Health Care Service Quality of Public Hospitals in Bandung as Part of Public Services

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ABSTRACT

Public hospitals have roles to provide health services for public. Hospitals from all background, including those with higher standards, have problems that demand full attention to deliver proper public health services. This research is conducted with the purposes of illustrating the evaluation of the patients towards the hospital services quality and finding out certain elements or aspects that determine those good qualities in certain high-ranking public hospitals in Bandung. The research makes use of primary data from the distribution of questionnaires with 300 samples. The assessment covers aspects of Infrastructure, Personnel Quality, Process of Clinical Care, Administrative Procedures, Safety Indicators and Social Responsibility. Depicted evaluation of public health service quality is obtained through descriptive data analysis to show that the hospital needs to pay more attention to administrative factors, particularly the procedure of obtaining medicine and the waiting time of the patients. Out of the confirmatory factor analysis on the model of healthcare service quality, the determining aspects of the service quality of health in hospitals are obtained and utilized as inputs and insights for the improvement of the public hospital health services quality in Bandung.

Keywords: healthcare service, service quality, public hospital

1. INTRODUCTION

Hospital is an institution concerned with health services for people of different backgrounds with responsibility to provide medicine service, care unit, and efforts for patients' health and recovery. In Indonesia, hospital also plays a vital role in public services by contributing health services materialized in the form of health services for people.

Republic of Indonesia Ministry of Health states in the act 56 year 2014 that public hospitals are those that gives health service in all fields and diseases. Bandung is one of the major cities in Indonesia that owns a number of public hospitals which provide various health services. Healthcare services include medical, pharmacy, nursing, midwifery services as well as supporting services in clinics or non-clinics and inpatient service. Public hospitals with higher standards of quality have problems as far as healthcare services are concerned. In 2015, the Minister of Health, during a work visit to evaluate the health services in one of the public hospitals, also emphasized on the fact that there are long queues of inpatient patients and only a few number of

resources deal with nursing and they are relatively below standards (Kabar Berita, 2015).

Health service has unique characteristics owned by the service and they generally and basically are different from products (Kotler, 2012). To get health service in accordance with the patients' expectation, hospitals must provide good service quality not only in the perspective of the hospitals but also those of the patients. Duggirala, et al. (2008) emphasized that being customers of health service, patients are the main delivery focus of health service system. Therefore, hospitals do not simply provide healthcare services but should also be able to understand the evaluations of the patients towards the services that they are willing to accept. Such an understanding of the evaluation of the patients is of pivotal role because there is no objective measurement in health or medical service (Padma, et al., 2009).

In relation to the issues mentioned above, this research has purposes as follows:

1. To analyze the patients' evaluation in relation to the healthcare service quality in public hospitals in Bandung

2. To determine the main aspect of the healthcare service quality in public hospitals in Bandung as part of public services.

2. CONCEPTUAL DEVELOPMENT

2.1. Service quality

Service quality is defined as quality that consumer gets from the service that the service provider offers (Dwivedi, et al., 2010). A good service is an aspect that requires full attention from a company so that it can be different, productive and efficient quotation (Chang & Chen, 1998). Furthermore, service quality determines the customer satisfaction, their loyalty, value and behavioral intention (Pantouvakis, 2014).

Perceived service quality is depicted based on consumer evaluation of product qualities by the correlation of their perception between what are expected and what are offered (Zeithaml, 1988). The perception of consumers is determined by the quality of the product or the service that the company offers (Parasuraman, et al., 1988). Dimension of service quality is one of the important factors to measure and determine the quality of the service that consumers feel or obtain (Papaioannou, et al., 2013).

2.2 Healthcare

Milakovich (Duggirala, et al., 2008) states that in the healthcare organization, patients and their families must be treated as consumers in a much broader definition than simply being customers in the process of healthcare service. Customers are the receiver of the final products. The understanding of the need and hope of the customers is the basis to develop new products and services. Customer orientation also guarantees the offer of services that can satisfy the needs of the consumers. The way to

communicate service and relations of consumers and the company must also meet customer expectation. Specific characteristics of healthcare service are reflected through service strategy, experience and innovation, disruptive technologies and business models, critical nature of service, customers in healthcare, context of developing nation (Padma, et al., 2009).

2.3 Healthcare Service Quality

The characteristics of healthcare service are naturally hard to be evaluated. Consequently understanding towards the perceptions of the consumers becomes something important due to the fact that there is no objective measurement towards a medical service (Padma, et al., 2009). Wider literature review on service quality is thus utilized to identify the dimension of the quality of healthcare service that patients can feel. Certain service quality models are also developed in the context of healthcare, one of which is by means of five dimensions from those of Parasuraman (Wan Rashid & Jusoff, 2009). As for the total quality service in healthcare service, according to Duggirala, et al. (2008), measurements are taken from patients' perspective as follows:

- Infrastructure

- Personnel quality [doctor's care, nursing care, paramedical and support staff quality, quality of communication]

- Process of clinical care

- Administrative procedures

- Safety indicators

- Overall experience of medical care received

- Social responsibility

3. METHODOLOGY

This research uses primary data are obtained through the distribution of questionnaires in which questions related to the healthcare service quality of the hospital are posed. The data are obtained through direct surveys and questionnaires distributed to respondents who are patients or attendants to get a depiction and description about healthcare services quality in public hospitals in Bandung. The data cover evaluation about Infrastructures, Personnel Quality, Process of Clinical Care, Administrative Procedures, Safety Indicators and Social Responsibility.

The population of the research in this case is patients or attendants of the public hospitals. This decision is based on the consideration of the fact that if the patients are in the state of physically or psychologically sick, the patient's attendants may in some ways influence the patient's choice of hospital as healthcare provider, so in that case they play important roles in healthcare (Padma, et al., 2009).

The research uses purposive sampling with patients or attendance who have obtained services from the public hospitals in the last three years with the consideration that there is not much difference or change in terms of their healthcare service quality. The minimal sample is 97, which represents an unknown population size with a significance level of 5%.

There are 300 respondents of patients and attendants in this research. The filling-in process of the questionnaires of the respondents is conducted with supervision to make certain that the data earned goes along with the purpose of the research.

The variables of the research use the basis of Total Quality Service in healthcare (Duggirala, et al., 2008), excluding the aspect of overall experiences from the medical services that the patient get. The evaluation is conducted using numerical scale. Respondents evaluate every question based on 7-point scale.

Below are some factors used and the explanations:

- Infrastructure which covers the availability and quality of physical facilities

- Personnel quality includes doctor's care, nursing care, paramedical and support staff quality, laboratory and radiology

- Process of clinical care which includes patients' evaluation towards the clinical process such as the handling process and the result of the service.

- The administrative procedure: patients' evaluation towards the administrative procedures such as the procedures of intensive care registration, the registration process of outpatients, the process of inpatients, the process of summoning medicine from the pharmacy, the registration process of laboratory or radiology, and the process of blood transfusion.

- Safety indicators: patients' evaluation towards the measurement of safety in different steps when on ICU, public or specialist polyclinic and inpatients on common hospital rooms.

- Social responsibility: the contribution of the hospital to the overall public like providing information for common public and the availability of leaflets about the danger of infected diseases.

The obtained data is tested in its validity and reliability beforehand to make sure that all items that are used are valid and reliable. Obtained data are in the form of patients or attendants' evaluation of the quality of the healthcare service that hospital provides. The data are then organized and analyzed descriptively to give a clear and detailed picture about the quality of healthcare service in public hospitals in Bandung. The data evaluation makes use of confirmatory factor analysis. It is meant to confirm the six factors of healthcare service quality of the hospital and to determine the main aspect that determines the quality of each of the factors in the healthcare service provided by the hospitals. As such, this research is a descriptive and confirmatory research.

4. RESULTS

Based on the result of data-gathering materialized through the spread of questionnaires for patients on attendants, data concerning the qualities of service in public hospitals in Bandung are obtained together with 300 pieces of questionnaires that have been filled in. The use of measurement is meant to give description about the quality of the service in the public hospitals in Bandung. This measurement needs to go through a testing process to make sure that the measurement used is appropriate to measure the quality of service in the hospital. Furthermore, the test is also conducted to make sure that the measurement used is in fact reliable. The tested indicators are:

1. The peacefulness and comfort of the waiting room

2. The peacefulness and comfort of the nursing room

3. The cleanliness of the hospital building

4. The availability of the facilities of equipments

5. Medical equipment that go along with the advancement of technology

6. The maintenance of the medical facilities

7. The completeness of the medical facilities

8. The clarity of sign for direction in the hospital building

9. The area of the parking space

10. The availability of medicine

11. The hospitality of the administration staff

12. The willingness of the hospital employees to deal with patients' or attendants' problem

13. The willingness of the hospital employees to answer questions of the patients or attendants

14. The expertise and skills of the doctors to deal with patients

15. The ability and skills of the paramedics and supporting staff to deal with patients

16. The availability of the number of doctors to deal with patients

17. The availability of the numbers of the paramedics and supporting staff to deal with patients

18. The clarity of doctors' information concerning the disease or illness that the patients suffer from, along with this supporting examination that must be conducted as well as the medicine routine that the patient must go through

19. The clarity of doctors' information about the result of supporting examination such as laboratory examination, Röntgen, CT scan and the like together with plans for further care or treatment

20. The effectiveness of medical treatment given to help the cure of a certain disease

21. The ease of the registration procedure for medical treatment

22. The ease and speed of the payment procedure

23. The speed of administration process with the help of technology

24. The ease and speed of the procedure of summoning the medicine

25. The waiting time of the patients for their medical treatment service

26. The accurateness of the schedule of doctors' service

27. The sense of comfort due to doctors and supporting staff working hygienically because they wash their hands, wear gloves when needed and use hygiene tools

28. The attention of the hospital to the measurement of safety and comfort like special lines designed to be used for wheelchair users and the existence of holders on every staircase

29. The appropriateness of medical handling given to the needs of any patients without differentiating patients

30. The appropriate service of the hospitals with the offered price without sacrificing the qualities of the service

31. The offer of healthcare service with reasonable price for economically challenged patients

32. The secrecy of data of the patients

The validity and reliability test is conducted for 300 data. The result shows that each indicator of the infrastructure factor has corrected item-total correlation values relatively big more than 0.7. This shows that the indicators are valid and reliable to measure the Infrastructure Factor. Besides that, the results of the test also show the Cronbach Alpha 0,971. This number fulfills the minimum criteria for reliability according to Hair and shows that the measurement instrument is truly reliable. (Ramayah, et al., 2011).

Each indicator of the Personnel Quality Factor also has corrected item-total correction value which is relatively huge, more than 0.9 and Cronbach Alpha as much as 0.977. This shows that the indicators really are valid and reliable to measure Personnel Quality Factor.

The indicators of Process of Clinical Care have corrected item-total correction values which are huge, more than 0.7 and Cronbach Alpha 0.915 and thus indicate that the measurement instrument is valid and reliable.

The test result of Administrative Procedure Factor also shows that corrected item-total correlation values are relatively huge, more than 0.8 and Cronbach Alpha as much as 0.963 and that number indicates closeness to 1. Therefore, the measurement instrument is also valid and reliable.

The Safety Indicator Factor also has indicators with corrected item-total correction values are more than 0.8 and Cronbach Alpha as much as 0.928, which indicates that the measurement instrument is also valid and reliable.

The test also shows that each indicator of the Social Responsibility Factor has corrected item-total correction value which is more than 0.5 and Cronbach Alpha as much as 0.764 which is much more than 0.7. This shows that the measurement instrument is reliable.

The description of the quality of healthcare service in public hospitals in Bandung is conducted by organizing the data based on the assessment of the patients or attendants concerning the healthcare service quality given by the hospitals. The result of 300 data that have been analyzed shows that out of scale 1 to 7, there are no indicators that show the lack of quality in the hospital healthcare service or the extreme measurement to the quality. However, there are inputs given to the hospital as far as the result is concerned. Patients or attendants evaluate that each indicator of Infrastructure Factor, Personnel Quality Factor, Process of Clinical Care Factor, Safety Indicators Factor, and Social Responsibility Factor is relatively above average which scores four or five out of scale of seven. This shows that there are still a lot of aspects needed to be improved by the hospitals so that they can give decent healthcare service quality which are deemed good by the patients.

Data analysis shows that hospitals need to pay more attention to the effect of administrative procedures. Specifically, they need to pay attention to the procedure of medicine taking and the waiting time of the patients. This is due to the average respond from the patients, which is below the score of four. This means that relatively patients have difficulties and have to wait for a long time to get their medicine. Furthermore, patients still need to wait for quite a relatively long time to get their service.

Confirmatory Factor Analysis is used in order to determine which indicator that contributes the most to each factor of the healthcare service quality, and to confirm the model of healthcare service quality. The data processing is conducted with Lisrel program.

The result of data analysis shows that medicine availability is needed by the patients to give the biggest contribution to the Infrastructure Factor, with testing model that results in the goodness of fit 0.79. As for the Personnel Quality Factor, staff politeness to the patients and their partners play the highest contribution with goodness of fit as much as 0.80. The biggest contribution on the Process of Clinical Care Factor are the clarity of information from the doctor concerning the infected disease, supporting examinations that need to be done as well as the medical treatment that must be conducted with the level of appropriateness to the perfect model. The Administrative Procedures Factor is mainly determined by the item of waiting time for patients to get their service with goodness of fit as much as 0.86. The Safety Indicators Factor from the hospital service is ultimately determined by the sense of comfort due to doctors and

supporting staff working hygienically. The healthcare service with reasonable price has given the biggest contribution to the Social Responsibility Factor with the goodness of fit as much as 0.8.

5. CONCLUSION

Hospitals that give healthcare service have a number of problems as far as the characteristics of specific service are concerned. This research manages to get information about the evaluation of the patients towards the health service offered by public hospitals in Bandung. Some inputs for public hospitals are generated such as the need to pay more attention and focus to the main aspects that determine the quality of the healthcare service which consists of the availability of the medicine, the hospitality of the staff to the patients and their attendants, the availability of information from the doctors concerning the disease and other related factors such as the waiting time for the patient to get services, the comfort in conducting medical treatment in hospitals as well as affordable prices for medical service.

This research can be further developed seeing that hospital healthcare service may affect patients' satisfaction so that they will return to the same particular hospital in times of need. Further research still also needs to be conducted using much bigger sample measurement.

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