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## Level of Satisfaction and Loyalty of Mothers towards Delivery Services at Labuang Baji Hospital, Makassar

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### ABSTRACT

The 2015 MDG target for maternal mortality rate is to reduce the ratio of up to 110 maternal deaths for every 100,000 births. Until now, MMR in Indonesia is still above 305. Since 2015, the emphasis on safe labor is labor delivered by health workers in health care facilities. The purpose of this study was to analyze the relationship between the level of maternal satisfaction in each dimension of the quality of delivery services with maternal loyalty to reuse hospital facilities and recommend them to others. This analytic observational study used a cross-sectional approach. The subjects of this study were 67 mothers who used delivery services at Labuang Baji Hospital, Makassar, which were selected by simple random sampling technique. The study was conducted from October to November 2018, using a measuring instrument developed by researchers. The results showed that the dimensions of the quality of delivery services at the hospital had satisfied patients, starting from the highest level of assurance, reliability, empathy, tangible, and responsiveness. These five dimensions correlate significantly with loyalty to hospital reuse and the patient's willingness to recommend these facilities to others.

**Keywords:** Service quality, Delivery services, Loyalty, Recommendations

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### INTRODUCTION

#### Background

One indicator that is a measure of the success of maternal health and community welfare in a country is the Maternal Mortality Rate (MMR). WHO defines maternal mortality as death that occurs during pregnancy or within a period of 42 days after the pregnancy ends, which is caused by all causes related to or aggravated by pregnancy or its handling, but not due to accidents / injuries<sup>(1)</sup>.

The results of the Indonesian Demographic and Health Survey (IDHS) in 2012 showed that MMR in Indonesia was still high at 359 per 100,000 live births. This figure shows a decrease when compared with the 1991 AKI of 390 per 100,000 live births. However, this achievement is still far from the MDGs (Millennium Development Goals) global target of reducing MMR to 102 per 100,000 live births in 2015. The 2015 Intercensal Population Survey (SUPAS) showed that MMR in Indonesia was 305 deaths per 100,000 births life<sup>(2),(3)</sup>.

One effort to reduce maternal mortality and infant mortality is by encouraging each birth to be assisted by trained health personnel, namely obstetrics and gynecology specialists, doctors and midwives; and sought to be done in health care facilities. The success of this program is measured through an indicator, namely the percentage of deliveries in health care facilities. Since 2015, the emphasis on safe labor is labor assisted by health workers in health care facilities. The Directorate General of Nutrition and KIA, Ministry of Health of the

Republic of Indonesia has set a key performance indicator, namely the increasing proportion of deliveries carried out in health care facilities in accordance with the standard, which is 85% by the end of 2019<sup>(4)</sup>.

Based on this description, it is necessary to know maternal satisfaction with delivery services at Labuang Baji Hospital, Makassar and relate them to maternal loyalty to use hospital facilities in the future, and the mother's desire to recommend this hospital service to others. Labuang Baji Hospital, Makassar is a Type B hospital belonging to the South Sulawesi Provincial Government, which was established on June 12, 1938. This hospital is a referral hospital that provides obstetric and gynecological services for both general patients and patients with health insurance coverage.

Parasuraman, et al. (1988) defines service quality as a discrepancy between expected service and perceived service<sup>(5)</sup>. The same assumption stated by Pohan (2003) that quality health services are services that are in accordance with the expectations and needs of patients, as measured by patient satisfaction or complaints. In this case, what is important is what is seen, heard and experienced by consumers or patients<sup>(6)</sup>.

Parasuraman et al.<sup>(7)</sup> have concluded that service quality can be described on a 10-dimensional basis, but it turns out that customers can only distinguish 5 dimensions, namely:

1. Responsiveness, namely the ability of officers to provide services to consumers quickly.
2. Reability, namely the ability of officers to provide services to consumers appropriately.
3. Assurance, namely the ability of officers to provide services to consumers so that they are trusted.
4. Emphaty, namely the ability of officers to foster relationships, attention, and understand consumer needs.
5. Tangible, namely the availability of facilities and physical facilities that can be directly felt by consumers.

Patient satisfaction is a level of feeling of the patient that arises as a result of the performance of the health service obtained, after the patient compares it with what he expected. The level of patient satisfaction can be measured both quantitatively and qualitatively. Accurate level of patient satisfaction is needed in an effort to improve the quality of health services<sup>(6)</sup>.

The level of satisfaction is the feeling of being happy or disappointed someone who appears after comparing between perceptions / impressions of the performance or the work of a product with expectations. Satisfaction is an indicator of service quality<sup>(8)</sup>. Measuring the level of patient satisfaction is important and needs to be done in conjunction with measuring the quality dimensions of health services. So it can be concluded that patient satisfaction is the outcome of health services. The results of measuring patient satisfaction will be used as a basis to support changes in the health care system, so that the devices used to measure patient satisfaction must be reliable and reliable<sup>(6)</sup>.

## Purpose

The purpose of this study was to analyze the relationship between the level of maternal satisfaction in each dimension of the quality of delivery services with maternal loyalty to reuse hospital facilities and recommend them to others.

## METHODS

This study was an analytic observational study with a cross-sectional approach to see the relationship between the level of maternal satisfaction with each dimension of the quality of delivery services with maternal loyalty to reuse hospital facilities and recommend them to others. The research location is Labuang Baji Hospital, Makassar, South Sulawesi, Indonesia. The research was conducted from August to November 2018. The population of this study were all mothers who received delivery services at Labuang Baji Hospital, Makassar. Samples were mothers who had undergone labor in the delivery room during the study. Samples taken must meet the predetermined sample criteria, namely: 1) willing to be the subject of research; 2) utilizing services in the hospital delivery room, 3) the general condition of the mother is good. The sample size was determined using a formula from Lemeshow (1994), with  $Z = 1.645$  ( $\alpha = 0.10$ ; two tail hypothesis). The basic health research 2013 results showed that the proportion of mothers giving birth at health care facilities was 57%, so that  $P = 0.57$  was obtained. The absolute error value that can be tolerated used in this study is 10%. Based on the formula, the sample size is 67 mothers. Sampling is done by simple random sampling technique, using the sampling day of the visit of the researcher. The researcher will randomly select the day of the visit, so that a 15-day visit is obtained for 1 month until the sample size is met. If the sample members are still lacking, then 1 week will be added and a 3-day visit is chosen for the week until the research sample size is met. Sampling will be stopped if the sample size has reached 67 people.

The research hypothesis is stated as follows:

1. There is a positive correlation between each dimension of the quality of delivery services with patient loyalty to reuse Labuang Baji hospital services, Makassar.

2. There is a positive correlation between each dimension of the quality of delivery services with the mother's desire to recommend Labuang Baji, Makassar hospital services to others.

The instruments used in this study consisted of 3 parts. The first part contains instructions for filling out the questionnaire, the general characteristics of respondents which include initials, age, education, and occupation. The second part is a questionnaire about maternal satisfaction with the five dimensions of service quality obtained in the Obstetrics Room, Labuang Baji Hospital, Makassar. The tangible dimension consists of 8 statements, the reliability dimension consists of 9 statements, the responsiveness dimension consists of 5 statements, the assurance dimension consists of 6 statements, and the empathy dimension consists of 5 statements. The third part is the maternal loyalty measurement questionnaire which contains two statements. All statements in the second and third parts use the Likert Scale with 5 alternative answer choices which are very good, good, sufficient, bad, very bad.

The analysis used in this study is descriptive analysis to determine the frequency, percentage, mean, median, and mode of each variable. To determine the correlation between dimensions of service quality, researchers used the Spearman correlation test. Data from research results are displayed in the form of frequency tables, tables of correlation test results, pie charts, and interpreted narratively.

## RESULTS

### Characteristics of Mothers

Most mothers are 26-30 years old. Most of the education levels of mothers are high school. Most mothers act as housewives. Complete data is shown in table 1.

Table 1. The characteristics of mothers

Characteristics	Frequency	Percentage
Age (years)		
16-20	8	11.9
21-25	20	29.9
26-30	21	31.3
31-35	16	23.9
36-40	1	1.5
41-50	1	1.5
Education		
Elementary school	4	6.0
Junior high school	4	6.0
High school	45	67.2
Diploma	7	10.4
Undergraduate	7	10.4
Job		
Civil servant / army / police officer	6	9.0
Entrepreneur	3	4.5
Housewife	58	86.6

### Mother Satisfaction with Service Dimensions

Table 2 shows that mothers are satisfied with all dimensions of service quality. The dimension that provides the most satisfaction is assurance. While the dimension that gives the least satisfaction is responsiveness.

Tabel 2. Mother satisfaction with service dimensions (n = 67 people)

Variables	Frequency	Percentage
Reliability		
Satisfied	37	55.2
Less satisfied	30	44.8
Responsiveness		
Satisfied	34	50.7
Less satisfied	33	49.3
Assurance		
Satisfied	46	68.7
Less satisfied	21	31.3
Emphaty		
Satisfied	37	55.2
Less satisfied	30	44.8
Tangible		
Satisfied	35	52.2
Less satisfied	32	47.8

### Mother Loyalty to Hospital Services

From Table 3, it can be seen that most mothers are loyal to Labuang Baji hospital services in Makassar to reuse it in the future and wish to recommend it to others who need information about delivery services in Makassar City.

Tabel 3. Mother loyalty to hospital service (n = 67 people)

Variables	Frequency	Percentage
Loyalty		
Loyal	64	95.5
Less loyal	3	4.5
Recommendation		
Recommend	65	97.0
Less recommend	2	3.0

### The Correlation between Satisfaction with the Dimensions of Childbirth Services with Mother Loyalty to Hospital Services

Referring to Table 4, it can be seen that all service dimensions correlate significantly with loyalty to reuse hospital services and recommend hospital services to others who need information about delivery services. From all these dimensions, the dimension that has the strongest influence on customer loyalty is assurance, then sequentially followed by tangible, reliability, responsiveness, and empathy. All dimensions also influence the mother's desire to recommend Labuang Baji hospital services to others. The dimensions that have the strongest influence are assurance, then sequentially followed by tangible, reliability, responsiveness, and empathy.

Tabel 4. Correlation matrix

Variables	Loyalty	Recommendation
Reliability	0.419	0.430
p-value	0.000	0.000
Responsiveness	0.351	0.402
p-value	0.004	0.001
Assurance	0.543	0.547
p-value	0.000	0.000
Empathy	0.287	0.345
p-value	0.019	0.004
Tangible	0.489	0.525
p-value	0.000	0.000

## DISCUSSION

The results of this study indicate that customers are satisfied with the five dimensions of service available at Labuang Baji Hospital, Makassar. Labuang Baji Hospital, Makassar, which was established in 1938, should have quality services with 80 years of service experience. The status of the hospital as an asset of the South Sulawesi Provincial Government is also a strategic position, because it has the support of the government, ranging from aspects of planning, governance, financing, infrastructure, human resources, monitoring and evaluation, and supervision.

The results of this study are in line with the results of research by Hardi (2010) who reported that the quality of inpatient services at Pasaman Barat hospitals showed good quality and patients were satisfied with the services they received.<sup>(9)</sup> The results of this study are also in line with the results of the Utama's study (2003) which showed that the patients of Cakra Husada Hospital, Klaten had a satisfying perception of the service quality they received which included tangible, reliability, responsiveness, assurance and empathy dimensions.<sup>(10)</sup>

The research conducted at Labuang Baji Hospital, Makassar, found that of the five dimensions of service quality, the most satisfying dimension was the assurance dimension. This dimension includes the availability of specialists, physician behavior that creates a sense of security, educated midwives / nurses who are able to serve patients, affordable care costs, maintain patient confidentiality while in the delivery room, and provide assurance for patient delivery. The advantages of delivery services at Labuang Baji Hospital, Makassar are seen in this dimension. Delivery services at Labuang Baji Hospital, Makassar are equipped with the availability of 24-hour specialist doctors and nurses / midwives with a minimum Diploma-3 educational qualification in accordance with the standards set out in Law No. 36 of 2014 concerning Health Workers, Article 9: Health workers must have a minimum Diploma 3 education qualification.<sup>(11)</sup> The better the education qualifications of health workers, the better their ability to serve patients. This is supported by the Kambuaya study (2016) which found that there was a significant relationship between the level of nurse education and the length of work with the performance of nurses in Sorong Regency hospital.<sup>(12)</sup>

Labuang Baji Hospital, Makassar serves patients who participate in the National Health Insurance (JKN) program organized by the government, both BPJS participants and users of the "Healthy Indonesia Card" (KIS). The availability of these services increases the perception of the quality of delivery services in hospitals, especially with the prices of services that are increasingly affordable by the community. This is in line with the results of Yuniarti's research (2015) which states that there is a relationship between the quality of hospital services and the satisfaction level of BPJS patients in the Nursing Room, Sultan Syarif Mohamad Alkadrie Hospital, Pontianak City.<sup>(13)</sup>

The results of this study found that the five dimensions (reliability, responsiveness, assurance, empathy, and tangible) have a significant relationship with customer loyalty to reuse the services of Labuang Baji, Makassar hospital as a place of delivery. This finding is in line with the results of the study of Gunawan & Djati<sup>(14)</sup> who found that service quality consisting of tangible, reliability, responsiveness, assurance, and empathy had an effect on patient loyalty. The dimension of reliability is the most dominant dimension affecting loyalty.

The results of this study are also in line with the results of the research of Caruana (2002) which states that service quality affects consumer loyalty.<sup>(15)</sup> According to Rifai (2005), public perceptions about the quality of health care services and their effects on the use of health services are key indicators in the success of health service delivery services.<sup>(16)</sup> The results of this study are also in line with the statement of Parasuraman, et al. (1994) that five dimensions of service quality have an important role in formulating customer loyalty levels.<sup>(7)</sup>

The dimensions of reliability in service quality are shown in the form of speed of service, accuracy and satisfactory service. This has an impact on customer loyalty on products or services from a company. Lovelock & Wright (2005) also explained that alignment between services provided and those needed needed to be adjusted from time to time.<sup>(17)</sup>

Related to the dimension of responsiveness; doctors, midwives and nurses who provide good service will trigger the formation of a family relationship which will ultimately have an impact on increasing patient loyalty to the hospital. Sabihaini (2002) in his research stated the influence of responsiveness to patient loyalty.<sup>(18)</sup>

Tangible displayed by the hospital to patients include hospital facilities, equipment, friendliness of doctors, midwives, and nurses will affect the level of patient loyalty. The more patients feel the tangible value provided by the hospital, the higher the patient's loyalty. Lovelock & Wright (2005)<sup>(17)</sup> in his research found that tangible provides guidance on service quality and has an influence on customers in providing an assessment of these services. Thus, it is necessary to consider the nature of the tangible for recipients of services.

The dimensions of assurance include aspects of knowledge, abilities and skills, politeness, and trustworthiness of doctors, nurses, and midwives to patients. The values contained in it will shape patient loyalty to the hospital. Research by Cronin et al. (2000) found that the guarantee dimension has a positive influence on loyalty.<sup>(19)</sup>

In this study, it was found that statistically, empathy dimension had the weakest correlation (0.287) with patient loyalty (0.287) and had a weak correlation (0.345) with the patient's desire to recommend Labuang Baji, Makassar hospital to others; but statistically, it still has a significant relationship with loyalty (0.019) and the mother's desire to recommend to others (0.004). Empathy in this study includes the efforts of doctors to calm patients' anxieties about labor undertaken, midwives / nurses take special time to communicate with patients, midwives / nurses always remind safety of storing patient and family valuables, time to consult the patient's family is fulfilled, and the attention of officers to entertain and encourage patients to quickly recover and pray for them. This study shows that the empathy dimension of delivery services has a weak influence but is statistically significant.

The empathy dimension includes the attention and understanding of the service agent to customer needs and communication relationships. If the customer feels that the officer at the hospital is able to show empathy and attention to the patient, they have no doubts about receiving the services provided. This then forms the level of customer loyalty. Haryono et al. (2006) provide a conclusion that attention has a relationship with patient loyalty.<sup>(20)</sup>

Of the five dimensions of the quality of delivery services at Labuang Baji Hospital, Makassar, the researchers concluded that the greatest dimensions of satisfaction for consecutive patients were assurance, reliability, empathy, tangible and responsiveness. The dimensions that have the strongest to the weakest influence on the loyalty of patients to reuse Labuang Baji hospitals in consecutive delivery services are assurance, tangible, reliability, responsiveness, and empathy. While the strongest dimension to the weakest influence on the patient's desire to recommend delivery services at Labuang Baji Hospital, Makassar to others in a row is assurance, tangible, reliability, responsiveness, and empathy.

## CONCLUSION

Based on the results of the research, it can be concluded that the delivery service at Labuang Baji Hospital, Makassar has provided satisfaction for the service users. Of the five dimensions of the quality of delivery services at Labuang Baji, Makassar hospitals, the biggest dimensions that give satisfaction to patients in a row are assurance, reliability, empathy, tangible, and responsiveness. The dimensions that have the strongest to the weakest influence on the loyalty of patients to reuse Labuang Baji hospitals in consecutive delivery services are assurance, tangible, reliability, responsiveness, and empathy. The strongest dimension is the weakest influence on the willingness of patients to recommend labor services at Labuang Baji, Makassar, to other people in a row are assurance, tangible, reliability, responsiveness, and empathy.

Based on the conclusions described above, the researcher gives advice to the management of Labuang Baji hospital to focus more on improving service quality on aspects of service dimensions in sequence according to priorities, namely responsiveness, tangible, empathetic, reliability and assurance. Doctors, midwives, and nurses who are in charge of the delivery service room need to increase responsiveness by always asking the patient's complaints, giving patients the opportunity to ask questions, explain the patient's condition, be friendly and polite, and always pay attention to the needs and complaints of patients. The South Sulawesi Provincial

Government as the policy maker of hospital management must continue to pay attention to the availability of delivery service facilities although currently in the process of building new buildings and building renovations, so that customer satisfaction is not reduced. Attention of officers in the maternity room to patients and families must be continuously improved in order to reduce patient doubts about the services provided.

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