective, ineffective, an opposite reaction, poisoning, and if necessary provide advice for modifying treatment, 4) provide guidance and counseling in order to educate the patient, 5) Provide and maintain and facilitate the testing of treatments for patients with chronic diseases, 6) Participate in the management of drugs for emergency services, 7) Development of information services and education for the community, 8) Participation in the assessment of drug use and audit of health and 9) providing education about drugs for health personnel.

Pharmacists must provide correct information, clear and easy to understand, accurate, unbiased, ethical, thoughtful, and current. Drug information to patients at least include: how to use drugs, how drug storage, treatment period, activity and food and beverages should be avoided during treatment.

The procedure remains the drug information service, namely 1) Provide information to patients by prescription drugs or medication record or the health of patients either orally or in writing. Perform literature searches when necessary systematically to provide information, 2) Answering questions from patients with clear and easily understandable, unbiased, ethical, and wise either orally or in writing, 3) displayed brochures, leaflets, posters or health magazine for patient information, 4) Documenting any drug information service activities.

### **Quality of Pharmaceutical Services**

Grönroos<sup>2,3</sup> emphasizes the importance of consumers' assessment of services as a result of a comparison between expectations and performance or experience in using or use the services consisting of what, which include technical quality, including outcome and how, services functional explaining the nature or state of the services consumed. While that is no less important between the two services is brand image. Experience of service users can be categorized into three criteria, namely technical quality, functional quality, and brand image that formed in his mind before or after he consumes services. If their expectations according to what he felt after consuming these services means that service quality was good. In other words, if a positive impression, meaning customers were satisfied or very satisfied, which is an indicator that the services provided have a good quality. If what is perceived consumers are still below expectations, the quality of services is still low. The quality of services is influenced by the perceived service and expected service. Measuring the quality of services is more difficult than measuring the quality of the real product, because the attributes attached to the service is not easy to identify.

In the measurement of patient satisfaction services necessary to first distinguish between the types of services used can not be all dimensions of service quality measurements can be applied to the business services sector. There are some differences between service businesses that have certain characteristics in health care. According to Pai and Chary (2013)<sup>10</sup> characteristics of health care, namely; 1) Healthcare is a need service, 2) lack of control, 3) surrender confidentiality, 4) healthcare services are labor and skill intensive, 5) made-to-order, and 6) collaboration. According Khudair and Raza (2013)<sup>11</sup> dimensions of hospital pharmacy services for the government are as follows; Pharmacist communication skills, Pharmacy location, Medication teaching, Service promptness, attitude and empathy Pharmacist, Medication availability, quality and quantity, and Pharmacist work skills and competence.

### **Patient Loyalty**

Loyalty is a person against an object of loyalty or commitment to customers to a brand, store or supplier, based on a very positive attitude and reflected in a consistent repeat purchases (Wu, 2011)<sup>18</sup>. While the customer loyalty defined by Dick and Basu (1994)<sup>19</sup> as a response are closely linked to pledge or promise to uphold the commitment of the underlying continuity of the relationship, and usually reflected in sustainable purchasing from providers of similar services on the basis of dedication and pragmatic constraints. Patient's loyalty make repurchasing and sustained by positive words. Patients will provide economic value to the hospital. Patient's loyalty is an invaluable asset to the hospital, while the characteristics of patients who are loyal is that they keep making repurchasing, buying between product lines and services, referencinto others, and showing resistance to the competitors. Wu (2011)<sup>18</sup> state that customer loyalty is an endogenous variable caused by a combination of satisfaction so that customer loyalty is a function of satisfaction. Positive patient preference will form trustwhich in turn can provide a positive judging to the hospital<sup>16, 20, 21</sup>.

## Research Framework and Hypotheses

The image of pharmaceutical services can be used as a factor for evaluating the quality of pharmaceutical services by the hospital to the patient. Interactions between patients with officers and facilities available in the hospital environment in general influenced the image of the hospital. Impressions and experiences patients feel better on experience and the experience of others during the process of health care will affect the perception of the patients. Whether or not the image of pharmaceutical services depend on the efforts hospitals provide quality pharmaceutical services to patients. The target that is expected is that every patient who has utilized keparmasian services will be satisfied and believe in the quality that has been received, and make pharmaceutical services such as a place to improve health. If a hospital has been successfully providing pharmaceutical services with a well that can give satisfaction to the patient, it means that the hospital has had good quality. Thus, it will create a positive image of the patient. The quality of pharmaceutical services in hospitals reflected the patients' perception of health services received and that perception will continue in the process the high satisfaction will increase patient's loyalty<sup>18</sup>.

## Methods

The population in this study is patients with revisited patient in a public hospital in Bandung, Indonesia, RSUD Dr. M. Salamun who have never received the overall process in health care. The amount of sample determined by purposive sampling. The final sample that can be used is 181 people.

The method used in this research is the survey method, the measurement process to gather information with a higher structure called a questionnaire. Survey methods specified an explanatory survey because it would explain the relationship between the studied variables (Hair et al, 2006)<sup>22</sup>. Data collection methods used by the researchers are to disseminate the questionnaire or questionnaires. While the kind of scale that is used to answer questions in the questionnaire was a Likert scale of 5 points is the method used to measure perceptions of a person of social phenomenon that aims to know the opinion of the respondents about the quality services of pharmaceutical service toward patient's satisfaction and loyalty.

The independent variable is used as an exogenous construct is a quality services of pharmaceutical service. The dependent variable is a variable that is affected (response) or a variable whose value depends on other variables change. The dependent variable is used as an endogenous construct is patient's satisfaction and loyalty.

The service quality of pharmaceutical service variabel domains included in the survey were 5 dimension namely; service promptness, pharmacist attitude, medical coaching, pharmacy location and waiting area and the indicator of instrument was adopted from Khudair and Raza (2013)<sup>11</sup> such as; 1) Receive medications, 2) Waiting time is acceptable, 3) Pharmacist helped, 4) Pharmacist answered, 5) Pharmacist understood, 6) Pharmacists treat, 7) Medication quantity, 8) medications were available, 9) Medication name was clear, 10) Medication appearance, 11) pharmacy was easily found, 12) waiting area was comfortable, 13) pharmacy area was clean, 14) pharmacy working hours. Moreover, were 5 items and the instrument was adopted from a study by Johnsons et al, (2001)<sup>23</sup> which had been modified in accordance with the study, namely 1) It can be trusted in what it says and does, 2) It is stable and firmly established, 3) It has a social contribution for society, 4) It is concerned with patient. Loyalty instrument was adopted from a study by Oliver, (1996)<sup>24</sup> which had been modified in accordance with the study, namely 1) conduct regular purchase or repurchase, 2) feeling happy patient treatment at the hospital, 3) the desire of patients to return to hospital treatment, 4) confidence patients with quality of care in hospitals, 5) the patient refused offers another hospital, and 6) patients are recommended to others about the hospital.

Measurement models Partial Least Squares (PLS) based on measurement predictions have the nature of non-parametric through convergent validity, ie where the size of the reflective individual correlated with the value of loading greater than 0,50 (Chin, 1988)<sup>25</sup> and the value discriminant validity by comparing the value of the square root of average variance extracted (AVE) of each construct with the correlation between the constructs in the model, if the value AVE is greater than the value of the correlation between the constructs models discriminant then said to have good validity (Fornell & Larcker, 1981)<sup>26</sup>. While the structural models were evaluated using R-squares for the dependent constructs, Stone-Geiser Q-square test to test and p value predictive relevance and significance of the parameters of structural lines (Kock, 2015)<sup>27</sup>. Data analysis was performed by entering all the data of respondents and test the convergent validity, discriminant validity and

significance tests. The results indicate that all indicator meet the loading value greater tahn 0.5 and eligible for testing models of Partial Least Squares (PLS).

**Results and Discussion**

Analysis profile of respondents intended to identify data based on respondents by sex, the last education,age, employment and number of visits. In accordance with the results of research conducted, there were 181 respondents who filled out questionnaires and all of them are eligible for further processing. Profile of respondents is shown in Table 1.

**Tabell Characteristic of Respondents**

No	Item	Category	%
1	Gender	male	0.43
		female	0.52
2	Age	17-32 years old	0.19
		33-48 years old	0.40
		49-64 years old	0.24
		65-80 years old	0.09
3	Education	Senior High School	0.19
		Diploma/Bachelor	0.45
4	Occupation	Unemployment	0.09
		Entrepreneur	0.12
		Government employee	0.49
		Private employee	0.21
5	Number of visit	2 - 4 times	0.49
		5 - 7 times	0.35
		8 - 10 times	0.06
		>10 times	0.01

Based on the results of data processing are known as follows:

**Tabel2Result of structural model**

	<i>Path Coefficients</i>	<b>P Values</b>	<b>Decision</b>
Promptness ->Satisfaction	0.08	0.02	Significant
Supply ->Satisfaction	0.05	0.23	No Significant
Attitude ->Satisfaction	0.07	0.03	Significant
Place ->Satisfaction	0.18	0.00	Significant
Teach ->Satisfaction	0.46	0.00	Significant
Satisfaction ->Loyalty	0.26	0.00	Significant

**The Influence of Service Quality towards Patient’s Loyalty**

The hypothesis to be tested is the influence of the quality of services to image. Based on the test results can be seen that only one dimension is not significant with p value variable quality of services (0.23) is greater than p value. Because p value greater than error rate of 5% -10 % so it was decided to reject Ha and Ho received. So based on the test results it can be concluded that only one dimension of the quality of services not significantly influence on patient’s satisfaction. Then the R<sup>2</sup>of service quality amounted to 33 % and 7% for patient’s satisfaction and loyalty.

The test results prove the hypothesis that service quality of pharmaceutical has positive influence on patient's satisfaction; can be interpreted if the quality of service promptness, the quality of the pharmacist attitude, the quality of the medical counseling and the quality of the pharmacy location and waiting area, tends to improve patient's satisfaction.

So hospitals need to improve pharmaceutical service by doing some quality improvement through improved service promptness, attitude pharmacist, medical counseling, pharmacy location and waiting area. The quality of pharmaceutical service has a close relationship with the patient's satisfaction, because the quality of encouraging patients to establish stronger ties with pharmacy services and ultimately patient satisfaction can increase patient loyalty. The pharmaceutical service aims to provide quality patient satisfaction through the creation of a positive image on pharmaceutical service. Patient's satisfaction to pharmacy services is determined by the level of interest of the patient before and after of used the patients' perception of the pharmaceutical services had felt after the patient perceives the performance of such services exceeds reality desired expectations, causing a sense of satisfaction and patient's loyalty. The results support previous research conducted by Sidharta *et al* (2016)<sup>8</sup>, Juhana *et al* (2015)<sup>4</sup>; Padma *et al* (2010)<sup>5</sup>; Auyeung *et al* (2011)<sup>7</sup>; Khudair and Raza (2013)<sup>11</sup>; Atiga (2012)<sup>6</sup>.

## Conclusion

Based on the results of the research that has been done on the effect of quality of pharmaceutical service on image in public hospital in Bandung, Indonesia which showed that the quality of pharmaceutical service affected brand image. Service quality partially has significant effect on service promptness, pharmacist attitude, medical counseling, pharmacy location and waiting area toward patient's satisfaction and loyalty. Some limitations and at the same advice that deserves attention is the following. First, the results of this study are expected to be a valuable input for further research, especially related to quality of pharmaceutical service, patient's satisfaction and loyalty variable. For, it is advisable to future researchers in order to examine these variables in greater depth, especially concerning its dimensions in a more restrictive loading factor and the unit of analysis in health workers, certain clinic, environment on hospital both public or private sector.

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