ORIGINAL ARTICLE

Analysis of Customer Requirements and Technical Requirements for Inpatients at Bhayangkara Hospital, Kendari City

Lodes Hadju¹, Sartini Risky¹, Nisha Nambiar², Ruma Poddar³

- ¹ STIKES Mandala Waluya Kendari, Indonesia
- ² Nursing Faculty, Lincoln University College, No. 2, Jalan Stadium, SS 7/15, Kelana Jaya,47301, Petaling Jaya, Selangor Darul Ehsan, Malaysia
- ³ Department of Research & Development, Lincoln University College, No. 2, Jalan Stadium, S7/15, 47301 Petaling Jaya, Selangor, Malaysia

ABSTRACT

Introduction: The number of inpatient visiting the Bhayangkara Level III Hospital in Kendari City in 2016 was 2322 people, in 2017 there were 3611 people, in 2018 there were 3488 people and from January to November 2019 there were 4243 people. **Methods:** This research uses descriptive analysis method with a quantitative approach. This research is a case study of the service quality of the Bhayangkara Level III Kendari Hospital. In this study, the sample was taken using simple random sampling technique, in which each element was selected randomly. **Results:** There are 25 customer requirements for services in the Inpatient Installation of Bhayangkara Hospital, Kendari City which can be categorized into 8 dimensions of service quality according to Brown with priority order based on the level of importance (Tke), namely: 1) Safety Dimensions (98.6%); 2) Dimensions of Interpersonal Relations (98.6%); 3) Dimensions of Continuity (97.1%); 4) Dimension of Effectiveness (97.1%); 5) Efficiency Dimension (97.1%); 6) Dimension of Convenience (97.1%); 7) Dimensions of Access to Services (92.9%) and 8) Dimensions of Officer Competence (92.9%). **Conclusion:** According to the results of this research it is found that nurses did not take special time to communicate with patients. The officers were warm to patients, doctors always heard complaints and stories of patients, pharmacy officers always prayed for patients to get well soon.

Keywords: Customer Requirements, Technical Requirements, Bhayakara Hospital TK III Kendari

Corresponding Author:

Lodes Hadju, MKes Email: lodeshadju.phd@gmail.com

Tel: +62 852-9837-6699

INTRODUCTION

In the current era of globalization, business competition has become very sharp, both in the domestic (national) market and in the international or global market. To win the competition, a company must be able to provide satisfaction to its customers, for example by providing a higher quality product, cheaper, and better service than its competitors. A product is said to be of good quality if it can meet the needs of its customers. Therefore, knowledge of customer requirements is very important. In all levels of service there is business competition including health sector and hospital (1).

Hospital must provide quality care to stay afloat and increase revenue generation from patients, either directly (out of pocket) or indirectly through health insurance. Without the presence of patients, hospitals cannot survive and develop. So, they must consider the very high costs of hospital operations and plan their

healthcare strategies accordingly. One of the main ways to differentiate health care services is to consistently provide quality health services, higher than competitors. The key is meeting or exceeding patient expectations about the quality of service they receive. The patients after receiving health services will examine the services according to their expectation. If the services experienced are below the expected they may not return (2).

Business competition in the health sector is also found at all levels of services at Puskesmas including primary health services. Inpatient service at the Bhayangkara Level III Hospital Kendari City is treated like a product because it is a necessity by the community and its surroundings. Due to public interest the utilization of inpatient services continues to increase. It is also found that the utilization and income of hospitalization also increases from year to year. Likewise the Bed Occupation Rate (BOR) for inpatient services at the Bhayangkara Level III Hospital in Kendari City in 2017 reached 74%, in 2018 it was 78% and in 2019 it reached 80%. Ideally the ideal BOR for a hospital is 75%-85%. In order to maintain and increase the number of visits it is necessary to develop a design for the quality of inpatient services that can meet or exceed customer expectations and

needs. There is a method that can be used to develop a quality designnamely the Quality Function Deployment (QFD) (3).

From the data obtained from the Bhayangkara Level III Hospital Kendari City, the number of inpatients in 2016 was 2322 people, in 2017 there were 3611 people, in 2018 there were 3488 people and from January to November 2019, there were as many as 4243 people. It is observed from the initial survey that in the inpatient room of the Bhayangkara Level III Kendari Hospital, there were patient complaints related to services in the inpatient unit. Therefore, an effort is needed to determine the quality of service based on the needs of the patient which is expected to increase service utilization in inpatient units (4).

MATERIALS AND METHODS

This research uses descriptive analysis method with quantitative approach. This study was done to assess the service quality of Bhayangkara Hospital Level III Kendari. The research conducted on the hospital management and surveys of inpatients of Bhayangkara Hospital Level III Kendari based on the quality of inpatient services provided. Ethical approval for this study was obtained from the Head of Ethics Committee for Health Research, STIKES Mandala Waluya (Reference No 1432.D/STIKES_MW/X/2019).

RESULTS

Service Quality based on the level of importance (Tke)

Table I shows the frequency Distribution of Service Quality Variables based on the level of importance (Tke) using Brown's theory at Bhayangkara Kendari Hospital. From the table above it can be concluded that the variable service satisfaction is based on the level of importance with the highest important category on the Interpersonal Relationship and Safety (98.6%), while the highest in the insignificant category is on the officers' technical competence variables and access to services (7.1%).

Service Quality based on performance level (TKI)

From the Table II it can be concluded that the variable service satisfaction based on the level of performance with the highest good category is on the effectiveness and continuity variable (98.6%) while the highest is in the unfavorable category on the interpersonal relationship variable (5.7%).

Customer Requirements Analysis

Table III shows that in the officer competency dimension, the highest important value according to the level of importance is point three, namely the knowledge and ability of doctors to make a correct diagnosis (there is no misdiagnosis), this was seen among 42 respondents. While the highest insignificant answer is for point one,

Table I: Frequency Distribution of Service Quality Variables based on the level of importance (Tke) using Brown's theory at Bhayangkara Kendari Hospital

Service Quality Based on Tke	total	l Percent (%)			
Officer Technical Competence Important Less Important	65 5	92.9 7.1			
Access to services Important Less Important	65 5	92.9 7.1			
Effectiveness Important Less Important	69 1	98.6 1.4			
Interpersonal Relations Important Less Important	69 1	98.6 1.4			
Efficiency Important Less Important	68 2	97.1 2.9			
Continuity Important Less Important	68 2	97.1 2.9			
Safety Important Less Important	69 1	98.6 1.4			
Comfort Important Less Important	68 2	97.1 2.9			
Total	70	100			

Source: Primary data, 2020

Table II. Frequency Distribution of Service Quality Variables based on the level of performance (TKI) using Brown's theory at Bhayang-kara Kendari Hospital

Service Quality Based on Tke	total	Percent (%)
Officer Technical Competence Important Less Important	67 3	95.7 4.3
Access to services Important Less Important	67 3	95. <i>7</i> 4.3
Effectiveness Important Less Important	69 1	98.6 1.4
Interpersonal Relations Important Less Important	66 4	94.3 5.7
Efficiency Important Less Important	67 3	95.7 4.3
Continuity Important Less Important	69 1	98.6 1.4
Safety Important Less Important	68 2	97.1 2.9
Comfort Important Less Important	68 2	97.1 2.9
Total	70	100

Source: Primary data, 2020

namely the officer providing information, 7 respondents clearly understood this.

Table III: Results of the Customer Requirements Analysis of the competency dimensions of officers and the Level of Importance of Service Quality at Bhayangkara Kendari Hospital

Service Aspects		Tke					
	SP	Р	KP	TP	Value		
Officer Competence							
Officers provide information that is clear and easy to understand	36	27	7	0	4		
The ability of doctors and nurses to respond quickly to patient complaints	36	27	6	1	4		
Knowledge and ability of doctors in making a correct diagnosis (there is no misdiagnosis)	42	22	6	0	4		
Access to Services							
Adequate parking area	30	25	14	8	4		
Fast and precise admission procedure	32	31	7	0	4		
Availability of general practitioners and specialists	40	20	10	0	4		
Effectiveness							
Medicines and treatments performed by doctors and nurses are in accordance with the patient's needs	31	29	10	0	4		
Service procedures are not complicated	37	26	7	0	4		
Availability of drugs that the patient needs	32	29	8	0	4		
Interpersonal Relations							
The officer gives attention to the patient	24	37	9	0	3		
officers want to listen to patient complaints	24	35	11	0	3		
the clerk is patient, friendly and friendly to the patient	26	34	8	2	3		
Efficiency							
Charging of applicable tariffs	23	39	8	0	3		
Health insurance can be used in accordance with the required health services	36	28	6	0	4		
The length of stay in the hospital is in accordance with the action / treatment required	40	20	10	0	4		
Continuity							
Services are provided complete according to patient needs	38	24	8	0	4		
The accuracy of the doctor's visit schedule (08.00-14.00)	32	31	7	0	4		
The hospital keeps patient medical records properly	40	23	7	0	4		
Safety							
Patients receive safe health services	39	23	7	1	4		
Doctors and nurses wash their hands after patient contact	39	20	11	0	4		
Staff maintain disease confidentiality and patient privacy	33	19	18	0	4		
Comfort							
The building and rooms were clean and comfortable	28	25	17	0	4		
Buildings and rooms are equipped with clear signs	36	22	11	0	4		
Toilets were clean and adequate	30	25	14	1	4		

Source: Primary data, 2020

The dimension of access to services the highest value according to the level of importance, is at point three, namely the availability of general practitioners and specialists which was noticed among 40 respondents, while the highest insignificant answer according to the level of importance is at point one, namely an adequate parking area which was seen among 14 respondents.

The dimension of the effectiveness of the highest value according to the level of importance is at point two, namely the non-convoluted service procedure among 37, while the highest insignificant answer according to the level of importance is at point one, namely Treatment and care carried out by doctors and nurses according to the needs of patients as many as 10 respondents.

In the dimension of interpersonal relations, the highest value according to the level of importance is at point two, namely the officers are friendly towards patients, as many as 37 respondents, while the highest insignificant answer according to the level of importance is at point two, namely the officers are willing to listen to patient complaints as many as 10 respondents.

The highest value efficiency dimension according to the level of importance is at point three, namely the length of treatment in the hospital in accordance with the action / treatment required was seen among 40 respondents, while the highest insignificant answer according to the level of importance is at point three for 10 respondents. The highest value continuity dimension according to the

level of importance is at point three, namely the hospital keeps patient medical records well for 40 respondents, while the highest insignificant answer according to the level of importance is at point one, namely that services are provided completely according to patient needs, without interruption / repetition as many as 8 respondents.

With respect to safety dimension, the highest value according to the level of importance is at point one, namely the patient gets safe health services for 39 respondents, while the highest insignificant answer according to the level of importance is at point three, namely 18 officers maintain the confidentiality of the disease and patient privacy.

Based on the dimensions of comfort, the highest value according to the level of importance, are at points one and two, namely clean building and comfortable rooms by 28 respondents and complete and well-maintained medical facilities and care for 28 respondents while the non-important answer according to the level of importance is at point three namely Clean and adequate toilets were 18 respondents.

DISCUSSION

From the results of research at Bhayangkara Hospital it is found that the aspect of competence of officers is based on the highest demand for patients according to their level of importance. These aspects include the doctor's knowledge and ability to make a correct diagnosis (there is no misdiagnosis). Meanwhile the general practitioners and specialists are higher in demand according to the level of performance and the availability. It was found that there was a second gap, namely the gap between management perceptions and service quality specifications (5). Management does not have the right to design the service standards because the perception of customer expectations is not accurately identified. So, there is no commitment to service quality, as well as organizational goalsare not formulated properly.

The variables that measure the level of importance and the level of performance are technical competence, access to services, effectiveness, efficiency, safety and comfort(6). In addition to examine the quality healthcare deployment at the Bhayangkara General Hospital measurement of the sales points of service quality was used.

It was established that all services must be provided with responsibility and employees should always be alert in helping customers by providing fast and responsive services. This mustalso be maintained during the change of duties of officers in serving customers and the speed of officers in handling transactions and handling customer complaints (7). Caresya (2016) uses the same research method and examines the effect of

dentist and patient interpersonal communication on the level of satisfaction in the dental clinic. The study states that dentist-patient interpersonal communications influenced the satisfaction of patients at the dental clinic at puskesmas in Jember district(8). It was found thatthere is a weak relationship between disclosure and transparency (satisfaction) with outpatient satisfaction at Oheo Health Center, Linomoiyo Sub-District, Oheo District, North Konawe District (9).

Inpatient visits compare about service quality and actual experiences received. A gap will arise when those expectations are not in accordance with their perception.In that condition consumers perception can be in the form of adequate satisfaction or satisfaction that is still within the tolerance level or desired satisfaction or dissatisfaction. It has been already proved that consumers are less satisfied with service quality due to higher consumer expectations than company performance (10,11). The research results reveal that of the five dimensions of service quality and also prove that the dimension of reliability is the strongest in explaining service quality especially indicators of service conformity with promises and service speed (12). Meanwhile Semuel and Wijaya's (2009) study found that the dimension of responsiveness is the dimension with the strongest influence on satisfaction of the officer dexterity indicator in serving consumers(13).Based on another research results it was found that the satisfaction felt by customers can increase the inflow of customers (14). The presence of maximum level of customer satisfaction encourages the customer to be loyal towards the service provider (15). The admission and discharge procedure are also related with this factor (16).

CONCLUSION

There are 25 customer requirements based on the services for the inpatient at Bhayangkara Hospital, Kendari City which can be categorized into 8 dimensions of service quality according to Brown with priority order based on the level of importance (Tke), namely: 1) Safety Dimensions (98.6%); 2) Dimensions of Interpersonal Relations (98.6%); 3) Dimensions of Continuity (97.1%); 4) Dimensions of Effectiveness (97.1%); 5) Efficiency Dimension (97.1%); 6) Dimension of Convenience (97.1%); 7) Dimensions of Access to Services (92.9%) and 8) Dimensions of Officer Competence (92.9%).

Based on the results of this study it is found that felling of the respondents about nursing care services is not good and according to them the nurses did not take special time to communicate with patients. They did not entertain and did not encourage patients to recover quickly and did not pray for them. According to the patient, officers are warm to them and doctors always hear complaints of the patients and pharmacy officers always pray for patients to get well rapidly. However, there are some officers who are not friendly to patients.

Communication between patients and staff are not good because of the complicated administrative process. The officer serves without making eye contact with the patient, does not smile and is unfriendly. The patient always expects to receive comfort especially from the doctors, midwives and nurses, as they are in a state of anxiety due to their health conditions.

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REFERENCES

- 1. Rivers PA, Glover SH. Health care competition, strategic mission, and patient satisfaction: research model and propositions. Journal of health organization and management. 2008 Oct 31.
- 2. Mmutle T. Customers' perception of service quality and its impact on reputation in the hospitality industry.2017
- 3. Benner M, Linnemann AR, Jongen WM, Folstar P. Quality Function Deployment (QFD)—can it be used to develop food products? Food Quality and Preference. 2003 Jun 1;14(4):327-39.
- 4. Davis, Davis CK, Sloan F, Wunderlich GS, editors. Nursing staff in hospitals and nursing homes: Is it adequate? National Academies Press; 1996 Apr 27
- Parasuramam A, Zeithaml VA, Berry LL. 17. Mohammad, AAS and SYM Alhamadani, 2011. A conceptual model of service quality and its Service quality perspectives and Customer implications for future research. Journal of Marketing, satisfaction in commercial banks working in Jordan. 1985;49:41-
- 6. Strawderman, Strawderman L, Koubek R. Human factors and usability in service quality measurement. Human Factors and Ergonomics in Manufacturing & Service Industries. 2008 Jul;18(4):454-63.
- 7. Parasuraman, Parasuraman A. Service productivity,

- quality and innovation. International Journal of Quality and Service Sciences. 2010 Oct 19.
- 8. Caresya, Caresya GD, Meilawaty Z, Hadnyanawati H. Pengaruh Komunikasi Interpersonal Dokter Gigi-Pasien terhadap Tingkat Kepuasan di Poli Gigi Puskesmas Jember (The Influence of Interpersonal Communication of Dentist-Patient Satisfaction Rate in the Dental Poly of Health Center in Jember). Pustaka Kesehatan. 2015 Sep 28;3(3):547-54.
- 9. Waslyanti S, Useng Y, Risky S. Hubungan Peranan Good Coorporate Governance Dengan Kepuasan Pasien Rawat Jalan Di Puskesmas Oheo Kelurahan Inomoiyo Kecamatan Oheo Kabupaten Konawe Utara. Miracle Journal of Public Health. 2019 Dec 21:2(2):220-30.
- Riyani, Riyani N. Analisis Harapan Dan Persepsi Pelanggan Terhadap Kualitas Kartu Indosat Multimedia Mobile (Im3) Pada Mahasiswa Fakultas Ekonomi Dan Fakultas Hukum USU.
- 11. Yulandari A. Analisis Pengaruh Kualitas Pelayanan Garuda Indonesia Airways Terhadap Kepuasan Konsumen Di Kota Surakarta. Jurnal Bisnis Dan Kewirausahaan. 2009;2(3):170-10.
- 12. Dwi, A., & Rosinta, F. Pengaruh kualitas layanan terhadap kepuasan pelanggan dalam membentuk loyalitas pelanggan. Jurnal Ilmu Administrasi dan Organisasi,(2010) 17(2), 114-126.
- Hatane S, Wijaya N. Service Quality, Perceived Value, Satisfaction, Trust dan Loyalty Pada PT Kereta Api Indonesia Menurut Penilaian Pelanggan Surabaya. Jurnal Manajemen Pemasaran. 2009 Apr;4(1):23-37.
- 14. Wijayanti ID. Manajemen. Editor: Ari Setiawan. Yogyakarta: Mitra Cendikia. 2008.
- 15. Putri YA, Wahab Z, Shihab MS, Hanafi A. The effect of service quality and brand trust on loyalty through customer satisfaction in transportation service Go-jek (go-ride) in Palembang City. Jurnal Manajemen Motivasi. 2018 Nov 9;14(1):24-31.
- 16. Purwacaraka M, Ahsan A, Nasution Th. Correlation of Admision Time, Discharge Time and Patients Discharge Type with Length of Stay in Yellow Zone of Emergency Department. The Malaysian Journal of Nursing. 2019 Jul 1;11(1):10-5.