



Evaluation of Patient Satisfaction on Quality of Public Dental Health Service from Different Dimensions in Indonesia

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Abstract

Objective: To verify user satisfaction with oral public health services in different treatment dimensions and relate them to demographic conditions. **Material and Methods:** This study using pilot pathfinder design, conducted in Bantaeng Regency in January 2018. The sample consisted of 114 participants. Data were collected using structured questionnaires, which have been designed according to this survey which has eighteen questions corresponding to the object, with response patterns: satisfied, more or less and dissatisfied. Questions about satisfaction with services are grouped into five domains - 'physical structure', 'relationships and communication', 'information and support', 'health care' and 'service organization'. Satisfaction was analyzed by using Chi-square test. Significance level set at 5%. **Results:** In dental and oral health centers in Bantaeng District the physical structure dimension showed the highest level of satisfaction, while the dimensions of dental and oral health care showed the lowest satisfaction. **Conclusion:** Communities in Bantaeng and Pa'jukukang Sub-districts of Bantaeng Regency are mostly satisfied with dental and oral health services based on health service dimensions. On the physical structure dimension shows the highest level of satisfaction, whereas the dimension of dental and oral health care shows the lowest satisfaction.

Keywords: Patient Satisfaction; Quality of Health Care; Dental Health Services.

Introduction

In recent years, ensuring the quality of health care has been a constant concern of countries in the world, regardless of the level of economic development and health care [1,2]. National and international organizations for the assessment of health services establish the satisfaction of health-care users as one of the main indicators for controlling health outcomes [3]. User satisfaction is one of health care quality indicator. Some authors said that health services can be evaluated based on the service / patient service structure, outcome, and satisfaction [4,5]. Patient satisfaction is essential as a measure of service quality as it provides information about the success of the provider in meeting the patient's values and expectations, where the patient is the highest priority [4,5].

In health care, patient satisfaction is how much the individual considers health care services or how they are useful, effective, beneficial [6]. Includes levels of general health needs and specific needs met, and evaluates patient clinical satisfaction rates for health care, as satisfied patients are more likely to adhere to treatment and are active in their own care [7].

The World Health Organization has shown great interest in the evaluation of health services, while encouraging the development of strategies that take advantage of user satisfaction with regard to various aspects of health care, which mainly include aspects of quality of non-clinical care [8]. Consciously that the evaluation of health services is an important requirement for quality improvement, the Brazilian government has made the National Program to improve the qualification, monitoring and evaluation of health team work, with a view to making changes in service practices, orientating services according to user needs and satisfaction, and monitoring assessments self [1,9], that the Faculty of Dentistry, Ponta Grossa University in Brazil, examines patient satisfaction of dental health services, which results in patient satisfaction relating to different dimensions of dental and oral health services [1].

Despite important patient satisfaction, studies on the quality of dental care services are rare and do not have the same criteria [10,11]. This is not in line with the equal rights of all patients to affordable, accessible, high-quality care to identify which aspects of the service need to be changed to improve patient satisfaction [10,11]. There have been reports of quality assessment of dental care services from developing countries such as Nigeria [11]. Several available studies have used patient satisfaction to evaluate quality, particularly in the field of dental and oral health services [11].

Therefore, the aim of this study was to verify user satisfaction with oral public health services in Bantaeng and Pa'jukukang Sub-district, Indonesia.

Material and Methods

Study Design and Sampling

A cross-sectional design was adopted. The study population was composed of subjects who had received dental services. This study using pilot pathfinder design was conducted in Bantaeng Regency, Indonesia, in January 2018. The researcher took sample of 114 participants by using purposive sampling method.

The inclusion criteria were residents in Bantaeng Regency, aged ≥ 18 years old, had received dental and oral health services, and were willing to be subject.

Data Collection

Data were collected using structured questionnaires, which have been designed according to this survey which has eighteen questions corresponding to the object, with response patterns: satisfied, reasonably satisfied and dissatisfied. This questionnaire is based on previous research [1] and has been tested for validity using Kruskal-Wallis Test, and test of reliability, obtained Cronbach's α ($\alpha = 0.70$) and then translated into Bahasa Indonesia.

Data Analysis

Questions are grouped according to the basic dimensions of the evaluation of public health services, namely '*Communication and Dental Relations*', '*Dental and Oral Health Care*', '*Information and Support*', '*Service Organization*', and '*Physical Structure*' (Chart 1).

Chart 1. An evaluative dimension of satisfaction with oral public health services and its forming variables.

Domain	Variables
<i>Communication and Dental Relations</i>	Reception of the patient to enter the dental service of the health unit. Statement of education, respect and interest, on the part of the dental health team during the service. Reliability of professionals providing care in oral health. Ease of dialogue with the oral health team after the end of treatment.
<i>Dental and Oral Health Care</i>	Quality of clinical care offered by the dental health team. Ability to solve all the problems of oral health.
<i>Information and Support</i>	Clarification of doubts, concerns and problems of oral health on the part of the dental team. Guidance during the consultation on the prevention of oral diseases, by the dental team. Guidance to the patient after treatment performed in the specialty, by the dental team.
<i>Service Organization</i>	Period of operation of dental care at the health facility. Time to schedule a dental appointment at the clinic. Form of scheduling dental appointment at the clinic. Time anticipated to be answered by the oral health team. Form of scheduling dental appointment in a specialized service. Time to schedule a dental appointment in a specialized service.
<i>Physical Structure</i>	Cleaning the environments in which the oral health team provides care. Comfort of the environments in which the oral health team provides care. Signaling the dental office at the health unit.

To get overall satisfaction on each dimension, by assessing the probability of answer, that is satisfied (value 3), more or less (2), not satisfied (1).

Statistical Analysis

Data were analyzed using IBM SPSS Statistics software (SPSS Inc., Chicago, IL, USA) and presented using descriptive statistics (frequency and percentage distribution).

Results

Table 1 shows the distribution of demographic characteristics. Most of the subjects were female (72.8%), age less than 40 years (74.6%), junior high school education status (38.6%), students (43.0%), and resident in urban areas (77.2%).

Table 1. Frequency distribution of demographic characteristics of the participants.

Variables	Categories	N	%
Gender	Male	31	27.2
	Female	83	72.8
Age (Years)	18-40	85	74.6
	41-60	24	21.1
	>60	5	4.3
Education Level	Not in School	2	1.7
	Graduated from Elementary School	15	13.2
	Graduated from Junior High School	44	38.6
	Graduated from High School	36	31.6
	College	17	14.9
Job	Student's Work	49	43.0
	PNS / Police / TNI / Retiree	18	15.8
	Private Employees	7	6.1
	Entrepreneur	21	18.4
	IRT	14	12.3
	Not Working	5	4.4
Location	Urban	88	77.2
	Rural	26	22.8

Table 2 presents the results of an evaluation of the quality of dental and oral health services for each item of questionnaire showing the proportion of responses to each variable. Generally the service users who are subjected to satisfied with the services offered by the oral and dental health system in Bantaeng Regency. Seen in the variable of acceptance of patients to enter the health and mouth services as much as 99 individuals (86.8%), with the variables of educational statement, the respect of the service provider team on duty is the highest dissatisfaction of 19 individuals (16.7%).

Table 2. Satisfaction of dental and oral health service users in Bantaeng Regency based on health service dimension.

Dimention	Variables	Not Satisfied		More or Less		Satisfied		Overall	
		N	%	N	%	N	%	N	%
<i>Communication and Dental Relations</i>	P1. Reception of the patient to enter the dental service of the health unit.	7	6.1	8	7.0	99	86.8	114	100.0
	P2. Statement of education, respect and interest, on the part of the dental health team during the service.	19	16.7	26	22.8	69	60.5	114	100.0
	P3. Reliability of professionals providing care in oral health.	5	4.4	25	21.9	85	73.7	114	100.0
	P4. Ease of dialogue with the oral health team after the end of treatment	8	7.0	22	19.3	84	73.3	114	100.0
<i>Dental and Oral Health Care</i>	P5. Quality of clinical care offered by the dental health team.	9	7.9	22	19.3	83	72.8	114	100.0
	P6. Ability to solve all the problems of oral health.	15	13.2	23	20.2	76	66.7	114	100.0
<i>Information and Support</i>	P7. Clarification of doubts, concerns and problems of oral health on the part of the dental team.	9	7.9	21	18.4	84	73.7	114	100.0
	P8. Guidance during the consultation on the prevention of oral diseases, by the dental team.	8	7.0	25	21.9	81	71.1	114	100.0
	P9. Guidance to the patient after treatment performed in the specialty, by the dental team.	9	7.9	25	21.9	80	70.2	114	100.0

<i>Service Organization</i>	P10. Clarification of doubts, concerns and problems of oral health on the part of the dental team.	14	12.3	22	19.3	78	68.4	114	100.0
	P11. Period of operation of dental care at the health facility.	14	12.3	22	19.3	78	68.4	114	100.0
	P12. Time to schedule a dental appointment at the clinic.	14	12.3	22	19.3	78	68.4	114	100.0
	P13. Form of scheduling dental appointment at the clinic.	14	12.3	22	19.3	78	68.4	114	100.0
	P14. Time anticipated to be answered by the oral health team.	14	12.3	22	19.3	78	68.4	114	100.0
	P15. Form of scheduling dental appointment in a specialized service.	14	12.3	22	19.3	78	68.4	114	100.0
<i>Physical Structure</i>	P16. Cleaning the environments in which the oral health team provides care.	15	13.2	25	21.9	74	64.9	114	100.0
	P17. Comfort of the environments in which the oral health team provides care.	9	7.9	22	19.3	83	72.8	114	100.0
	P18. Signaling the dental office at the health unit.	10	8.8	21	18.4	83	72.8	114	100.0

Based on Table 3 it can be concluded that there is a significant relationship between satisfaction and demographic characteristics except location-based characteristics.

Table 3. Satisfaction of oral health service users of Bantaeng Regency based on demographic characteristics.

Variables	Categories	N (%)	Percentage of Satisfaction	p-value
Gender	Male	31 (27.2)	43.0	0.025*
	Female	83 (72.8)	67.0	
Age	18-40 years	85 (74.6)	76.0	<0.001*
	41-60 years	24 (21.1)	53.0	
	>60 years	5 (4.3)	40.0	
Education Level	Not in school	2 (1.7)	0.0	<0.001*
	Graduated from elementary school	15 (13.2)	0.0	
	Graduated from junior high school	44 (38.6)	79.0	
	Graduated from high school	36 (31.6)	100.0	
	College	17 (14.9)	0.0	
Job	Student's work	48 (42.1)	60.4	<0.001*
	PNS / Polri / TNI / Retiree	19 (16.7)	100.0	
	Private employees	7 (6.1)	100.0	
	Entrepreneur	21 (18.4)	66.7	
	IRT	13 (11.4)	0.0	
	Not working	6 (5.3)	0.0	
Location	Urban	88 (77.2)	64.0	0.088
	Rural	26 (22.8)	36.0	

*Chi-square test; Statistically significant.

Figure 1 shows that the dimension of relationship and communication has a standard deviation (SD) value of 0.52 with a mean value of 2.65. The treatment dimension has a SD value of 0.63 with a mean value of 2.59. The information and support dimension has a SD value of 0.6 with a

mean value of 2.64. The dimension of service organization has a SD value of 0.7 with a mean value of 2.56. The physical structure dimension has SD value of 0.57 with mean value 2.68.

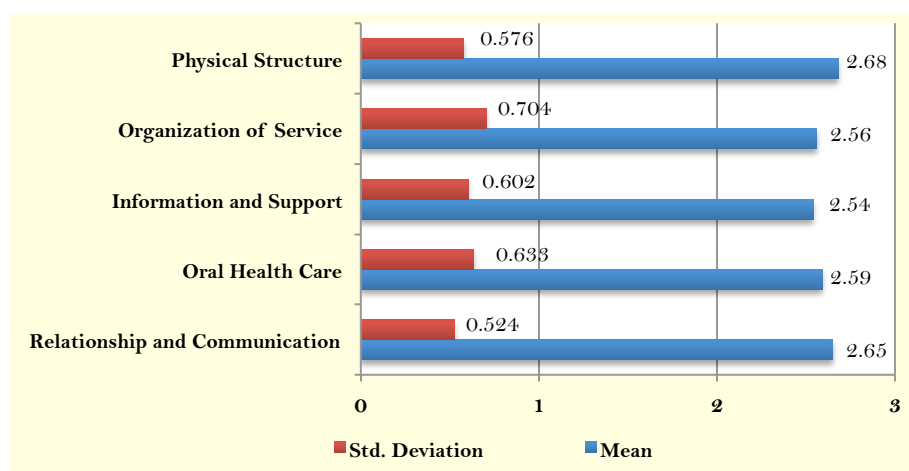


Figure 1. Average index and standard deviation of satisfaction based on dental and oral service dimensions in Bantaeng District.

Discussion

This study showed that subjects who have received dental treatment in dental and oral health services show the highest number of women (Tables 1 and 3). Women and young adults who visit dental and oral health services are more likely than men and elderly. This is in line with previous which finds a large number of female patients visiting dental clinics [1,12-14]. In this study, women presented a high level of satisfaction, a result similar to that previously described [15,16], which suggested that more women taking into account the health and aesthetic conditions of the oral cavity so that more frequent visits to dental and oral health services. Evident in the systematic review and study in Brazil, which revealed that the highest satisfaction occurred in women and by sex there was no significant difference in satisfaction between men and women [15-17].

Regarding satisfaction in health service dimensions (Table 2 and Figure 1), the results show a low 'oral health care' dimension, this information indicates the inability of professional clinical skills. This dimension relates to the completeness of health services and demonstrates effective dental care relationships, with sufficient and unlimited communication between complex health conditions. Evident in the German study found that aspects of dental and oral care techniques are a key aspect of service quality to service users [18]. There are several aspects that can be input to avoid barriers to completeness of services, such as difficulties in accessing health services, high prevalence of admission, clinicians, the possibility of failure in the system to be forwarded to the special service [17,19], so that the initiative to reset the work process and optimize the internal flow so as to contribute satisfactorily to encourage the service quality, therefore health providers and clinicians should also be based on perception the various individuals involved to understand the factors inhibiting the completeness of the service as a healthcare solution [20].

In the 'service organizing' dimension, the lowest satisfaction of this survey was found according to previously reported [1], which states that the 'service organization' is the dimension with the lowest satisfaction index, since many of the users come and are delayed to enter the service so that it is made returning appointments and scheduling again to the health care facility [1]. In this survey the interview was not conducted in a neutral place, which did not involve the service provider, resulting in the shame and discomfort of the professionals working in the location.

In satisfaction with the 'physical structure' dimension is the highest satisfaction in the comfort category of the treatment environment and the dental treatment marker. These findings are in agreement with previous results [18,20], showing the results of the 'physical structure' dimension is the highest satisfaction. This high satisfaction needs to be considered because there are other aspects that affect such an atmosphere, not part of the research. A recent systematic review has shown that user satisfaction with respect to the research variables of environmental size and arrangement, the number and quality of chairs in the waiting room [19]. The high satisfaction of the physical structure can be explained by the low utilization of the user's critical capacity and by the strong relationship between expectation and satisfaction, when expectations are low, satisfaction is more easily achieved and a high level of satisfaction will be achieved [21,22].

Conclusion

Communities in Bantaeng and Pa'jukukang Sub-districts of Bantaeng Regency are mostly satisfied with dental and oral health services based on health service dimensions. On the physical structure dimension shows the highest level of satisfaction, whereas the dimension of dental and oral health care shows the lowest satisfaction.

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