

## Research Report

## Analysis of importance level and quality achievement aspect in dental health service (A case study on Waru Sidoarjo Community Dental Health Service)

Taufan Bramantoro and Retno Palupi  
Department of Dental Public Health  
Faculty of Dentistry, Airlangga University  
Surabaya - Indonesia

### ABSTRACT

**Background:** Patients as customers of health services actually have expectation and assessment of health services perceived. During the initial interview conducted at Waru Sidoarjo Community Dental Health Service (Waru Sidoarjo CDHS), it is known that one hundred percent of initial respondents were not satisfied with dental care service provided. All of those respondents assessed that Waru Sidoarjo CDHS still has not met their expectations of service quality factors considered to be important for them. It is even known that there is usually a gap between the expectations of quality dental care service and the assessment of services perceived. As a result, further researches are needed to be conducted regarding the level of importance and achievement-related with factors that affect the quality of health services. **Purpose:** The purpose of this study was to determine the level of importance and achievement of the quality aspects of the health service provided by Waru Sidoarjo CDHS. **Methods:** This study can be considered as a descriptive observational study. The instrument used in this study was measurement instruments of service quality. Respondents in the study were 200 patients who visited to dental care services in Waru Sidoarjo CDHS in July 2011. **Results:** All of the attributes had a mean value of dominant importance and assessments at four. The attributes of the appearance feasibility of medical staffs had the highest interest, about 4.780. Meanwhile, the mean value of the lowest importance was on the attributes of the service suitability, about 4.595. During the observation of the service value, it is also known that the highest mean value was on the non-discriminative services, about 4.600. **Conclusion:** It can be concluded that there were attributes considered to be important for patients, but still not being fully met by health services provided by the service provider or Community Dental Health Care. Those attributes involving waiting room comfort, service readiness and service preparation attributes which not only had high importance value, but also had a large percentage of respondents who were not satisfied.

**Key words:** The expectations of patients, the assessments of patients, the satisfactory of patients, dental care service

### ABSTRAK

**Latar belakang:** Pasien sebagai pengguna jasa pelayanan kesehatan, memiliki harapan dan penilaian terhadap pelayanan kesehatan yang diterima. Pada wawancara awal yang dilakukan pada pasien Balai Pengobatan Gigi Puskesmas Waru Sidoarjo, didapatkan bahwa seratus persen responden awal merasa tidak puas dengan pelayanan kesehatan gigi. Seluruh responden awal menilai pihak BPG Puskesmas belum memenuhi harapan mereka terhadap faktor kualitas pelayanan yang mereka nilai penting. Terdapat kesenjangan antara harapan mereka terkait kualitas pelayanan kesehatan gigi yang mereka nilai penting dengan penilaian mereka terhadap pelayanan yang diterima, sehingga diperlukan penelitian lebih lanjut mengenai tingkat kepentingan dan pencapaian terkait faktor yang berpengaruh terhadap kualitas pelayanan kesehatan. **Tujuan:** Tujuan penelitian ini adalah untuk mengetahui tingkat kepentingan dan pencapaian aspek kualitas pelayanan yang diberikan Balai Pengobatan Gigi Puskesmas Waru Sidoarjo. **Metode:** Penelitian ini merupakan penelitian deskriptif observasional. Instrumen yang digunakan pada penelitian ini adalah instrumen pengukuran kualitas pelayanan jasa. Responden pada penelitian adalah 200 pasien yang berkunjung dan mendapatkan pelayanan kesehatan gigi di Balai pengobatan Gigi Puskesmas Waru Sidoarjo pada bulan Juli 2011. **Hasil:** Seluruh atribut memiliki rerata nilai kepentingan dan penilaian yang dominan pada nilai 4. Atribut kelayakan penampilan staf medis memiliki nilai kepentingan tertinggi sebesar 4,780. Rerata nilai kepentingan terendah pada atribut kesesuaian layanan sebesar 4,595. Pada pengamatan nilai penerimaan layanan, rerata nilai tertinggi pada atribut layanan yang tidak diskriminatif sebesar 4,600. Rerata nilai terendah didapatkan pada atribut kesiapan layanan sebesar 4,200. **Kesimpulan:** Disimpulkan bahwa terdapat atribut yang dinilai penting tetapi belum sepenuhnya terpenuhi oleh

*pelayanan kesehatan yang diberikan oleh penyedia layanan atau Puskesmas. Atribut kenyamanan ruang tunggu, kesigapan layanan, dan kesiapan layanan, memiliki nilai kepentingan yang tinggi, tetapi memiliki nilai persentase yang besar pada jumlah responden yang merasa tidak puas.*

**Kata kunci:** *Harapan pasien, penilaian pasien, kepuasan pasien, pelayanan kesehatan gigi*

*Correspondence:* Taufan Bramantoro, c/o: Departemen Ilmu Kesehatan Gigi Masyarakat, Fakultas Kedokteran Gigi Universitas Airlangga. Jln. Mayjend. Prof. Dr. Moestopo No. 47 Surabaya 60132, Indonesia. E-mail: tbramantoro@yahoo.com

---

## INTRODUCTION

Waru Sidoarjo Community Dental Health Service (Waru Sidoarjo CDHS) is a governmental organization that works to provide community health services. Thus, it is always required to constantly improve the quality of its health care services. One of the services organized by the Waru Sidoarjo CDHS is dental and oral health care. As a service provider organization, it has to pay attention to interaction between structure, process, and outcome; since these three components will affect the health service quality assessment.<sup>1</sup>

The structure of the Public Health Center also involves physical facilities, supplies and equipment, organization and management, finance, human resources, and resource sharing. The existence of the structure is actually supported by a process, namely as a professional activity carried out by medical and nonmedical resources including the assessment of patients, diagnose, treatment plans, treatment indications, and so on. The final results of the patients' activity in terms of changes in health status and satisfactory actually involve both positive and negative outcomes, which could impact the short and long term development of health care service.<sup>1,2</sup>

Patient as an individual has different individual expectation and assessment of the health services perceived. The patient will be satisfied when his expectation of the health services is provided. It means that the satisfactory of the patients at Waru Sidoarjo CDHS can have an implication towards the improvement of dental health care services.<sup>3,4</sup>

During the initial interview conducted at Waru Sidoarjo CDHS, it is known that one hundred percent of the initial respondents were not satisfied with dental care services perceived. All of the respondents even stated that the BPG still had not provided their expectations of service quality factors. This condition was actually related to the gap between their expectations of dental care service quality considered to be important for them and their assessment of the dental care services perceived. Therefore, further researches are needed regarding the level of the importance and achievement of related factors that affect the quality of health services. The purpose of this study, thus, was to determine the level of the importance and achievement of

the aspects of service quality provided by Waru Sidoarjo CDHS.

## MATERIALS AND METHODS

This study is considered as a descriptive observational study. The instrument used in this study was an instrument of service quality measurement, questionnaire, consisting of five aspects of the observations, namely: a) reliability, the ability to deliver promised services immediately, accurately, and satisfying, b) assurance or insurance includes knowledge, compensation, decency and trustworthiness, free from danger, and risk or doubt, c) tangibles or physical evidence includes physical facilities, equipment, as well as personnel and means of communication, d) empathy includes relationships, good communication, as well as attention and understanding of customer needs, e) responsibility or responsiveness, the desire of staffs to assist customers and provide a responsive service.

The respondents in the study were 200 patients who visited Waru Sidoarjo CDHS in July 2011. The respondents then answered 22 questions by circling items based on Likert scale score of 1 to 5 concerned with the service quality problems that have been adapted to the condition of the dental health services. The questionnaire consisted of column values of expectations and judgments. The data of the respondents' response were then recapitulated. Afterwards, the comparison of the expectation of the respondents and the assessment of the respondents was conducted. The result was then classified into three groups: the value of the assessment of the respondents was smaller than the value of the expectation of the respondents; the value of the assessment of the respondents was the same as the value of the expectation of the respondents; and the value of the assessment of the respondents was higher than the value of the expectation of the respondents. The mean value of the expectations and assessments of the respondents was then calculated for each topic of questions in order to know the importance of the service quality provided by Waru Sidoarjo CDHS.

## RESULTS

Based on the recapitulation result of the expectation and assessment of the patients in Waru Sidoarjo CDHS, it is known that more than 50% of respondents in each attribute of health care service quality aspects had the same expectation value as the assessment one concerned with dental care services received. The highest mean value was obtained from the attribute of the appearance feasibility of the medical staffs, about 4.780. Meanwhile, the lowest mean value was obtained from the attribute of the dental care service suitability, about 4.595. Based on the observation results on the value of the dental care services, the highest mean value was obtained from the attribute of the non-discriminatory services, about 4.600. Meanwhile, the lowest mean value was obtained from the attribute of the service readiness, about 4.200.

The attribute of the service readiness on responsiveness aspects had the highest mean value of the expectation, about 4.775. It means that the aspect of the service quality had high level of importance. It was contradicted with the percentage of the dissatisfaction value. Compared to the other aspects of the service quality, the aspect of the service readiness had the largest percentage of the dissatisfaction value, about 39.5%.

The largest percentage value on the service satisfactory was obtained from the attribute of the non-discriminatory service, about 78.5%. This was consistent with the highest mean value of the service reception obtained from the attribute of the non-discriminatory service. It was also followed by other five attributes on the aspect of assurance, which were the attribute of the hospitality services by medical staffs, the attribute of the medical staffs' skills, the attribute of the reasonable and affordable rates, the attribute of the medical staffs' thoroughness, and the attribute of the medical staffs' knowledge, so the aspect of assurance had the highest percentage of the satisfactory of the patients, above 70%, than the aspect of dental service quality.

Based on the results, it can be indicated that there were some attributes that were considered to be important for the patients or had high expectation value, but still not being fully met by the dental care services provided by the service providers or the Public Health Center. The attributes of waiting room comfort, service readiness, and service preparation actually obtained high interest value from the respondents, but there still was a large percentage of the number of the respondents who were not satisfied.

## DISCUSSION

The characteristics of services involved can be related with an activity with intangible elements. In the service process, there are aspects of interaction between service users and service providers although sometimes parties involved are not always aware of the interaction, and do not result in the transfer of owner.<sup>1,4,5</sup>

Quality improvement efforts that have impacts on improving the utilization of services require both of the focus on how to provide needs, demands, and expectations of service users, as well as the integration of all activities of the organization in order to meet the needs, demands, and expectations in providing services. Both of them can actually be related with the orientation of the long-term achievement of organizational goals. The process of fulfilling the needs of service users is actually more complicated than the process of purchasing goods. The first stage in the process of fulfilling the needs of service users is concerned with how the customers identify the various alternatives, consider the risks and the advantages, and then make a purchase decision. The next stage is the interaction between service users and service providers. An the last stage is about the assessment of the service users on the services perceived.<sup>5,6</sup>

Based on the observation results of the value of importance and achievement of the service quality of Waru Sidoarjo CDHS, it is known that there were some attributes including the comfort of waiting room, the readiness of service, and the preparation of service obtaining high importance value from the respondents, but they still obtained a large percentage of the number of respondents who felt unsatisfied. Those patients of CDHS felt that the dental care service perceived still had not optimally met their expectation considered to be important for them. The service quality perceived by service users (perceived service quality) is actually the difference of the expectations or wishes of the service users (expected service) and the reality of the service they received (perceived service). Based on this difference between the expectations and the reality, the satisfactory of the service users then can be obtained. This condition will finally trigger the loyalty of the service users to the service providers. The level of the ability of the service providers in fulfilling the expectations and needs of the service users is considered as the basis of the service quality.<sup>7,8</sup>

Waru Sidoarjo CDHS actually requires efforts to increase the satisfactory of patients with quality of dental care provided. These efforts, therefore, require a fundamental understanding of the expectations of patients. The expectations of patients are greatly influenced by experiences and taste. The expectations of service users are believed to have a major role in determining the quality of service and customer satisfaction. Basically there is a close relationship between the determination of quality and customer satisfaction. In evaluating process, it is known that customers will usually use their expectations as a standard or reference. The components of the expectations of patients can become the basic ingredient in the process of mutual interaction between the needs and the providing of the needs of patients. Knowing the needs of service users, therefore, can help service providers understand how and why customers react to product delivery. The expectations of patients, however, will continue to evolve to keep pace of time progress. The development of the expectations of patients improves as much information perceived by

patients, and patients become more experienced, and will affect the level of the perceived satisfactory of the patients.<sup>9,10</sup>

Based on the results of the study, it can be concluded that there are attributes that are considered important or have a high expectation value by the respondents, but they are not fully provided by health services conducted by service provider or health center. Those high interest value attributes include waiting room comfort, service readiness, and service preparation. However, in this study it is known that there are still a large percentage of respondents who were not satisfied with the services.

## REFERENCES

- Supriyanto S, Ernawaty. Pemasaran jasa industri kesehatan. Edisi 1. Surabaya: FKM Universitas Airlangga; 2006. p. 195–216.
- Sabarguna B. Pemasaran rumah sakit. Konsorsium RSI Jateng-DIY, 2004. p. 88–93.
- Karydis A, Kodovazeniti MK, Hatzigeorgiou D, Panis V. Expectations and perceptions of Greek patients regarding the quality of dental health care. *Int J for Quality in Health Care* 2001; 13(5): 409–16.
- Muninjaya AA. Manajemen kesehatan. Jakarta: EGC. 2004. p. 235–39.
- Chahal H, Sharma RD, Gupta M. Patient satisfaction in public outpatient health care services. *J Health Management* 2004; 6(1): 23–45. Available at: <http://jhm.sagepub.com>. Accessed December 11, 2010.
- Cooper BR, Monson AL. Patient satisfaction in a restorative functions dental hygiene clinic. *J Dent Educ* 2008; 72(12): 1510–5.
- Sur H, Hayranl O, Yildirim C, Mumcu G. Patient satisfaction in dental outpatient clinics in Turkey. *Croat Med J* 2004; 45(5): 651–54.
- John J, Yatim FM, Mani SA. Measuring service quality of public dental health care facilities in Kelantan Malaysia. *Asia Pac J Public Health* 2010; 20(10): 1–12. Available at: <http://aph.sagepub.com>. Accessed June 12, 2011.
- Patrick JM, Alan BE. Marketing the dental practice: Eight steps toward success. *J Am Dent Assoc* 2006; 137: 1426–33. Available at: <http://jada.ada.org/cgi/content/full/137/10/1426>. Accessed November 10, 2010.
- Westaway MS, Rheeder P, Van Zyl DG, Seager JR. Interpersonal and organizational dimensions of patient satisfaction: the moderating effects of health status. *Int J for Quality in Health Care* 2003; 15(4): 337–44.