



Indonesian Dental Association

Journal of Indonesian Dental Association

<http://jurnal.pdgi.or.id/index.php/jida>
ISSN: 2621-6183 (Print); ISSN: 2621-6175 (Online)



Research Article

Patient Satisfaction with the National Health Insurance Scheme Dental Service in Kupang, East Nusa Tenggara

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Received date: July 3, 2019. Accepted date: October 16, 2018. Published date: October 31, 2019

KEYWORDS

government insurance;
health services;
satisfaction,

ABSTRACT

Introduction: Patients with government insurance such as National Health Insurance Scheme (BPJS) use capitation system with low dental services payment. Patients should be treated professionally without considering payment system whether government or private insurance. **Objective:** The aim of this study is to know the satisfaction of the patients who visited dental treatment in BPJS facilities. **Method:** Data collected using structured questionnaire from Bhayangkara, W.Z Yohanes General Hospital, Public Health center in Kupang Kota and Pasir Panjang from June 1st – October 31st 2018. There were 46 samples from each hospital and 45 from each public health center. The study variables were patient satisfaction with dental health service accessibility, communication between patient, dentist, and staff, and safety and technology during the dental treatment. **Result:** Patients aged between 20 and 45 years old were the most common users of dental health services (59%). Patients with BPJS and Kartu Indonesia Sehat (KIS) insurance who paid by government were the most common patients to visit a dental health service facility (83.1%). Easy access to see the dentist was highly satisfying for 83.1% of the respondents. The BPJS patients were satisfied with the results of dental treatment (68.3%) and, concerning communication, 71.6% of the patients were satisfied with the dentist's friendliness. Patients were quite satisfied with the ease of contacting the dentist (89.1%). Regarding instrument sterilization, 26.2% of the respondents were quite satisfied. On communication related to the dental treatment procedure, 23.5% of the respondents were quite satisfied. Regarding the technology in dental treatment, 30.6% of the respondents were quite satisfied. **Conclusion:** BPJS patients were satisfied with dental health services which most of them had a low educational background, were female, worked as a private employee or homemaker and were patients with governmental aid.

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DOI: [10.32793/jida.v2i2.406](https://doi.org/10.32793/jida.v2i2.406)

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INTRODUCTION

Assessment of patient satisfaction with dental health services is important to evaluate and enhance service quality. Patient satisfaction can be reviewed for the accessibility, communication, safety, and technology aspects. Patients are satisfied with the dental health service if these following aspects are fulfilled, e.g. easy access to a dentist, good communication between dentist and patient regarding dental health problem, procedure and the purpose of the upcoming treatment.¹

Patients with government insurance, such as the National Health Insurance Scheme (BPJS Health Insurance), should not be a secondary priority compared to privately insured or self-pay patients². The Indonesian government enacted *Jaminan Kesehatan Nasional* (JKN), which is managed by BPJS, on January 1st, 2014 with a capitation system. This system is much affordable compare to fee for service. Before 2014, Indonesian dental services paid with fee for service system which cost higher compare with capitation system. Indonesian health expenditure budget in 2018 is only 5% from state budget.³ In other word, it is reasonable to implement capitation system instead of fee for service system.

Indonesian dentists working with BPJS must adapt with the capitation payment system. Up to 2018, the number of BPJS members reached 192,029,645 people.⁴ The high number of BPJS members and the low number of dentists can affect dental health services, especially patient access to dental health services and communication between patient and dentist. Many dentists have not agreed to join the government health insurance scheme because of the high number of patients and the low budget from capitation system insurance.⁵ Many patients are uncomfortable with government insurance because of long queues, difficult administration, and limited service.² Long health service queues (waiting time) and long waiting lists to see the dentist can cause patient discomfort. In Malaysia, a patient has to wait three months on a waiting list to see a government dentist for dental health services.⁶

Good communication between dentists and patients is marked by explanations about the cause and the treatment of the patient's illness.² Harmonious relations between dentists and patients can be built up by calming worried patients, calling patients by their name, keeping eye contact while talking, talking firmly, effectively and friendly, listening and giving proper explanations to patients and giving patients a chance to ask questions, talk about their problems or offer their suggestions.² These services need a long visit time, but when the dentist and patient only have limited time the communication lessens.² Patient should receive promotion and prevention treatment such as teeth

cleaning, fissure sealant, topical fluoride application, etc. Good communication is difficult to perform with BPJS patients because of the high number of patients and the low budget under the capitation system.²

Patient safety is one of the main factors that determine patient satisfaction. Patients will feel insecure with the dental health service if the facility fails to provide standard sterilized instruments. The Centers for Disease Control and Prevention reported that some dental health facilities fail to sterilize instruments according to standards and found practices such as unsterile injection, improper sterilization, reuse of needles, and contaminated water in Finland.⁷ Standard sterilization equipment such as an autoclave needs a high budget; for BPJS patients, due to the low budget, standard sterilization is difficult to apply.

Low patient anxiety and reduced fear of dental treatment are the signs of a satisfied patient that can be seen in the patient response towards the health facility. Patients who attend for their next treatment and obey the dentist's instructions also signify satisfaction. A positive treatment result is also related to patient satisfaction towards dental health services.⁸ BPJS patients, especially in the dental health service, may experience the problems mentioned above. The BPJS dental health service budget is very low: 2,000 Indonesian Rupiah (IDR) per patient or 20,000,000 IDR for 10,000 patients (capitation system). As an information that one U.S dollar is approximately 14,000 IDR. This can affect the quality of dental health services. One family dentist serves 10,000 BPJS patients, which creates a challenge to give a quality service and causes patient difficult to visit a dental health service facility.⁹

East Nusa Tenggara is a small province with approximately five million inhabitants, located in eastern part of Indonesia, three hours flight from the capital city of Indonesia, Jakarta. This province was the third highest number of poor population in Indonesia after Papua and West Papua. Dental health services were not a priority in this region as local government struggle with other diseases such as maternal and child health, filariasis, malnutrition and malaria. Many public health centers do not have dentists and lack of dental health equipment. This condition may contribute to lack of dental health services quality and lead to patients' dissatisfaction. This study aimed to provide an overview of patient satisfaction towards dental health services managed by BPJS and to obtain data on BPJS dental health users.

MATERIAL AND METHOD

This study was a descriptive report that aimed to provide an overview of BPJS insurance patients'

satisfaction with dental health services. The study population was BPJS patients at dental health service facilities in Kupang, East Nusa Tenggara, that accept BPJS insurance. The study sample was randomly gathered in the BPJS dental health service facilities: two government hospitals, Bhayangkara Hospital (C type or hospital with limited specialist services) and W.Z. Yohanes General Hospital (B type or hospital with wide range specialist and limited subspecialist services), and Puskesmas (Public Health Service) Kupang Kota and Puskesmas Pasir Panjang. The sample included 46 people from Bhayangkara Hospital, 47 people from W.Z. Yohanes General Hospital and 45 people from each Puskesmas. The total sample was 183 people. Data collected from 1st June – 31st October 2018. Bhayangkara Hospital and W.Z. Yohanes General Hospital receive referrals from first-level health facilities (Puskesmas or private practice). The average monthly patient load at Bhayangkara Hospital every month is 1,200 patients, served by four dentists, and the most common case is endodontic treatment (root canal treatment). At Bhayangkara Hospital, there are two endodontists. The average monthly patient load at W.Z. Yohanes General Hospital is 200 patients, served by six dentists and one dental surgeon. The most common case is related to oral surgery. The average monthly patient loads at Puskesmas Kupang Kota and Pasir Panjang are 300 and 100 patients, respectively, served by three dentists in these Public Health Centers. This research has no ethical clearance due to administration problem as the institution ethical department still in establishing process in Kupang. The researchers gave informed consent to the subjects before collecting data.

The study sample included patients with a BPJS insurance card, which had already used the card at a BPJS dental health service facility in Kupang. This study used a questionnaire to collect the data. The study variables were patient satisfaction with dental health service accessibility, communication between patient, dentist, and staff, and safety and technology during the dental treatment. Patients are required to answer the questionnaire according to last received treatment experience, some patients rejected to answer the questionnaire due to busyness or still suffering from tooth ache.

The framework of this questionnaire is that satisfaction of BPJS dental services (dependent variable) affected by socio-economic of the patients, accessibility, communication, safety, and technology of dental health services. Socio-demographic (sex, age, profession, education and BPJS) data also collected from the questionnaire. Before the questionnaire was distributed, the researchers performed a pilot test (questionnaire trial)

to confirm the questionnaire's validity and reliability. The respondents were asked to answer 17 favorable questions with a response that ranged from highly satisfied (score: 4), satisfied (score: 3), quite satisfied (score: 2), or less satisfied (score: 1) to unsatisfied (score: 0). The researchers collected the data by interviewing the sample directly and using questionnaire as guidance. All patients had been consented and agreed to be a research subject in this study.

Data Analysis

Data were processed using SPSS analysis software to describe the sample distribution frequency socio-demographic table and patient satisfaction with the dental health service accessibility, communication, safety, and technology. The satisfaction score was obtained by multiplying the scores for the 17 questions; the maximum score was 68. The satisfaction level was categorized into excellent (score 55–68), very good (score 41–54), good (score 27–40), fair (13–26), and poor (score 0–12).

RESULTS

The predominant socio-demographic characteristic of BPJS insurance users was below senior high school education level, 54.7% (Table 1). Homemakers and students were the most common users of dental BPJS insurance (42.6%), and active government employees comprised only 16.4% of the sample. Patients aged between 20 and 45 years old were the most common users of dental health services (59%). Female patients (60.7%) were more common compared to male patients. Patients with BPJS and *Kartu Indonesia Sehat* (KIS) insurance who were paid by government were the most common patients to visit a dental health service facility (83.1%).

Patients with BPJS insurance were mostly satisfied with the BPJS dental health service. Easy access to see the dentist was highly satisfying for 83.1% of the respondents. The BPJS patients were satisfied with the results of dental treatment (68.3%) and, concerning communication, 71.6% of the patients were satisfied with the dentist's friendliness (Fig.1-4). Patients were quite satisfied with the ease of contacting the dentist (89.1%), with only 8.8% of the respondents being satisfied or highly satisfied patients. Regarding instrument sterilization, 26.2% of the respondents were quite satisfied and 11.5% were unsatisfied. On communication related to the dental treatment procedure, 23.5% of the respondents were quite satisfied and 19.1% were less satisfied. Regarding the technology in dental treatment, 30.6% of the respondents were quite satisfied.

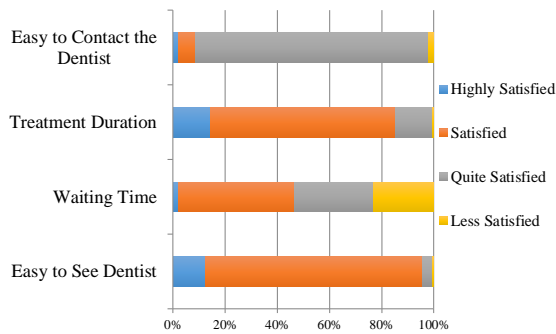


Figure 1. Patient satisfaction with dental health service (Accessibility)

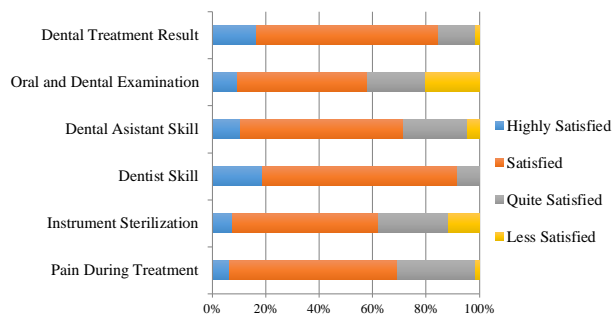


Figure 2. Patient satisfaction with dental health service (Safety)

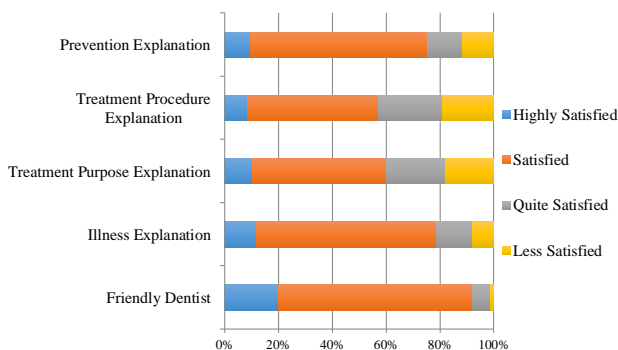


Figure 3. Patient satisfaction with dental health service (Communication)

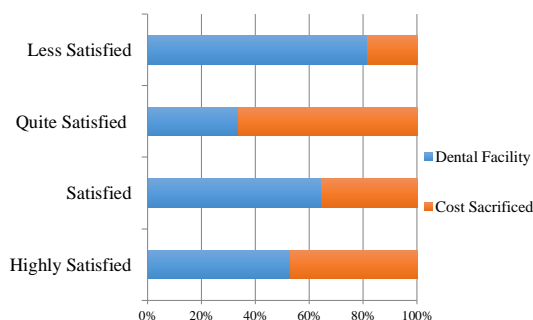


Figure 4. Patient satisfaction with dental health service accessibility Technology

Table 1. Respondent Profiles of BPJS Insurance Patients in Kupang, 2018

Respondent Profile	(n)	%
Sex		
Female	111	60.7
Male	72	39.3
Age		
< 19 years old	24	13.1
20–45 years old	108	59.0
46–60 years old	34	18.6
> 60 years old	17	9.3
Profession		
Government Employee	30	16.4
Private Employee	43	23.5
Homemaker	41	22.4
Student	37	20.2
Retired Employee	12	6.6
Police Officer	3	1.6
Honorary staff	5	2.7
Education		
Below diploma level	100	54.7
Diploma	27	14.8
Bachelor	51	27.9
Master	5	2.7
BPJS		
Government aid	152	83.1
Non-government aid	31	16.9

DISCUSSION

This study found that dental BPJS insurance is commonly used by people with a low education level (below senior high school grade), people with BPJS and KIS, and females (homemaker). These social groups are unable to pay for high-cost dental health services, such as the fee-for-service system in private practice. They were used and satisfied with the service from government, even though with the low service quality. Previous studies in Saudi Arabia have shown that patient satisfaction with government dental health insurance is low, especially the insurance with capitation system.^{2,10}

A large majority (95.7%) of patients were satisfied or highly satisfied with the ease of seeing the dentist. On the contrary, previous studies have reported government insurance patient complaints about the waiting time to meet the dentist. However, the long waiting time and

treatment queues are problematic: 23% of patients were less satisfied with the long waiting time. An Australian study found that patients needed to wait 5 years to see the dentist¹¹, and in Malaysia, a patient needed to wait 3 months to access a government insurance dental health service.⁶ There is no data show about waiting time for a patient in Indonesia. The low number of patients visiting the dental health facility can explain the ease of meeting the dentist in this study. BPJS data from 2017 showed only 2% of eligible BPJS patient use utility of dental health service, while in another country the number was 10%.¹²

On oral and dental treatment 57.9% of the patients were satisfied or highly satisfied and 20.2% were less satisfied. These number are lower compared to previous studies shows mean value 4.3 out of 5 in India.¹³ The patient with government insurance receives treatment only on the complained about tooth but not on the other teeth which need preventive treatment. Ideally patient undergoes regular dental check up in public health center or family doctor who work with BPJS. The tight patient schedule and the patients' low budget payment, especially in the capitation system, are factors that explain the unfinished and the lack preventive treatment.²

In this study, we found that 57.9% respondents were satisfied with dental service safety particularly on oral examination at the BPJS dental health facilities. Over half of the respondents felt secure in their overall oral and dental treatment in BPJS dental health facilities. The patients were satisfied if the dentist checked all of their teeth, even the healthy ones, and all the data was documented manually or digitally. Dental information is important to control and review dental health history. A regular dental checkup is also important to prevent tooth decay from the beginning (early detection).^{14,15} The control of crossover infection is performed by local health institute, in this study, 62.3% respondents were satisfied and highly satisfied with the instrument sterilization; 37.7% were quite satisfied and less satisfied, meaning that one third of total respondents still worried about the instrument sterilization at BPJS facilities.

Communication between dentist and patient (explanations regarding the treatment procedure) found 57.3% of the patients were satisfied or highly satisfied and 19.1% were less satisfied. This dissatisfaction showed there were still complaints regarding the communication between dentist and patient. Previous studies have stated that poor communication between dentist and patient occurs because of many factors, including the patient's education level, economic status and regularity of visits to the dentist. The higher the education level, economic status and regularity of visit to the dentist, the better the communication. Dental

assistants can help communicate with patients, and dental health information regarding prevention of oral and dental disease can be given to patients in a leaflet.¹⁶

On technology, 55.7% of the respondents were satisfied during dental treatment by the BPJS dental service facility. The less satisfied respondents might be due to the low budget of the BPJS dental health service facility (2,000 IDR per patient in the capitation system). This low budget forces the facility to use minimum infrastructure. Advanced technology in dentistry, such as digital radiology, photography, electro-surgery, and magnification, can minimize trauma, enhance the healing speed, minimize bleeding, and, finally, increase patient satisfaction. Nevertheless, these modern technologies have high costs and are unsuitable with capitation system payment.^{17,18}

Over one third (38.3%) of the respondents were satisfied and highly satisfied regarding the BPJS premium. Spontaneously many patients say that BPJS dental services need to be improved. The patients have no information regarding the capitation payment by BPJS to the dental service facility. A dentist has to serve 200 patients per month if the capitation is 10,000 patients (2% utilization). Therefore, a patient has to pay 100,000 IDR per visit. Many dentists are unwilling to join the BPJS insurance because of this cheap payment.⁵

CONCLUSION

The most common BPJS insurance patient in this study had a low educational background, was female, worked as a private employee or homemaker and was a patient with governmental aid (JKN and KIS). Patients with dental health BPJS were satisfied with the services, except for the oral and dental full examination and the BPJS premium. The BPJS budget needs to increase to improve the dental health service quality, especially in oral and dental full examination and the BPJS health insurance premium that targets high-class group and cover wide range of dental health treatments.

This study gives advantageous information to BPJS as the JKN administrator to improve the quality of dental health services. This study is important for operators (dentists and dental assistants) who work together with BPJS to give optimal patient service. This study is also relevant for BPJS users to understand the problems that might occur during treatment or at the dental health service facility.

ACKNOWLEDGMENT

The author thanks Bhayangkara Hospital, W.Z Yohanes General Hospital, Public Health Center, Yuliana

Raditya Dolo Wain and Mira Enjelina Malelak for their support and co-operation.

CONFLICT OF INTEREST

The author reports no conflict of interest. The author alone is responsible for the content and writing of the paper.

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