

Research Report

Patient's assessment on quality of Obstetrics and Gynecology service
at Dr. Cipto Mangunkusumo Hospital

Penilaian pasien terhadap kualitas pelayanan Obstetri dan Ginekologi
di Rumah Sakit Dr. Cipto Mangunkusumo

Erni Nurrahmi Suprihatin Priatna, Omo Abdul Madjid

Department of Obstetrics and Gynecology
Medical Faculty University of Indonesia/
Dr. Cipto Mangunkusumo Hospital
Jakarta

Abstract

Objective: To evaluate patient's assessment on service quality of Obstetrics and Gynecology at Dr. Cipto Mangunkusumo Hospital, the importance of each service quality dimension, and the relation between quality assessment and several factors.

Method: The research was performed to 112 patients who were hospitalized in the Obstetrics and Gynecology ward in August 2009. We used a questionnaire which was developed from SERVQUAL instrument. This questionnaire consists of 26 questions about patient expectation and perception on the service they received. It covered 5 service quality dimensions (reliability, responsiveness, assurance, empathy, and tangibility). Patients were asked to state the answer in Likert scale from 1 to 7. The gap between perception and expectation score was then calculated. If the gap was zero or positive it means the quality was good and if negative it means the quality was not good.

Result: Among 112 respondents, 82 respondents (73.2%) assess that the service quality was not good, only 26.8% considered it good. Reliability dimension had the highest expectation score followed by assurance, responsiveness, empathy, and tangibility with the proportion of 21%, 20%, 20%, 20%, and 19% respectively. The sequence of the gap from the biggest to the smallest was empathy, responsiveness, reliability, assurance, and tangibility. There was a significant relationship between patients' educational background and assessment of service quality ($p=0.036$).

Conclusion: Obstetrics and Gynecology Department's service quality at Dr. Cipto Mangunkusumo Hospital has not fulfilled patients' expectation. Improvements of the service quality need to be addressed on 4 factors, which are empathy, reliability, responsiveness, and assurance.

[Indones J Obstet Gynecol 2010; 34-2: 77-83]

Keywords: patient expectation, patient perception, Obstetrics and Gynecology service quality

Abstrak

Tujuan: Mengetahui penilaian pasien mengenai kualitas pelayanan obstetri dan ginekologi di Rumah Sakit Dr. Cipto Mangunkusumo Jakarta (RSUPNKM), urutan dimensi kualitas yang penting bagi pasien, serta faktor-faktor yang berhubungan dengan penilaian pasien tentang kualitas pelayanan obstetri dan ginekologi di RSUPNKM.

Metode: Penelitian dilakukan pada 112 pasien yang menerima pelayanan perawatan di ruang rawat Obstetri dan Ginekologi RSUPNKM pada bulan Agustus 2009. Penelitian ini menggunakan kuesioner dari instrumen SERVQUAL yang berisi 26 pertanyaan mengenai harapan responden terhadap pelayanan dan persepsi responden tentang pelayanan yang telah didapatkan yang meliputi lima dimensi kualitas pelayanan (keandalan, daya tanggap, jaminan, empati, dan keberwujudan). Responden diminta untuk menyatakan jawabannya dalam skala Likert yang berupa angka 1 sampai 7. Dihitung selisih skor persepsi dan skor harapan masing-masing responden, kualitas dianggap baik bila selisihnya nol atau positif, jika negatif maka kualitas pelayanan tidak baik.

Hasil: Dari 112 responden didapatkan 82 responden (73,2%) menilai pelayanan tidak baik, hanya 26,8% yang menilai baik. Dimensi keandalan mendapat skor harapan tertinggi diikuti oleh dimensi jaminan, daya tanggap, empati, dan keberwujudan dengan proporsi secara berurutan 21%, 20%, 20%, 20%, dan 19%. Kesenjangan antara persepsi dengan harapan terbesar didapatkan pada dimensi empati diikuti oleh daya tanggap, keandalan, jaminan, dan keberwujudan. Terdapat hubungan bermakna antara tingkat pendidikan pasien dengan penilaian kualitas pelayanan ($p=0,036$).

Kesimpulan: Kualitas pelayanan Obstetri dan Ginekologi di RSUPNKM belum memenuhi harapan pasien. Perlu dilakukan perbaikan pelayanan pada faktor empati, keandalan, daya tanggap, dan jaminan.

[Maj Obstet Ginekol Indones 2010; 34-2: 77-83]

Kata kunci: harapan pasien, persepsi pasien, kualitas pelayanan Obstetri dan Ginekologi

Correspondence: Erni Nurrahmi S.P. Jln. Pertengahan No. 68, Cijantung, East Jakarta, Phone: 081318068785
Email: r_nee_dr@yahoo.com

INTRODUCTION

Health care is one of the fastest growing sectors in the service economy. Based on data from the health profile of Indonesia, in 1997 there were 1090 hospitals in Indonesia and increased by 21 percent to 1319 hospitals in 2007. In Jakarta alone, the number of hospitals increased from 115 in 2005 to 121 in 2 years.^{1,2} The increase was primarily in the private sector. To be able to compete in this condition, hospitals as part of the health service facilities should be able to pro-

vide a quality service that can meet or even exceed patients' expectations.

Assessing the quality of health service is not easy. There are some problems especially in terms of whose assessment and criteria used. Previously, health service quality was measured by objective criteria, such as mortality and morbidity.³ These indicators are important to assess the clinical quality. However, to measure the performance of health services, assessment of patient satisfaction is a more sensitive indi-

cator. This measure is also more reliable than other methods such as reviews from the expert group.⁴

Currently, patient's perception becomes increasingly important. With patient-centered method applied in most health care centers, the patients has the main role in the management of their own problem.^{5,6} Patients' satisfaction can be a tool to predict patient adherence to treatment and even to improve the health status of patients.⁴ Patients' satisfaction may also affect the patient in selecting facilities provided by health service available, which can affect hospital revenues because patient's perception affect 17-27 percent of variation in a hospital's financial measures such as earnings, net revenue and asset return.⁸ In addition, patients with a negative opinion which then passed on to others may adversely affect the hospital.⁸

In obstetrics and gynecology department, patient's perception about quality of the service is also important. Health services for women, especially in pregnancy, childbirth, and lactation, are women's human rights as stated in the law number 7 in 1984.⁹

The method to evaluate the quality of health services by patients mostly is based on the gap between the perceptions of service with the expectations of patients using SERVQUAL method. In SERVQUAL, service quality concepts are made in a "model of service quality gaps".^{10,11} In this model, customers' perceptions of service quality is known as gap 5 which is the difference between customer perceptions and expectations. Assessment of the quality of this customer (gap 5) is influenced by four gaps which occur in the organization (Figure 1). Assessment of service quality based on SERVQUAL gap method was conducted on 5 dimensions of service quality, which are reliability, responsiveness, assurance, empathy, and tangibility.¹²⁻¹⁶

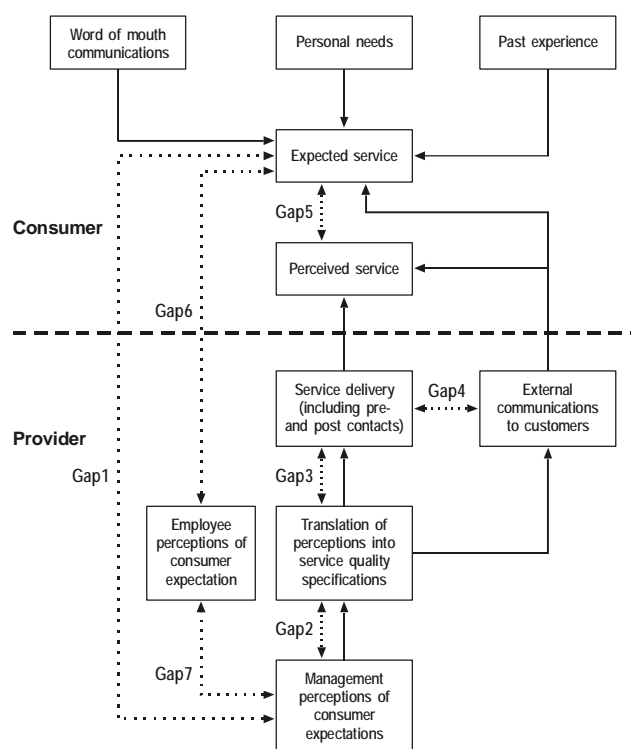


Figure 1. Model of Service Quality Gaps

This study aims to evaluate patients' assessment on the quality of obstetrics and gynecology services at the Dr. Cipto Mangunkusumo Hospital Jakarta (RS UPNCM), the importance sequence of quality dimensions, which dimensions of quality that still need improvement, as well as factors associated with patients' assessments on quality of obstetrics and gynecology services at RSUPNCM.

METHOD

This study was conducted in the ward of obstetrics and gynecology at Dr. Cipto Mangunkusumo Hospital Jakarta in August 2009. It was conducted on 112 patients who had undergone care, selected by consecutive sampling. After getting the approval of the patient, guided interviews were conducted using the SERVQUAL questionnaire with modification on several questions so it can be understood by respondents and adapted in accordance with conditions in the RSCM. This questionnaire consists of 26 questions, that each asked about the patient's expectations and perceptions about the services that have been obtained. These questions represent the five dimensions of service quality. Tangibility dimension evaluate the physical condition of facilities, equipment, worker performance, work performance, and communication materials. These dimensions were asked in 6 questions. Four questions for the reliability dimensions that assess the ability to conduct service in accordance with the promise of accurate and reliable, trustworthy, responsible for what was promised, and never give excessive promises. The responsiveness dimension, which evaluates the willingness to help patients and provide prompt service, was in 5 questions. Dimension of empathy, indicates the degree of attention to each patient, on 5 questions. For assurance dimension, includes the knowledge and courtesy of employees and its ability to give confidence to customers, on 6 questions.

Interviews were conducted by research assistants who had been trained previously on the day the patient was discharged. Respondents were asked to state the answer in Likert scale from 1 through 7, for expectation the value 1 means not important and 7 for very important. For perception of the service that had been obtained, the value of one for strongly disagree and 7 for strongly agree.

The validity and reliability of the questionnaire has been evaluated and the result was that all the questions have correlation coefficient ≥ 0.3 and cronbach's alpha ≥ 0.7 .

Quality of service is determined based on corrected SERVQUAL scores, good quality if corrected SERVQUAL score is zero or positive and if negative it means the quality is not good. Corrected SERVQUAL score is the value of the difference between perception scores and expectation score with weighting. Calculation is done in the following way:

- In each patient, the average SERVQUAL score on each dimension is calculated. SERVQUAL score is the gap between the perception and expectation (P-E).

- b. In each patient, SERVQUAL scores for each dimension (obtained in step a) is multiplied by the importance of the dimensions so that then we obtain the corrected SERVQUAL scores. The level of importance is calculated by dividing a given patient's score for one-dimensional with a total score of all dimensions and then multiplied by 100.
- c. In each patient, corrected SERVQUAL scores (from step b) from the five dimensions were added together to obtain combined corrected SERVQUAL score.

We also analyzed the relationship between several independent variables (age, education level, frequency of visits to the Obstetrics and Gynecology Division of RSCM, history of treatment at another hospital, type of hospital visited, information sources, and health problems of patients) with assessment of service quality as the dependent variable.

Bivariate analysis was performed using chi square test, and if not eligible for the test then the Fisher's exact test was used. For multivariate analysis, we used the logistic regression analysis. Processing and data analysis were conducted using SPSS program version 15.

RESULT

The study was conducted at the ward of Obstetrics and Gynecology RSUPNCM in August 2009. We obtained 112 research subjects through guided interviews using a questionnaire that has been tested its validity and reliability.

The age range of the 112 research subjects is 18 to 70 years, with most of the research subjects aged between 20 to 40 years.

For the characteristic distribution of the past experiences of patients, it was found that 83% of respondents were on the first visit to the OBGYN RSCM. (Table 1).

Maternity problem is the health problem experienced by most research subjects. Meanwhile, most of the patients selected to come to RSCM due to referral and they know about the RSCM from the reference. Two patients chose RSCM due to financial problem and two others because they are RSCM staff.

For the assessment of service quality, in each dimension, in Table 4 we can see scores on each question both on expectations and perceptions. In this table can be seen that the components in each dimension of quality is still not fulfilled the expectations of patients except in the physical facilities and examination equipments that looked interesting. Meanwhile, patients' attendant problems for patients with severe conditions seem very far from the expectations of patients with a gap of -2.11

Table 1. Characteristic distribution of research subjects

Characteristic	n	%
Sociodemographic		
Age group		
≥ 20 years old	6	5.4
20 - 40 years old	95	84.8
≤ 40 years old	11	9.8
Education Level		
Low	49	43.8
Middle	51	45.5
High	12	10.7
Work		
Civil employee	4	3.6
Private	17	15.2
Entrepreneurs	8	7.1
Housewife	82	73.2
Not working	1	0.9
Ward class		
Class 2	2	1.8
Class 3	110	98.2
Past Experience		
Visit to Obstetrics and Gynecology Dept. of RSCM:		
First time	93	83
Repeat	19	17
History of care at another hospital:		
Never	58	51.8
Ever	54	48.2
The hospitals has ever visited:		
Private hospital	22	40
Government hospital	27	49.1
Private and government hospital	6	10.9
Current health problem:		
Pregnancy	3	2.7
Maternity	91	81.3
Gynecological	18	16.1
Reason for choosing RSCM:		
Close to the house	3	2.7
Close to the workplace	0	0
Accessible by public transportation	0	0
Referred	97	86.6
Complete Service	4	3.6
Experience doctors	4	3.6
Others	4	3.6

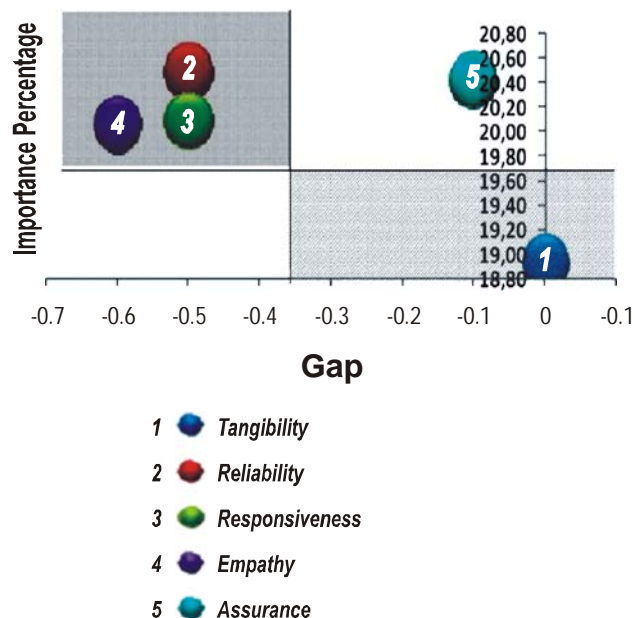
From 82 patients, the service quality of Obstetrics and Gynecology RSCM was concluded not good based on the negative overall SERVQUAL score, while 30 patients (26,8% respondents) gave positive SERVQUAL score.

Table 2. The mean expectation score, perception score of research subject, and the gap between them

Variable	Mean Expectation Score (E)	Mean Perception Score (P)	Gap (P-E)	Corrected SERVQUAL Score
Tangibility	6.3	6.3	0	-0.21
Reliability	6.9	6.4	-0.5	-9.33
Responsiveness	6.7	6.2	-0.5	-11.13
Empathy	6.7	6.1	-0.6	-13.01
Assurance	6.8	6.7	-0.1	-3.36
Total	33.4	31.7	-1.7	-37.04

To determine the order of dimensions that are important to patients, each dimension was analyzed based on its expectation score. In this study, although there were no striking difference between the five dimensions, it seems that the reliability has the highest average score (6.9) and the lowest score is the tangibility dimension (6.3).

To estimate the performance of dimensions that need improvement or maintenance, an importance-gap matrix was made. In this matrix, the dimensions in the gray quadrant are those that require improvement while the ones in other quadrants are quite good. The dimensions in the shaded area are even considered better. We can see that reliability, responsiveness and empathy are three dimensions that improvement should be addressed.

**Figure 2.** Importance - Gap Matrix

In the analysis of variables related to quality assessment, we identified sociodemographic variables. Among them, only the patients' education level has a significant relationship with quality of service with the p-value 0.036.

In this study we found no relationship between the patient's health problems, past experiences, as well as source of information and the quality of service.

Based on the results of bivariate analysis of several independent variables above, there were two variables that were related to the assessment of service quality with p-value less than 0.25. Those variables are education level and frequency of visit. Based on these findings, logistic regression analysis was performed and the result was that only the education level variable was associated with the assessment of service quality with p-value 0.029. (Table 3)

Table 3. Relationship between independent variables and service quality

Variables	Service Quality				n	p
	Not Good		Good			
	n	%	n	%		
Age group						
< 20 yo ^a	5	83.3	1	6.7	6	0.481*
20 - 40 yo ^a	70	73.7	25	26.3	95	
> 40 yo	7	63.6	4	36.4	11	
Education level						
Low	31	63.3	18	36.7	49	0.036#
Middle ^a	39	76.5	12	23.5	51	
High ^a	12	100	0	0	12	
Current health problem:						
Pregnancy	2	66.7	1	33.3	3	1.000 ^b
Maternity	67	73.6	24	26.4	91	1.000 ^c
Gynecological	13	72.2	5	27.8	18	
Visit to OBGYN RSCM:						
First visit	66	71.0	27	29.0	93	0.235#
Repeat visit	16	84.2	3	15.8	19	
History of care at another hospital:						
Never	41	70.7	17	29.3	58	0.532#
Ever	41	75.9	13	24.1	54	
The hospital visited before:						
Private hospital	16	72.7	6	27.3	22	0.683 ^d
Government hospital	21	77.8	6	22.2	27	1.000 ^e
Private and government hospital	5	83.3	1	16.7	6	

a: United in statistical analysis

b: Fisher's exact test, significance test between pregnancy problem and gynecological problem

c: Fisher's exact test, significance test between maternity problem and gynecological problem

d: Chi square test, significance test between private hospital and government hospital

e: Fisher's exact test, significance test between government hospital with private and government hospital

*: Fisher's exact test

#: Chi square test

DISCUSSION

Most of the patient (98.2%) were hospitalized in third class ward with 89.3% patients have low and middle education level.

For the reasons of choosing the hospital, 86% of patients state referral as the reason. This illustrates that the majority of respondents in this study does not seem to choose RSCM on their own desires for reasons of health service quality is good or whether RSCM is an educational hospital and also a tertiary

hospital. Teaching hospitals are known to have a more complete health service facilities with medical equipments and more specialists from every field in medicine compared to non-educational hospitals.¹⁷ However, in this study it appeared that RSCM status as a teaching hospital is not the main reason patients seek treatment to the hospital, and it corresponds with previous research that found the election of hospitals by patients not because of the status of these hospitals, but rather the quality of services that are owned and previous experiences.¹⁸

Such characteristics are seen in patients in third-class ward, who can be assumed to have a middle to low socioeconomic level, seeing that their education level was also middle to low.

Quality of services assessed in this study is the functional quality based on the patient's assessment. Assessment of quality of service based on patient's opinion is not only important for health services, but it is also important to the industry that produces a product. As presented by Albrecht, service quality does not only apply to a service industry/service, but

it applies to all industries that means a quality service consists of the outcome and processes. Albrecht says that the term customer value is considered more appropriate than the quality of the product or service quality. In customers' value, consumers determine the quality of service.⁸

In this study, the overall SERVQUAL score was negative (-37.04), which means that the patient perceived the services was not as good as they expected. The biggest gap was found in the dimension of empathy and responsiveness, followed by reliability. This gap occurs in the dimensions that are important to patients. Apparently this is not just a problem experienced by Department of Obstetrics and Gynecology RSCM, since a similar assessment also found in several hospitals in other countries, such as the NHS hospital¹⁹, Bangalore²⁰, and Turkey.²¹

The negative SERVQUAL score in this study are associated with quality of service that has not been good. When adjusted for Albrecht opinions about customer value with customer value hierarchy it can be said that the service in this study for 73.2 percent of

Table 4. Mean Expectation Score and Perception Score of Each Question

Details of Each Dimension	Expectation		Perception		Gap (P - E)	
	mean	SD	mean	SD	mean	SD
Tangibilities						
Complete and modern equipment	6.90	0.6	6.70	0.6	-0.2	0.9
Visually appealing facilities	5.31	1.5	5.95	1.3	0.64	1.5
Clean and quiet ward and examination room	6.94	0.2	6.65	0.6	-0.29	0.6
Physicians have a neat and professional appearance	6.67	0.6	6.62	0.5	-0.05	0.6
Have a good directional signs and information board	6.65	0.5	6.39	0.8	-0.26	0.7
Materials associated with the medical service are visually appealing	5.56	1.4	5.78	1.4	0.22	0.9
Reliability						
Physicians provide services as promised	6.86	0.5	6.38	0.9	-0.48	0.9
Physicians provide services at promised time	6.81	0.7	6.22	1.1	-0.59	1.1
Keeping patients informed if there is a cancellation or delay in service	6.88	0.4	6.38	0.8	-0.5	0.7
Physicians perform services right the first time (correct diagnosis, prompt treatment)	6.90	0.4	6.67	0.6	-0.23	0.6
Responsiveness						
Hospital staffs are dependable in solving service problem (problem in registration, calling the concerned doctor to attend the case)	6.73	0.6	5.92	1.1	-0.81	1.2
Physicians are always willing to help patients	6.86	0.4	6.47	0.9	-0.39	0.8
Physicians are never seem too busy to respond to patient's requests	6.35	1.1	6.23	1.1	-0.12	1.6
Physicians and medical staff give prompt service	6.84	0.5	6.10	1.1	-0.74	1.1
Physicians and medical staffs always ready to give service when patients arrived	6.86	0.4	6.23	1.04	-0.63	0.9
Empathy						
Physicians give patients individual attention	6.65	0.8	6.41	0.9	-0.24	0.9
Physicians understand the specific needs of their Patients	6.69	0.6	6.47	0.8	-0.22	0.8
Physicians give service independent of patients social status	6.84	0.4	6.74	0.6	-0.1	0.4
Give special time for consultation	6.79	0.5	6.24	1.1	-0.55	1.04
Patients family/attendants may accompany the patients with severe condition	6.62	0.9	4.51	1.7	-2.11	1.9
Assurance						
Physicians are consistently courteous to patients	6.88	0.4	6.67	0.7	-0.21	0.7
The appearance and behavior of physicians instill confidence in patients	6.79	0.4	6.72	0.6	-0.07	0.6
Patients feel safe when service performed (closed examination room, receive information about diagnosis, therapy, and examination)	6.88	0.4	6.72	0.7	-0.16	0.7
Physicians have the knowledge to answer patients questions (thoroughness of explanation of medical condition, proper advice)	6.86	0.4	6.65	0.7	-0.21	0.5
Physicians keep patients secret	6.79	0.5	6.52	0.9	-0.27	0.7
Educated physicians	6.84	0.4	6.75	0.5	-0.09	0.3

SD: Standard Deviation

patients reached the primary level (basic), which means only fill an important basic components that should be provided by a hospital. But unfortunately the service has not able to reach the next stage which is the expected, desired, or unanticipated. Meanwhile, in 26.8 percent of research subjects had a score of zero or positive, which means that for those patients the services is sufficient to meet expectations.

In Table 2, it can be seen that the highest expectation score is the reliability, followed by assurance, empathy, responsiveness, and tangible. When analysis of importance of each dimension was calculated based on the allocation of scores by the patients in each dimension compared with the overall score, the result was also similar. The results are consistent with research conducted by Youssef et al also Rohini,^{19,20} and also in accordance with the findings of Parasuraman et al on the other service industries,¹⁰ which showed that the reliability is the most important dimension, tangible is the least important, and responsiveness, assurance and empathy are in second to fourth place.

Analysis on the importance of quality dimension have been carried out by Tucker and Adams with factor analysis, it was found that there are two dimensions that primarily affect the assessment of patients, those are the performance of service providers found to be most significant in patient's assessment, associated with interpersonal relationships and patients interactions with providers and the second is access which means a variable that associated with the ability of patients to get treatment and barriers to the process.⁸

Meanwhile, Albrecht said that it has been known two key factors in the service at the hospital.²² The first factor is that patients want to feel to have power over him; the patient did not want to feel helpless and have no authority. The second factor is the trust through teamwork and continuity that patients accepted. Those key factors have been included in the three most important dimensions in this study, namely reliability, responsiveness, assurance, and empathy.

Based on these results, it became clear that the modern and attractive equipment and facilities does not seem so important to patients. But what is happening now is the opposite, hospitals offer up to date and complete examination equipment and facilities instead of professional medical personnel.

The results obtained in this study can be used to improve existing services. As previously described, the sequence of importance of the quality dimension is reliability, assurance, empathy, responsiveness, and tangible. To determine the priority order can be based on the importance-gap matrix (Figure 2). This matrix is an analysis that has been provided useful in this kind of studies.²³

In the matrix, empathy, responsiveness and reliability are all factors which should get first priority. While security is the next priority, whereas tangible is enough and can be maintained although there are some details in this dimension which need to be improved like the informative sign and information board, clean and quiet room also modern and complete equipment.

Quality improvement for the three major factors can be done through training for doctors and health workers and hospital staff about how to provide a

good service that put on the responsiveness, reliability, communication skills, as well as the ability to empathize. In addition, considering the importance of the person who accompany the patients for patients in severe disease conditions it may be necessary to make regulations more acceptable to patients, or may also need good communication to patients about whether the disease condition is severe or not.

To improve the assurance dimension, not only the doctor interpersonal skills and the hospital staff that need to be improved but improvements in competence and knowledge of physicians through improvements in education system for residents and continuing professional development for consultants also needed. Besides that, the security of examination room still needs to be improved.

In this study an analysis of variables related to service quality assessment was also conducted. In previous research, it was found several sociodemographic factors that positively related to the patient assessment; those are the age, education, and health status.^{8,24} While Sofaer found the positive relationship between age and the evaluation of service quality, but the negative relationship found in educational level and severity of disease with evaluation of service quality.⁵

In this study, we found no relationship between age and the service quality neither health problems with the service quality. Age was found as a factor that is not always related in the study conducted by Andaleeb.¹²

There is a significant relationship between education level with the assessment of service quality in this study. It seems that the higher the education level of the lower service quality perceived.

The past experience that includes the frequency of visits and types of hospitals has ever been visited does not have relationship with service quality in this study. This is not in accordance with study conducted by Cho et al that found that the more frequent visit will make a better assessment.²⁵

There is also no relationship between the information sources and the assessment of service quality. But it can be seen in the distribution of sources of information that information from mouth to mouth is the main source of information for patients. Based on the results of multivariate analysis, only the education level that have relationship with the assessment of service quality by patients with p 0.029 (95% CI: 1.103 - 6.272).

CONCLUSION

Based on the gap between perception and expectation of patients at five quality dimensions, it appears that service quality of Obstetrics and Gynecology RSUP-NCM had not fulfilled the patient's expectation. Important dimension of quality to patients in sequence is the reliability, assurance, responsiveness, empathy, and tangible. Dimensions that still need improvements are empathy, responsiveness and reliability. Those three dimensions should get the first priority, assurance is the next priority, whereas tangible is enough and can be maintained.

REFERENCES

1. Hartono B, Kusumobroto BS, Sugito, Sunaryadi, Kurniasih N, Hardhana B, et al. Profil kesehatan Indonesia 2005. Jakarta: Departemen Kesehatan Republik Indonesia, Kesehatan D; 2007.
2. Hartono B, Sugito, Sunaryadi, Kurniasih N, Hardhana B, Manullang E, et al. Profil kesehatan Indonesia 2007. Jakarta: Departemen Kesehatan Republik Indonesia, Kesehatan D; 2008.
3. Dagger TS, Sweeney JC, Johnson LW. A hierarchical model of health service quality: scale development and investigation of an integrated model. *J Serv Res.* 2007; 10: 123-42.
4. Fitzpatrick R. Surveys of patient satisfaction: I-important general considerations. *BMJ.* 1991; 302: 887-9.
5. Sofaer S, Firminger K. Patient perceptions of the quality of health services. *Annual Review of Public Health.* 2005; 26: 513-59.
6. Brink-Muinen Avd, Dulmen SMv, Haes HCJMd, Visser AP, Schellevis FG, Bensing JM. Has patients' involvement in the decision-making process changed over time? *Health Expectations.* 2006; 9: 333-42.
7. Rashid WEW, Jusoff K. Service quality in health care setting. *International Journal of Health Care Quality Assurance.* 2009; 22(5): 471-82.
8. Naidu A. Factors affecting patient satisfaction and health-care quality. *International Journal of Health Care Quality Assurance.* 2009; 22(4): 366-81.
9. Undang-undang Republik Indonesia nomor 7 tahun 1984 tentang pengesahan konvensi mengenai penghapusan segala bentuk diskriminasi terhadap wanita (convention on the elimination of all forms of discrimination against women), 7 (1984).
10. Zeithaml VA, Parasuraman A, Berry LL. *Delivering quality service; Balancing customer perceptions and expectations.* New York: The Free Press; 1990.
11. Zeithaml VA, Bitner MJ. *Focus on the customer. Services marketing: Integrating customer focus across the firm.* 2nd ed. Boston: McGraw-Hill; 2000: 26-8.
12. Andaleeb SS. Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social Science & Medicine* 2001; 52: 1359-70.
13. Lee H, Delene LM, Bunda MA, Kim C. Methods of measuring health-care service quality. *Journal of Business Research.* 2000; 48: 233-46.
14. O'Connor SJ, Shewchuk RM, Carney LW. The great gap. *Journal of Health Care Marketing.* 1994; 14(2): 32-9.
15. Kilbourne WE, Duffy JA, Duffy M, Giarchi G. The applicability of SERVQUAL in cross-national measurements of health-care quality. *The Journal of Services Marketing.* 2004; 18(6/7): 524-33.
16. Mostafa MM. An empirical study of patients' expectations and satisfactions in Egyptian hospital. *International Journal of Health Care Quality Assurance.* 2005; 18(7): 516-32.
17. Kupersmith J. Quality of care in teaching hospitals: a literature review. *Academic Medicine.* 2005; 80(5): 458-66.
18. Dy SM, Rubin HR, Lehmann HP. Why do patients and families request transfers to tertiary care? a qualitative study. *Social Science and Medicine* 2005; 61: 1846-53.
19. Youssef FN. Health care quality in NHS hospitals. *International Journal of Health Care Quality Assurance.* 1996; 9(1): 15-28.
20. Rohini R, Mahadevappa B. Service quality in bangalore hospitals - an empirical study. *Journal of Services Research.* 2006; 6(1): 59-84.
21. Taner T, Antony J. Comparing public and private hospital care service quality in Turkey. *Leadership in health services.* 2006; 19(2): i-x.
22. Albrecht K. Model building 101: the customer value model. In: Albrecht K, editor. *The northbound train: finding the purpose, setting the direction, shaping the destiny of your organization.* California: Amacom; 1994: 8-1 - 8-11.
23. Zeithaml V, Bitner MJ. *Understanding customer expectations and perceptions through marketing research. Services marketing: Integrating customer focus across the firm.* 2nd ed. Boston: McGraw-Hill; 2000: 122-7.
24. Choi K-S, Lee H, Kim C, Lee S. The service quality dimensions and patient satisfaction relationships in South Korea: comparisons across gender, age and types of service. *Journal of Services Marketing.* 2005; 19(3): 140-9.
25. Cho WH, Lee H, Kim C, Lee S, Choi K-S. The impact of visit frequency on the relationship between service quality and outpatient satisfaction: A South Korean study. *Health Services Research.* 2004; 39(1): 13-33.