## RESEARCH ARTICLE

# Quality of dental care services and satisfaction of patients visiting dental treatment center of Kahuripan public health center, Tawang sub district, Tasikmalaya city

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Submitted: 16th November 2018; Revised: 23rd January 2019; Accepted: 18th March 2019

#### **ABSTRACT**

Patients, especially those who use health insurance have felt that the quality of primary care services tends to be less satisfying in terms of both public services and dental care services. Based on the results of the annual report at the Kahuripan Health Center, the number of patient visits to dental treatment center decreased from 2016 to 2017 by 802 people. This study aimed to determine the quality of dental care services and the satisfaction of patients visiting dental treatment center Kahuripan Health Center. This case study used a qualitative method and an explanatory research design. The sample in this study consisted of 40 patients as the respondents responding to the questionnaires about service quality and patient satisfaction, and 12 people were interviewed. The results showed that all dimensions of the quality of dental care services at the Kahuripan Health Center were categorized as very good i.e. real dimensions (82.71%), reliability (83.21%), responsiveness (87.12%), assurance (84.93%), and empathy (83.54%). As for patient satisfaction, three stages of patient satisfaction were categorized as very satisfied, namely the anamnesis and diagnosis stage (83.02%), action (83%), and completion of action (82.62%). The stages categorized as satisfying were the registration and waiting room stage (78.87%), and the stage of preparation of treatment (72.50%). The result of interview showed that the average respondents stated that the quality of dental care services was very good. All the five dimensions of the quality of dental care services were categorized as very good. Patients who visited BPG expressed satisfaction with the five stages, namely they were very satisfied with the three stages and satisfied with the other two stages.

Keywords: patient satisfaction; quality of dental care services

## INTRODUCTION

Patients, especially those who use health insurance have felt that the quality of primary care services tends to be less satisfying in terms of both public services and dental care services. The results of the research on the quality of health services in Sukorame Village, Mojoroto Sub district, Kediri City based on the payment system in terms of patient perceptions indicate that there are differences in the quality of health services for patients based on payment systems, where of payment systems the patients directly perceive service quality as better than Askes and public health insurance users. The results of the study on survey analysis of the

aspects of Indonesian domestic life stated that health insurance users tended to choose privately-owned rather than government—owned health care services because they did not provide satisfactory services to patients.<sup>2</sup>

Patient satisfaction with dental and oral health services is a comparison between the services perceived by patients and their expectations before getting services.<sup>3</sup> Perception is the sensory experiences of objects, events or relationships that are obtained by deducing information and interpreting messages. In terms of health services, perception means integrated activities in individuals so that what is in the individual will be active in

perceptions, such as perceptions about the quality of health services in an agency or Public Health Center.<sup>4</sup>

Handayani's findings were analyzed by comparing expectations and experiences that illustrated the level of patient satisfaction with health services in tangible aspects (72.76%), reliability (72.09%), empathy (72.89%), responsiveness (72.88%) and assurance (72.22%). Overall satisfaction level (72.58%) was categorized as satisfying.5 As for the results of the study on the perception of patient satisfaction with service quality in terms of five dimensions, very satisfied respondents were 77% and those satisfied were 23%.6 Furthermore, the results of research on patient satisfaction with dental and oral care at Bahu Public Health Center in terms of service dimensions showed an average index of 85.32%, classified as very satisfied.3 The research conducted by Sunarsih and Yuniastini showed that there was a very strong and positive relationship between the quality of health services and the level of patient satisfaction at Tanjungkarang Health Integrated Polytechnic of the Ministry of Health.7

Based on the data of the annual report from the dental and oral health program activities of Kahuripan Health Center, Tawang Subdistrict, Tasikmalaya City in 2016 and 2017, the data of the number of patient visits were obtained as follows: the number of patient visits in 2016 was 4,490 people, and the number of patient visits in 2017 was 3,662 people. The patient visits decreased by 828 people from 2016 to 2017.8 Almost all the patients visiting the Dental Medicine Center in Kahuripan used a Healthcare and Social Security Agency. According to the rules of the insurance health, if patients feel dissatisfied with the services provided by the primary health facility handling them and

they want to move to another health facility, they must wait for three months after being registered at the previous health facility.<sup>9</sup>

The number of staffs at the Dental Medicine Center in Kahuripan consists of one dentist, two supervisors and one dental nurse. In general, some of the duties of dental nurses are filling tooth cavities, extracting deciduous and permanent teeth, pulpectomy or mummification, and scaling, all of which are done based on the instructions from dentist.<sup>8</sup>

#### **MATERIALS AND METHODS**

The population in this study was all patients amounting to 358 patients who visited the Dental Treatment Center in April. The sample in this study was 40 patients. These patients filled out a questionnaire about service quality and patient satisfaction. The instruments used to assist the data collection in this study were the researchers themselves, a questionnaire, interview guidelines and observation sheets. The data processing and analysis in this study consisted of data collection and data processing and analysis (data reduction, data display, conclusion drawing).

#### **RESULTS**

The results of the research on the quality of dental care services using the questionnaire were divided into five dimensions consisting of: tangibility, reliability, responsiveness, assurance and attention, which are recapitulated in Table 1. The results of the study on the aspects of satisfaction using the questionnaire were based on five stages, namely waiting room, anamnesis and diagnosis, preparation of actions, treatment measures and completion stages which are summarized in Table 2.

Table 1. Results of recapitulation of the quality of dental care services

No	Statement		Service Quality			
	N = 40	TS	KS	S	SS	
I.	Tangibles (physical evidence)	1	2	3	4	
1.	Dental Treatment Center is easy to find.	0	1	22	17	
2.	Dental treatment condition is clean and comfortable.	0	1	20	19	
3.	Patient waiting room is spacious, clean, and comfortable.	0	1	27	12	
4.	Posters on how to prevent and treat dental diseases are complete and neatly arranged in dental treatment room.	0	3	29	8	

5.	This Dental Treatment Center has complete, clean and well maintained dental equipment.	0	4	26	10
6.	Registration officers, dentist and dental nurse are cleanly, neatly and properly dressed.	0	0	22	18
	Total	0	10	146	84
	Percentage of service quality	0	4.17	60.83	35
	Percentage of tangibles	82.7	71%		
	Category	Very	good		
II.	Reliability	TS	KS	S	SS
1.	The requirements and registration process at the Public Health Center are very easy and quick.	1	3	24	12
2.	The registration officer is friendly and polite.	0	1	27	12
3.	The dentist always arrives on time to provide dental treatment services.	0	1	22	17
4.	The dental nurse always comes on time to provide dental treatment services.	0	0	25	15
5.	The dentist always provides an explanation of dental disease, the consequences and treatment to be given.	0	1	20	19
6.	The dental nurse at this Public Health Center always helps the dentist by providing dental nursing services.	0	1	23	16
7.	The opening and closing hours of this Dental Treatment Center are on time according to the applicable schedule.	0	2	26	12
	Total	1	9	167	103
	Percentage of service quality	0.35	3.22	59.65	36.78
	Percentage of reliability		21%		
	Category		Good		
III.	Responsiveness	1	2	3	4
1.	The dentist quickly responds to / fulfills patient requests in dental treatment	0	1	19	20
2.	services.  The dentist always understands the dental health problems that a patient	0	0	19	21
3.	complains about.  The dentist is responsive to dealing with dental diseases that the patient	0	0	18	22
4	complains about.  The dentist responds to the patient's questions about the disease and how to	0	0	21	19
5.	treat it.  The dental nurse quickly serves the needs of the patient during and after dental treatment.	0	0	24	16
	Total	0	1	101	98
	Percentage of service quality	0	0.5	50.5	49
	Percentage of responsiveness	87	12%		
	Category		Good		
IV.	Assurance	TS	KS	S	SS
1.	The dentist always provides a sense of security when doing dental care.	0	0	25	15
2.	The dentist is friendly and polite to the patient.	0	0	21	19
3.	The dental nurse is friendly and polite to the patient.	0	0	24	16
4.	The dentist provides dental treatment regardless of the patient's social status (ethnicity, religion, wealth).	0	0	16	24
5.	The dentist makes correct diagnosis regarding the patient's illness.	0	0	28	12
6.	The dentist does not tell one patient's dental condition to other patients.  The dentist is highly skilled, highly skilled and full of confidence when providing	0	3	26	11
7.	services to the patient.	0	0	21	19
8. 9.	The dentist does not rush any dental treatment. The dentist always wears a mask and gloves	1 0	0 2	22 21	17 17
	Total	1	5	204	150
		-			
	Percentage of service quality (100%)	0.27	1.39	56.67	41.07
	Percentage of service quality (100%)  Percentage of assurance	0.27	1.39 93%	56.67	41.67

V.	Empathy	TS	KS	S	SS
1.	The dentist introduces himself before providing dental treatment or prescribing medicine.	0	3	27	10
2.	The dentist listens and pays attention when a patient complains about dental disease.	0	0	25	15
3.	The dentist tries to reduce the patient's anxiety about the dental disease she/hesuffers from.	0	1	26	13
4.	The dentist tries to comfort patients instead of frightening them.	0	0	27	13
5.	The dentist always motivates patients to recover.	3	4	7	26
6.	The dentist patiently deals with patients having a toothache.	3	2	8	27
	Total	6	10	120	104
	Percentage of service quality (100%)	2.5	4.17	50	43.33
	Percentage of empathy	83.54%			
	Category	Very Good			

Category description:

Very Good (VG) 81.26 – 100% Good (G) 62.51 – 81.25% Fair (NG) 43.76 – 62.50% Poor (NG) 25 – 43.75%

Table 2. Results of recapitulation of patient satisfaction

No.	Statement	TP	KP	Р	SP		
I.	N = 40  Registration and waiting room	1	2	3	4		
1.	In my opinion, the registration officer looks neat.	0	0	24	16		
	, , , ,	Ü	•				
2.	In my opinion, the registration officer could quickly make a medical card.	0	1	27	12		
3.	In my opinion, the condition of the toilet is clean and does not smell.	0	10	26	4		
4.	In my opinion, the waiting time for a dental check is not long.	0	2	24	14		
5.	I feel that the waiting time in a queue for the drug at the Public Health Center is not long.	0	8	26	6		
	Total	0	21	127	52		
	Percentage of satisfaction	0	10.5	63.5	26		
	Percentage of registration and waiting room		.87%	00.0			
	Category		Satisfied				
II.	Stage of anamnesis and diagnosis	TP	KP	P	SF		
1.	In my opinion, the dentist is friendly in providing dental treatment services.	0	0	24	16		
٠.	The dentist always asks and confirms the patients' names, addresses,	O	Ü	27	10		
2	and jobs.	0	4	25	11		
3.	The dentist asks and listens to the patient's dental complaints patient	0	0	26	14		
	The dentist asks for a history of other diseases before carrying out a	•	•	07	4.4		
4.	thorough examination.	0	2	27	11		
5.	The dentist checks the patient's teeth and mouth thoroughly and carefully.	0	0	24	16		
6.	In my opinion, the dentist is able to explain the type of disease and	0	1	23	16		
0.	determine treatment plan.			23	10		
	Total	0	7	149	84		
	Percentage of satisfaction	0	2.91	62.09	35		
	Percentage of anamnesis and diagnosis	83.	.02%				
	Category	very satisf	fied				
III.	Preparation stage	TP	KP	Р	SF		
1.	Before any treatment is given, the dental nurse asks the patient to sign a	1	7	23	9		
١.	letter of agreement and explains it.	ı	,	23	9		
2.	The dental nurse attaches a dental bib around the patient's neck.	8	12	16	4		
3.	Before any action is given, the dentist will first wash his hands.	0	7	26	7		
4.	Before any treatment is given, the dentist wears gloves and mask.	0	0	25	15		
5.	Before any treatment is given, the dentist tells the names of dental tools	5	12	19	4		
5.	and their uses to the patient	0	12	10	7		
6.	Before any treatment is given, the dentist provides an explanation of the	1	3	28	8		
	treatment to be performed.						
	Total	15	41	137	47		

	Percentage of satisfaction	6.25	17.09	57.08	19.58
	Percentage of preparation phase	72.5	50%		
	Category	Sa	itisfied		
IV.	Stage of treatment	TP	KP	Р	SP
1.	The dentist politely asks the patient to open his mouth during a treatment.	0	0	26	14
2.	The dentist performs dental treatment carefully.	0	0	25	15
3.	The dental nurse assists the dentist during any treatment procedure.	0	1	30	9
4.	The dentist does the treatment well	0	2	23	15
5.	The dentist finishes treatment quickly	0	0	26	14
	Total	0	3	130	67
	Percentage of satisfaction (100%)	0	1.5	65	33.5
	Percentage of stage of treatment	83	3%		
	Category	Very S	atisfied		
V.	Stage of action	TP	KP	Р	SP
1.	The dentist explains that the treatment has finished.	0	1	24	15
2.	The dentist asks the patient again whether he/she still feels uncomfortable with the tooth.	0	3	23	14
3.	The dental nurse cleans the patient's mouth carefully.	0	2	28	10
4.	Advice and messages from the dentist are clear and easy to understand.	0	1	24	15
5.	The dentist allows the patient to go home kindly.	0	1	24	15
	Total	0	8	123	69
	Percentage of satisfaction (100%)	0	4	61.5	34.5
	Percentage stage of action	82.6	63%		
	Category	Very S	atisfied		

## Category description:

Very Satisfied (VS) 81.26 – 100%
 Satisfied (S) 62.51 – 81.25%
 Less Satisfied (LS) 43.76 – 62.50%
 Not Satisfied (NS) 25 – 43.75%

# **DISCUSSION**

Based on the results of the questionnaires on service quality, the five dimensions of service quality, namely tangible, reliability, responsiveness, assurance and empathy, are categorized as very good. The highest category or very good was the dimension of responsiveness (87.12%) and the lowest category was the dimension of tangible (82.71%); therefore, all the dimensions fell in the very good category. The results of the study are in line with those of Rosalia and Purnawati (2018), showing that the four dimensions of quality, tangible, reliability, assurance and empathy significantly influence patient satisfaction. One dimension, which is responsiveness, influences patient satisfaction, but less significantly. 10 The results of other studies about the perception of patient satisfaction on service quality in terms of five dimensions are as follows: 77% of the respondents were very satisfied and 23% were satisfied.6

Based on the results of the observations made by the researchers in the dental treatment center, the dentist and dental nurse were responsive to what the patients complained about without discriminating their social status. The results of these observations were in accordance with the results of interviews with the respondents who stated that at this dental clinic the service was fast. These respondents answers were in accordance with their understanding of responsiveness. The results of the interview are in line with those of Muhammad (2015), showing that there was a significant relationship between responsiveness of staff and the level of satisfaction of the National Health Insurance (JKN) users at Siko Ternate Public Health Center.<sup>11</sup> Muninjaya (2011) states that responsiveness means being responsive and fast in providing services, accompanied by clear and easy-to-understand delivery methods. 12 The results of the study were in line with the results of interviews with the patients who stated that the dentist gave them clear, easy-to-understand instructions or suggestions and quick service. Based on the observations made by the researchers in the dental clinic room, it was seen that the dentist explained to the patient about the treatment procedures and advice coherently, directly, and clearly. Tang (2013), stated that the quality of communication between doctors and patients, the length of time they spend waiting for health services, the quality and quantity of medical equipment, the quality of the clinical environment and the cost of treatment affect patient satisfaction.<sup>13</sup>

The result obtained from the questionnaire about patient satisfaction with the five stages showed that the patients were very satisfied with three stages namely the stage of anamnesis and diagnosis, the stage of treatment, and the stage of completion of treatment, and they were satisfied with the other two stages namely the stage of registration and waiting room, and the stage of preparation. The registration and waiting room stage, although included in the category of satisfied, but from the five statements submitted, four statements received 21 dissatisfied 21 answers, which answered most unsatisfied at the state of the toilet 10 people, the observations showed that the toilet door had no key, and the condition was not quite clean. During the queue of drugs, eight people were not satisfied there were two patients; queuing for dental treatment and one person queuing for registration. The results of the study are in accordance with the satisfaction-generating aspects, namely satisfying service, adequate supporting facilities provided, values or benefits obtained after experiencing service products.14

At the stage of preparation for treatment, 8 patients were not satisfied with the use of bib around their neck and 12 patients were less satisfied. This resulted from the fact that Kahuripan Health Center did not have bibs, which serve to protect patients' clothes from any blood and dirt coming out of the patients' mouth. Five patients were not satisfied and twelve patients were less satisfied with the dentist not informing them about the names of the tools to be used prior to giving treatment. The dentist should tell or explain the names of the tools and their uses before giving treatment, so the patients know and not get surprised to see the tools to be used. This way, the patients will get information and

education about the risks that will probably occur after the completion of treatment. Such explanation is in accordance with the patient's rights as stated in law No. 29 of 2004 concerning medicinal practice, article 52, paragraph 1, stating that patients have the right to get a full explanation of medical treatment.<sup>15</sup>

Another seven patients were less satisfied with the fact that the dental nurse asked them to sign an informed consent to the patient. Based on the observations made by the researchers the informed consent was only used when the patients wanted to have their tooth extracted, but not for filling cavities purpose. The results of this observation were in accordance with the results of the interview with the dentist who stated that an informed consent letter is often prepared only for treatments containing risks, especially tooth extraction, but rarely used for other treatments such as fillings. It is advisable for patients to use an informed consent every time they have both extraction and filling. The informed consent is stated in Law No.29 Article 45 of 2004 concerning medical practice.15 Seven patients who were less satisfied stated that the dentist should wash their hands. As observed, the dentist immediately put on gloves without washing his/ her hands, and immediately held dental tools and examined the patients. Hand washing must be done by doctors and other health workers to avoid nosocomial infections before they perform treatment on patients. In addition, there are advantages of using questionnaires as measuring instrument from the five dimensions of service quality which consist of: tangibles, reliability, responsiveness, assurance, empathy, namely: measurement results can be used to make comparisons between the conditions before and after a change in an organization or agency; for managers, this measurement is needed to find and analyze the source of problem and understand how to improve the quality of services; measurement results are needed to measure satisfaction and set service quality standards of service products.<sup>16</sup>

# CONCLUSION

Based on the results and discussion of this research, the conclusions are as follows: the quality of dental treatment services at Kahuripan Health

Center based on the results of the research from the five dimensions of service quality shows that all the dimensions of service are included in the very good category, which consist of the dimensions of tangibles, reliability, responsiveness, empathy, and assurance. Patients are satisfied with their visits to the dental treatment center of Kahuripan Health Center, and the five stages. Anamnesis and diagnosis, treatment and treatment completion stages are categorized as very satisfying while the other two stages, namely the stage of preparation and waiting room and the stage of registration belong to satisfying category. In spite of that, there are several aspects that require further improvement and follow-up, especially the waiting room.

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