
ISSN 2615-3718

DOI: 10.31014/aior.1991.01.01.8

The online version of this article can be found at: https://www.asianinstituteofresearch.org/
Investigating the Factors Influencing Patient Satisfaction at a Private Medical Centre in Northern Namibia

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Abstract

The aim of this study was to investigate factors affecting patient satisfaction at a private medical centre in Northern Namibia. The study was guided by the following objectives: to explore the factors affecting patients’ satisfaction at the private medical centre; to investigate factors that can improve patient satisfaction at the centre and to suggest recommendations to management on how they can increase patients’ satisfaction. A quantitative research design was adopted in the study through the use of a closed-ended questionnaire which was on a five point Likert scale. Expectation Confirmation Theory was the underlying theoretical framework for this study. Data was gathered from 50 participants above the age of 18 years selected by systematic random sampling from all the patients above the age of 18 years who were attended to at the practice over ten working days. The findings showed that factors that affected patient satisfaction to a greater extent were waiting period before seeing a doctor, availability of doctor during and after working hours and thoroughness of doctor’s examination and care. The study concluded that further studies should be done using a larger sample across many organisations. Based on the findings of the study, it was recommended that an electronic filing system be used at the practice and practice cell phones should be available to doctors so that patients can be able to reach them for emergencies after working hours.

1. INTRODUCTION

1.1 Background to the Problem

The private general medical practice that was established in 2008. The practice was established in northern Namibia because there were few private practices there at that time and there was a potential for the practice to grow. The practice employs two medical doctors, one nurse, two receptionists, an accounts clerk and a cleaner. When it started operating, the centre was attending to six patients a day. However, the number increased gradually up to a peak of forty patients a day by the end of 2015. Management attributed this increase to the fact that people in the community were now used to the doctors who were working at the practice since they had been there from 2008 when the practice started.
The expectation confirmation theory was used as the theoretical framework of the study. It is a cognitive theory which seeks to explain post-purchase or post-adoption satisfaction of customers. It was developed by Richard. L. Oliver in 1977. The theory originally appeared in the psychology and marketing literatures (Baharum and Jaafar 2015). Expectation confirmation theory involves four primary constructs: expectations, perceived performance, disconfirmation of beliefs, and satisfaction (Lankton and McKnight 2012). Expectation confirmation theory posits that expectations, coupled with perceived performance, lead to post-purchase satisfaction and this effect is mediated through positive or negative disconfirmation between expectations and performance (Baharum and Jaafar 2015). If a client enters a contract with a service provider and the client’s expectations are exceeded in a positive way, the client is satisfied with the service (Abdulwahab and Kabir 2014).

1.2 Statement of the Problem

Patient satisfaction is very important for the profitability of private practices and hospitals. Accreditation, business improvement, and risk management are some of the other reasons patient satisfaction is important to a practice. Retention of patients at the practice will lead to profitability and growth of the business (Hosseini 2016). This research was able to identify factors that lead to patient satisfaction/dissatisfaction at the centre. Researching on patient satisfaction can offer patients an opportunity to participate in their care by reporting their care experiences and building engagement. This benefitted the patients too as the practice was able to tailor its services according to the patients’ needs. Patient satisfaction research represents real-time feedback for service providers and show opportunities to improve services or decrease risks. By implementing the recommendations given by the patients on improving their satisfaction, the practice might have been able to improve patient satisfaction which might have led to reduced litigations. Improving the quality of care is becoming more vital in the health industry than ever before (Nunu and Munyewende 2017). When it comes to quality of care, the practice should look at its patients for opportunities for improvement and this is what the study addressed. This study supplied statistically reliable data which promoted informed decision making by management. It helped open a dialogue with the patients and this helped them know that management listens to them. This patient relationship building might have earned the practice word of mouth referrals. This research might also have been beneficial to other medical practices in Northern Namibia because the researchers wished to present the findings of the study to the local doctors’ association on factors that contribute to patient satisfaction and how patient satisfaction can be improved at private medical practices.

1.3 Literature Review

A number of factors influence patient satisfaction and these factors may be related to patient characteristics or to features of the healthcare system (Raivio, Jaaskelainen, Holmberg-Marttila & Mattila, 2014). Batbaatar et al. (2016) mentioned that most of the studies done examined the correlation between demographic factors such as age, gender, health status and level of education with patient satisfaction. However, the findings from these studies are conflicting (Batbaatar et al., 2016). Thornton, Nurse, Snavely, Hackett-Zahler, Frank and
DiTomasso (2017) performed a three-phase, semi-quantitative analysis using anonymous, validated patient satisfaction surveys collected from 889 ambulatory outpatients in 6 healthcare centres over 5 years. The findings showed that level of education affected patients’ satisfaction only in the component of orderly/time. Patients without a high school education were significantly less satisfied than those with more. Patients in their 40's were significantly less satisfied in availability/convenience than those above 60 years old (Thornton et al., 2017). Another study done in Finland also showed that patients above 64 years of age were less satisfied with healthcare services compared to those of a younger age (Raivio et al., 2014). These contradicting findings were worth exploring further in a different setting.

According to Farley et al. (2014:353) a number of studies have failed to demonstrate an association between patient satisfaction and the quality of care. According to Batbaatar et al. (2016:123) healthcare service quality indicators were the most influential determinants of patient satisfaction across the studies reviewed. Among them, health providers’ interpersonal care quality was an essential determinant of patient satisfaction (Batbaatar et al., 2016). Tateke et al. (2012) also found out that perceived providers’ technical competency appeared to be a predictor of patient satisfaction at both private and public hospitals. However, Lyu et al. (2013:1) found no relationship between patients’ experiences and the quality of clinical care in their study of surgical patients.

The perceived cleanliness score of hospitals was found to be associated with patient satisfaction according to a study done by Tateke, Woldi, and Ololo (2012) in Ethiopia. Attractiveness and cleanliness of hospitals, as well as neatness and smartness of staff, played a crucial role in determining patient satisfaction according to a study done by Peprah (2014) in Ghana. A study was also done by Iloh et al. (2013) in Nigeria also concluded that sanitation, cleanliness of the hospital and the environment contributed to patient satisfaction.

A study done by Peprah in Ghana found out that the easiness with which a patient could locate a hospital was associated with patient satisfaction (Peprah 2014). A study done by Van de Ven (2014) concluded that shorter waiting time was not an important predictor of patient satisfaction and therefore reducing waiting time could not be used as a method of improving patient satisfaction. Another study was done by Wetmore et al. (2014) in Canada found out that 40% of patients liked to see their doctors available after normal working hours for emergencies to improve their satisfaction.

Continuity of care is a very important attribute of primary care. This pertains to whether the patients see the same healthcare provider every time they visit the healthcare facility. A study done by Ye et al. (2016) showed that patients who had been treated by the same physician for the previous 2 years had a better quality of life both physically and emotionally compared with those treated by several physicians. They also reported excellent patient satisfaction (Ye et al., 2016). Apart from improving patient satisfaction, a study done by Romaire et al. (2014) also showed that greater continuity of care was associated with less use of high-cost services and lower expenditures for such services. Provision of follow-up appointments is also important for continuity of care and an important determinant of patient satisfaction (Ye et al., 2016). A study by Mitchell, Callaghan, Street, Neuhaus and Bessen (2014) concluded that
patients who were given follow-up dates by their healthcare providers were more likely to be more satisfied than those who did not receive any follow-up dates.

The results of a study done by Peprah (2014) in Ghana showed that one of the factors associated with patients’ satisfaction at Sunyani Regional Hospital was empathy. Patients felt that their satisfaction level about the service delivery would probably go high when they are treated with utmost care and given individualised attention (Peprah 2014). Doctors with better interpersonal skills appear to have more of their patients satisfied and they usually have fewer malpractice claims against them (Smith, 2017).

The findings of the study by Peprah (2014) also pointed out that rudeness of nurses and other staff members, the ability of the hospital to provide individualised attention to the aged and physically challenged, understanding the specific needs of patients, and keeping patients informed about when service will be performed were other factors under empathy dimension that determined patients’ satisfaction. Other factors extracted under empathy were the politeness of staff, the willingness of nurses to answer patients’ questions and patients being given enough time to tell the doctor their problems (Peprah 2014). Another study done by Van de Ven (2014) in USA concluded that staff courtesy was the most powerful predictor of overall patient satisfaction.

A patient’s financial status may affect the quality of health care. Sometimes patients may not be able to afford costs associated with their treatment and decide not to buy some of the medication prescribed by the healthcare provider. In this situation the treatment may not be effective and such patients may end up dissatisfied with the service offered (Mosadeghrad 2014). In developing countries, private-sector health institutions that are for-profit usually charge higher fees than public sector institutions and they require full payments as soon as the services have been offered (Chapman, 2014). A study done by Sanjeewa and Serevirathne (2017) in Sri Lanka found out that medical costs contributed to dissatisfaction with services offered in 76.5% of the patients and that dissatisfied patients were unwilling to pay their medical bills. The study concluded that if flexible payment plans were availed to patients, dissatisfaction levels could be reduced. This research study explored whether the perception about the affordability of health care would affect the patients’ perception of satisfaction.

2. METHOD

2.1 Participants

The target population for this study was all the patients above the age of 18 years being attended to at the centre. Over a period of 10 days, the practice attends to an average of 200 patients, and 63% of them were above the age of 18 years. The database of the centre had about 12 000 patients above the age of 18 years.
2.2 Sampling Procedure

A probability sampling strategy through the use of systematic random sampling was done in distributing a questionnaire to 50 participants. The private medical centre attends to about 20 patients a day, and 12 of them are above the age of 18 years. The questionnaire was distributed to the first 5 willing patients above the age of 18 years seen at the practice for a consecutive 10 working days. Systematic random sampling was chosen because it can accurately represent a larger population. There was also no need to divide the population into sub-populations or take any steps further than taking the number of research subjects needed systematically from the large group.

2.3 Research Instrument

Questionnaire compiled in English with closed-ended questions was used to guide and confine participants on questions and responses. The questionnaire consisted of 17 questions divided into 3 sections (Sections A, B and C) grouped under the headings: Section A: Demographics; Section B: Factors affecting patient satisfaction at the private medical centre and Section C: How patient satisfaction can be improved at the private medical centre. Responses were in 5-point Likert Scale categories expect for Section A questions. Respondents indicated their answers by either putting an (x) or a tick (√) against the box next to their preferred response.

The questionnaire was distributed among the first five willing patients above the age of 18 years who were attended to at the centre over a period of 10 consecutive working days. Questionnaire was only given to those who had signed an informed consent. Participants were asked to complete the questionnaires in the practice and leave the completed questionnaires before leaving the practice. This was done to avoid selection and recall bias.

Content validity was accomplished by asking research experts at University of Namibia and the supervisor of the study to assess the questionnaire to establish if the items were representative of the outcome. Construct validity was ensured by correlating the performance of the researcher’s questionnaire with performance on an established patient satisfaction questionnaire, the PSQ-18. Test retest reliability was done to establish the reliability of the questionnaire. This was done by administering the questionnaire twice to the same participant at different times.

2.4 Research Design

Descriptive research design was chosen for this research study to help discover the relationship between patient satisfaction and organisational performance, to describe accurately and systematically the factors affecting patient satisfaction and to describe the frequency with which factors affecting patient satisfaction were considered to be important by the participants.
3 RESULTS

3.1 Recruitment

Participants were recruited from 13 November 2017 to 24 November 2017 only during working days.

3.2 Data Analysis

Data was entered into Microsoft Excel and this numerical data was presented in tables and graph form. Percentages and frequency distributions were calculated to analyse participants’ responses. The responses to section A of the questionnaire were not scored. Responses to Sections B and C, of the questionnaire were all scored on a 5-point Likert scale. Findings from all the questions were presented in graphical or chart format.

3.2.1 Factors Affecting Patient Satisfaction at the centre

3.2.1.1 Extent to Which Cleanliness of Staff and Practice Affects Patient Satisfaction

Figure 1 Extent to which Cleanliness of Staff and Practice Affects Patient Satisfaction

Figure 1 shows that 42% of participants reported that cleanliness of staff and practice contributed to their satisfaction to a relatively great extent while 26% had their response as to a greater extent. These findings concurred with studies done by Tateke et al. (2012), Peprah (2014) and Iloh et al. (2013) which revealed that the cleanliness of the physical environment was an important determinant of patient satisfaction.
3.2.1.2 Extent to Which Easiness of Making an Appointment Affects Patient Satisfaction

**Figure 2: Extent to Which Easiness of Making an Appointment Affects Patient Satisfaction**

Figure 2 shows that 30% of participants’ responses were that easiness of making an appointment affected their satisfaction to a less extent. 20% were uncertain and another 20% it did not affect them at all. These findings are at variance with study findings of Raivio et al. (2014) which concluded that easiness of making an appointment had a positive influence on patient satisfaction.

3.2.1.3 Extent to Which Friendliness of Staff Affects Patient Satisfaction

**Figure 3: Extent to Which Friendliness of Staff Affects Patient Satisfaction**

Figure 3 shows that 46% of participants reported that friendliness of staff contributed to their satisfaction to a relatively great extent while a further 28% reported to a greater extent. A
study by Van de Ven (2014) also concluded that staff courtesy contributed positively to patient satisfaction.

3.2.1.4 Extent to Which Thoroughness of Doctor’s Examination and Care Affects Patient Satisfaction

![Pie chart showing the extent to which thoroughness of doctor's examination and care affects patient satisfaction.]

Figure 4: Extent to Which Thoroughness of Doctor's Examination and Care Affects Patient Satisfaction

Figure 4 shows that 58% of participants responded that thoroughness of doctor’s examination and care affected their satisfaction to a greater extent while 30% reported to a relatively great extent. This confirms the expectation confirmation theory by Richard L. Oliver (1977) which contends that post purchase satisfaction is influenced by expectations (Tsao 2013).

3.2.1.5 Extent to Which Affordability of Services Affects Patient Satisfaction

![Pie chart showing the extent to which affordability of services affects patient satisfaction.]

Extent to Which Affordability of Services Affects Patient Satisfaction

Figure 4 shows that 38% of participants responded that affordability of services affected their satisfaction to a greater extent while 36% reported to a relatively great extent. This confirms the expectation confirmation theory by Richard L. Oliver (1977) which contends that post purchase satisfaction is influenced by expectations (Tsao 2013).
Figure 5: Extent to Which Affordability of Services Affects Patient Satisfaction

Figure 5 shows that 38% of participants responded that affordability of services contributed to their satisfaction to a greater extent while 36% chose to a relatively great extent. These findings concur with earlier literature by Mosadeghrad (2012) which contends that the more affordable the services are, the better the patient satisfaction.

3.2.1.6 Extent to Which Seeing the Same Doctor Every Time Affects Patient Satisfaction

Figure 6 shows that 40% responded that seeing the same doctor every time contributed to a relatively great extent to their satisfaction while 34% responded that it contributed to a greater extent. These findings concur with findings of a study done by Ye et al. (2016) which concluded that patients who were seen by the same doctor were more satisfied than those who saw different doctors.
3.2.1.7 Extent to Which Availability of Diagnostic Equipment at the Practice Affects Patient Satisfaction

![Bar Chart: Extent to which Availability of Diagnostic Equipment Affects Patient Satisfaction]

Figure 7: Extent to which Availability of Diagnostic Equipment Affects Patient Satisfaction

Figure 7 shows that 36% of participants responded that availability of diagnostic equipment at the practice contributed to their satisfaction to a less extent while 30% reported that it did not affect them at all. These findings disagree with the results of a study by Arshad et al. (2012) which concluded that more diagnostic equipment would help improve patient satisfaction.

3.2.1.8 Extent to Which Availability of Doctor during and After Working Hours Affects Patient Satisfaction

![Pie Chart: Extent to Which Availability of Doctor during and After Working Hours Affects Patient Satisfaction]

Figure 8: Extent to Which Availability of Doctor during and After Working Hours Affects Patient Satisfaction

Figure 8 shows that 58% of participants responded that availability of doctors during and after working hours affected their satisfaction to a relatively great extent, 26% to a greater extent, 8% to a relatively small extent, 6% to a small extent, and 2% to not at all. This suggests that the availability of doctors during and after working hours is an important factor in improving patient satisfaction.
Figure 8: Extent to Which Availability of Doctor during and After Working Hours Affects Patient Satisfaction

Figure 8 shows that 58% of participants responded that availability of doctor during and after working hours affected their satisfaction to a greater extent while 26% were affected to a relatively great extent. This concurred with earlier literature by Altin and Stock (2015) which stated that the doctor’s availability to provide a service during and outside the normal working hours is an important determinant of patient satisfaction.

3.2.1.9 Extent to Which Being Reminded about Follow-up Date Affects Patient Satisfaction

Figure 9 shows that 50% of participants did not believe at all that being reminded about their follow-up dates had any effect in their satisfaction while 20% reported that it affected them to a less extent. Management at the centre may need not waste resources contacting patients reminding them about their follow-up dates as this would not have any positive effect on patient satisfaction.
3.2.1.10 Extent to Which Waiting Period before Seeing a Doctor Affects Patient Satisfaction

Figure 10: Extent to which Waiting Period Before Seeing a Doctor Affects Patient Satisfaction

Figure 10 shows that 62% of participants reported that waiting period before seeing a doctor contributed to their satisfaction to a greater extent. This concurred with findings by Raivio et al. (2014) which showed that waiting period before seeing a doctor was an important determinant of patient satisfaction.

3.2.2 How Patient Satisfaction can be improved at the centre

3.2.2.1 If it is Easy to Make a Consultation Appointment It will Help Improve My satisfaction

If it is Easy to Make a Consultation Appointment It will Help Improve My satisfaction
Figure 11: If it is Easy to Make a Consultation Appointment It will Help Improve My satisfaction

Figure 11 shows that 46% of participants strongly disagreed that easiness of making a consultation appointment would help improve their satisfaction and another 34% disagreed. These findings concur with the findings by Wetmore et al. (2014) which concluded that less satisfied patients believed they had longer waiting times when booking appointments.

3.2.2.2 Friendly and Clean Practice Environment Will Help Improve My Satisfaction

![Frequency Chart: Friendly and Clean Practice Environment Will Help Improve My Satisfaction](chart)

Figure 12: Friendly and Clean Practice Environment Will Help Improve My Satisfaction

Figure 12 shows that 50% of participants strongly agreed that friendly and clean practice environment would help improve their satisfaction while another 36% agreed. These findings concurred with studies done by Tateke et al. (2012) and Iloh et al. (2013) which found out that friendly and clean practice environment helped improve patient satisfaction.
3.2.2.3 Flexibility of Payment Plan for Services Rendered Will Help Improve My Satisfaction

![Diagram showing participants' responses regarding flexibility of payment plan.](image)

Figure 13: Flexibility of Payment Plan for Services Rendered Will Help Improve My Satisfaction

Figure 13 shows that 46% of participants agreed that flexible payment plans for services rendered would help improve their satisfaction and another 42% strongly agreed. An earlier study by Sanjeewa & Serevirathne (2017) concluded that if flexible payment plans were availed to patients, dissatisfaction levels could be reduced.

3.2.2.4. Seeing the Same Doctor Who Has My Medical History Every Time Will Help Improve My Satisfaction

![Diagram showing participants' responses regarding seeing the same doctor.](image)
Figure 14: Seeing the Same Doctor Who Has My Medical History Every Time Will Help Improve My Satisfaction

Figure 14 shows that 42% of participants agreed that seeing the same doctor every time would help improve their satisfaction while 28% strongly agreed. These findings concur with an earlier study by Wetmore et al. (2014) which found out that 60% of completely satisfied patients reported seeing their usual doctor always, almost always or a lot of the time.

4. DISCUSSIONS

The sample size of 50, though convenient, limited the study as the practice sees at least 20 patients a day. Lack of similar research at the practice before limited the study on literature review. The study was also limited to one practice in Namibia so therefore it was not possible to generalise it to all patients in Namibia. The questionnaire was written in English and this made it difficult for non-English speaking patients to participate in this study. However, arrangements were made for the receptionists to assist such patients to understand the questions. Some participants might have misunderstood the questions while others might have answered favourably for fear of reprisals from the practice staff.

The findings from the study showed that factors that affected patient satisfaction to a greater extent were thoroughness of doctor’s examination and care, availability of doctor during and after working hours and waiting period before seeing a doctor. The findings also showed that patients satisfaction at the centre could be improved by making sure that the staff are friendly, consultation appointments are easy to make, practice environment is friendly and clean, payments plans are flexible and patients see the same doctor every time.

The study concurred with earlier research that the following factors affect patient satisfaction to a greater extent: (a) waiting period before seeing a doctor (b) availability of doctor during and after working hours and (c) thoroughness of doctor’s examination. However, the study was at variance with earlier research on the availability of diagnostic equipment as an important determinant of patient satisfaction. 36% of participants reported that it affected patient satisfaction to a less extent while 30% reported that it did not affect patient satisfaction at all. Based on these findings, the researchers made the following recommendations to management:

• Reduce waiting period before patients see a doctor. This can be reduced by purchasing an electronic filing system so that reception staff can quickly retrieve patients’ files.
• Doctors should spend adequate time examining patients, explaining to patients their conditions and directions for use of medication prescribed.
• Doctors should be reachable after working hours to attend to emergencies. This can be achieved by making sure that they have a practice cell phone after working hours where patients can reach them in cases of emergencies.
• The practice should make sure that patients see the same doctor whenever they are attended to at the practice. This can be done by use of a booking system. In the event that the patient’s usual doctor is not available, this should be explained to the patient and they should be given a choice of seeing the available doctor or waiting for their usual doctor if it is not an emergency.

• The practice environment and staff should always be clean. The practice environment can be kept clean by installing ceramic tiles on the floor which are easier to clean. For staff to remain smart, the practice should buy a washing machine which can be used at the practice to wash their uniforms as well as practice linen. The practice should also provide adequate uniforms for its staff members.

• Doctors at the practice should show to care about their patients. Incentives can be provided to doctors who rate highly on patient care feedback.

• Practice staff should go for customer care courses so that they can attend to clients in a friendly way.

Acknowledgements

Part of this paper was submitted as an MBA Dissertation at Regent Business School. We sincerely acknowledge the opportunity, resources and support that were availed to us throughout this study, without which we would not have been able to accomplish this research. We are grateful and will always remain indebted to the following:

• The Private Medical Centre Director, for allowing and giving us the opportunity to carry out the study at his practice;

• Our families, whose understanding and encouragement were our source of inspiration.

• The participants, for without them we would not have been able to carry out this study.

References


Iloh, G. O. J. et al., 2013. Satisfaction with Quality of Care Received by Patients without National Health Insurance Attending a Primary Care Clinic in a Resource-Poor