



Review Article

Client characteristics and satisfaction with the quality of primary health-care services in Calabar, Nigeria

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ABSTRACT

Different mix of clients visit primary health care (PHC) facilities, and the quality of services is critical even in rural communities. The study objective was to determine the relationship between socio-demographic characteristics and client satisfaction with the quality of PHC services in Calabar Municipality, Cross River State, Nigeria. Specifically to describe aspects of the health facilities that affect client satisfaction; determine the health-care providers' attitude that influences client satisfaction; and determine the socio-demographic characteristics that influence client satisfaction with PHC services. A cross-sectional survey was adopted. Ten PHCs and 500 clients utilizing services in PHC centers in Calabar Municipality were randomly selected. Clients overall satisfaction with PHC services was high (80.8%). Divorced clients were less (75.0%) satisfied than the singles and the married counterparts (81%), respectively. Clients that were more literate as well as those with higher income were less satisfied, 68.0% and 50.0%, respectively, compared to the less educated and lower-income clients, 92.0% and 85.0% respectively. These differences in satisfaction were statistically significant ($P = 0.001$). Hence, it was shown that client characteristics such as income and literacy level show a significant negative relationship with the clients satisfaction with the quality of PHC services in Calabar Municipality.

Keywords: Clients characteristics, Clients' satisfaction, Primary health care, Quality features

INTRODUCTION

The adoption of primary health care (PHC) as a means of making basic health services available, affordable, and accessible to people everywhere brought the issue of quality to the top of the World Health Organization (WHO) agenda. Likewise, many countries are beginning to take cue from the WHO. New methods of measuring the quality of health care and assuring the same are frequently being reported.^[1] Health-care service delivery in developing countries is also undergoing changes as clients have become better informed and are demanding better services. It is becoming obvious by the day that health-care services within the developing world context seriously need to be improved on as concerns relating to the quality of care, cost, and outcomes are increasing not only among health policymakers but also among those who utilize these services. It is therefore imperative that the structure within which health-care services are rendered, the required inputs, processes of care delivery and the eventual outcomes are properly scrutinized and evaluated.^[1]

To be able to address the complex challenges facing health systems in the 21st century, developing nations have to articulate and implement evidence-based quality improvement strategies to

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guarantee a reasonable and sustainable level of effectiveness and responsiveness in health care. Evaluation of health-care provision is germane to quality assessment and quality improvement of health services. As such, patient-perceived quality of care or patient satisfaction is an integral part of quality improvement programs.^[2] Measuring patient satisfaction at the PHC level is an important means of determining patients' perception of the quality of PHC services.^[3]

Satisfaction can be described as the extent to which the set goals or expectations of an individual have been met.^[4] Furthermore, satisfaction is believed to have been achieved when clients perceived that they have received good quality service and care from health facilities and their expectations met.^[1]

Conventionally, decisions about health services are made based on the views of health-care professionals because they are perceived to be the repository of knowledge and therefore have the right to determine what is best for the patient.^[4] This viewpoint is counter-productive to the overall national health goal of ensuring quality health care in Nigeria. The need to include clients' perspective on the quality of care is gaining attention because health-care service providers have realized that it is more cost effective to measure client satisfaction since it is a "non-invasive indicator of quality of care." It has also been realized that when clients are given the opportunity to express their views about the quality of care they are given; it becomes an avenue for promoting public and client participation in health-care delivery.

Different mix of patients visit PHC facilities for their health care needs, hence, there is a need to determine how patient characteristics and the health-care quality dimensions affect patient satisfaction. Studies have shown that variations in patient satisfaction are "related to age and health status."^[5] It has also been reported that older patients are more satisfied with the quality of care offered by providers.^[6] However, patients with "better overall health-care outcomes" had a higher level of satisfaction.^[7] Furthermore, people with higher education were less satisfied with the health-care services they received compared to their counterparts who are less educated.^[8] However, a review has shown that several reports of studies on the influence of sex on global satisfaction are contradictory.^[6] "Waiting time, real or perceived, is often found to influence the satisfaction of the patients."^[9] Adindu and Esu^[10] studied the relationship between client waiting time and satisfaction with quality of care in a secondary health facility in Calabar. The study concluded that waiting time is not always associated with client satisfaction or quality of care. Other aspects of quality like distance to care facility and availability of drugs are also found to be strongly associated with patients' satisfaction.^[4,11]

This study was therefore carried out to determine the association between patient socio-demographic

characteristics such as income level, age, sex, level of education, and marital status and their level of satisfaction with aspects of the health-care structure, and the attitudes of health-care providers in PHC facilities in Calabar Municipality.

HYPOTHESIS

The following hypothesis was formulated to guide the study: "Socio-demographic characteristics like age, level of education, and income status do not influence client satisfaction with the quality of PHC services in Calabar Municipality."

METHODOLOGY

Study design and setting

The study was a cross-sectional descriptive survey to determine the factors influencing client satisfaction with the quality of PHC in Calabar Municipality, Cross River State. Calabar Municipal local government area (LGA) of Cross River State, Nigeria is located between Latitude 04°15 and 5°N and Longitude 8°15 and 8°25E. It is the capital of Cross River State and is divided into ten¹⁰ political wards. The LGA has 29 government-owned PHC facilities comprising three comprehensive health centers, six health centers, 14 health posts, and six outreach centers which offer routine immunization services.

Calabar Municipality is a largely urban setting with pockets of rural/semi urban and riverine areas with a projected population of 219,134.^[12] The people are mostly Christians, among who are public servants, businessmen, and artisans.

Sampling procedure

By setting the confidence level at 95% with a precision of 5%, we obtained a sample size of 384 using Cochran's formula.^[13] The sample size was adjusted to 400. An addition of 25% to account for non-response brought the final sample size to 500. A multi-stage sampling procedure was used. In the first stage, simple random sampling technique was used in selecting the ten health facilities from the ten political wards, one from each ward of the municipality. In the second stage, a systematic sampling technique was used to recruit 50 clients aged 18 years and above from each of the selected PHC facilities, making a total of 500 respondents.

Survey instrument

The structured questionnaire that was pretested and validated was used for the survey. The questionnaire comprised three sections and a total of 45 items. The instrument was administered by the researcher and five trained assistants

at the out-patient clinics at each health facility. Client's satisfaction was assessed using a 5 point Likert scale instrument.

Ethical procedures

Before the administration of the instruments, ethical clearance was sought and obtained from the Cross River State Ministry of health. Furthermore, informed consent of each participant was obtained.

Data analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 13.0 and were presented mainly in frequencies and percentages in tabular form. The test of association between the variables was performed using Chi-square. The assessment of client's satisfaction with the health facility environment (physical and organizational aspects of care setting) that relates to the structure of health care was done by aggregating the responses and reclassifying them into three new categories. The "very satisfied" and "satisfied" responses were pooled to form the "satisfied category," the "very dissatisfied" and "dissatisfied" responses were also pooled to create the "dissatisfied category" while the "unsure" responses were left as the "unsure category."

For the test of association of the client characteristics with their satisfaction, the response variables for satisfaction were grouped into two main domains, namely the Health facility/environment domain which represents the "structure" and health-care providers' attitude domain, representing "process." The individual mean score for the two domains was obtained by summing the responses provided by each respondent for each of the variables in the reclassified domains and dividing the total by the number of valid responses given by the respondent. The process produced an average score for each respondent of values ranging from 1.0 to 5.0. All the respondents' scores were re-coded to produce an overall satisfaction rating as follows: very dissatisfied, 1.00–1.50; dissatisfied, 1.51–2.50; unsure, 2.51–3.50; satisfied, 3.51–4.50; and very satisfied, 4.51–5.00.

To test clients' satisfaction with the attitude of the health-care providers, the 5-scale response was classified into three response categories. The "strongly agree" and "agree" responses were pooled to form the "Agree category," the "strongly disagree" and "disagree" responses were pooled to form the "Disagree category" and the "unsure responses" were left the "Unsure category."

The Chi-square analysis at 0.05% level of significance was done for the different variables (age, sex, marital status, occupation, level of education, and income) using the

re-coded satisfaction rating, which generated respective *P* values for each of the client characteristics.

RESULTS

Table 1 describes the socio-demographic characteristics of the respondents. Results show that 54.2% of participants were between the ages of 18 and 27 years, 36.6% were between 28 and 37 years while the remaining were 35 years and above. Females made up 91% and most 386 (77.2%) were married. Most respondents (45.8%) completed secondary education, while (22.0%), (29.6%) completed primary and tertiary education, respectively. However, 2.6% of respondents had no formal education. With regard to occupation, most respondents (46.4%) were self-employed, however, 25.8%, 13.6%, 7.2%, and 7.0% were unemployed, civil servants, students, and public servants, respectively. Two

Table 1: Socio-demographic data of study respondents.

Characteristics	Number of respondents, <i>n</i> (%)
Age group	
18–27	271 (54.2)
28–37	183 (36.6)
38–47	35 (7.0)
48–57	7 (1.4)
58–above	4 (0.8)
Total	500 (100)
Sex	
Male	47 (9)
Female	453 (91)
Total	500 (100)
Marital status	
Single	110 (22.0)
Married	386 (77.2)
Divorced	4 (0.8)
Total	500 (100.0)
Level of completed education	
No formal education	13 (2.6)
Primary education	110 (22.0)
Secondary education	229 (45.8)
Tertiary education	148 (29.6)
Total	500 (100.0)
Occupation	
Civil servant	68 (13.6)
Self-employed	232 (46.4)
Public servant	35 (7.0)
Student	36 (7.2)
Unemployed	129 (25.8)
Total	500 (100.0)
Level of income (monthly)	
<₦18,000	291 (58.2)
₦18,000–₦50,000	141 (28.2)
₦51,000–₦100,000	43 (8.6)
₦101,000–₦150,000	7 (1.4)
₦150,000	18 (3.6)
Total	500 (100.0)

hundred and ninety-one participants (58%) earned below ₦18,000 monthly. Only 3.6% of the respondents earned above ₦150,000, while 1.4% earned between ₦50,000 and ₦100,000. The remaining respondents (28%) earned between ₦18,000 and ₦50,000, and (9%) earned between ₦50,000 and ₦100,000. [The Naira exchange rate to \$1 at the time of data collection ranged from ₦170-₦190].

Table 2 provides information about the client level of satisfaction with the Health Facility/Environment which is an aspect of the structure of the health system. The results show that 86.8% of respondents were satisfied with the cleanliness of the health facility, 10.8% were dissatisfied, and 2.4% of respondents were unsure. Most respondents (78.4%) were also satisfied with the size of the waiting room, 92 (18.4%) were dissatisfied and 18 (3.2%) were unsure. Three hundred and ninety respondents (78.4%) were satisfied with the state of the consulting room in terms of availability of adequate lighting and working fans, 27 (5.4%) were dissatisfied and 83 (16.2%) were unsure. However, while

56.2% of respondents were satisfied with the toilet facilities, the rest 23 (4.6%) were dissatisfied with the toilet facilities, and 196 (39.2%) were unsure.

In terms of distance, cost of transportation to the health facility, availability of drugs and the fees charged for healthcare services, 445 (89.0%) were satisfied with the distance to the health facility from their homes, 54 (10.8%) dissatisfied, and 1 (0.2%) unsure as per satisfaction with the distance commuted to the facility from their homes. Four hundred and fifty-seven (91.4%) were satisfied with the transport costs, 32 (6.4%) were dissatisfied and 11 (2.2%) were unsure; 431 (86.2%) were satisfied with the fees charged for service, 26 (5.0%) were dissatisfied, and 43 (8.8%) were unsure. On drug availability, 69 (73.8%) were satisfied, 39 (7.8%) were dissatisfied, and 92 (18.4%) were unsure.

Table 3 shows the results of clients satisfaction with the attitude of health service providers.

Only two of the facilities were manned by doctors, one in each facility. At the PHC setting, most of the clients were attended to by the following health-care personnel, namely, nurses, Community Health Officers (CHOs), and Community Health

Table 2: Respondents' satisfaction with health facility/environment.

Component	Level of satisfaction	Frequency, n (%)
Cleanliness of the environment	Satisfied	434 (86.8)
	Dissatisfied	54 (10.8)
	Unsure	12 (2.4)
	Total	500 (100.0)
Size of waiting room	Satisfied	390 (78.4)
	Dissatisfied	92 (18.4)
	Unsure	18 (3.2)
	Total	500 (100.0)
State of consulting room	Satisfied	390 (78.4)
	Dissatisfied	27 (5.4)
	Unsure	83 (16.2)
	Total	500 (100.0)
State of toilet facility	Satisfied	281 (56.2)
	Dissatisfied	23 (4.6)
	Unsure	196 (39.2)
	Total	500 (100.0)
Distance from home	Satisfied	445 (89.0)
	Dissatisfied	54 (10.8)
	Unsure	1 (0.2)
	Total	500 (100.0)
Transport cost	Satisfied	457 (91.4)
	Dissatisfied	32 (6.4)
	Unsure	11 (2.2)
	Total	500 (100.0)
Fees for service	Satisfied	431 (86.2)
	Dissatisfied	26 (5.0)
	Unsure	43 (8.8)
	Total	500 (100.0)
Drug availability	Satisfied	369 (73.8)
	Dissatisfied	39 (7.8)
	Unsure	92 (18.4)
	Total	500 (100.0)

Table 3: Health service providers attitude and clients satisfaction (n=500)

Attitude component	Level of satisfaction	Frequency, n (%)
Politeness	Agree	481 (96.20)
	Disagree	9 (1.80)
	Unsure	10 (2.00)
	Total	500 (100.00)
Explain procedure well to clients	Agree	477 (95.40)
	Disagree	16 (3.20)
	Unsure	7 (1.40)
	Total	500 (100.00)
Non-delay of clients	Agree	475 (95.00)
	Disagree	13 (2.60)
	Unsure	12 (2.40)
	Total	500 (100.00)
Compassionate	Agree	469 (93.80)
	Disagree	7 (1.40)
	Unsure	24 (4.80)
	Total	500 (100.00)
Punctuality	Agree	459 (91.80)
	Disagree	10 (2.00)
	Unsure	31 (6.20)
	Total	500 (100.00)
Clients involvement in decision-making	Agree	443 (88.60)
	Disagree	31 (6.20)
	Unsure	26 (5.20)
	Total	500 (100.00)
Adequate privacy measure	Agree	432 (86.40)
	Disagree	17 (3.40)
	Unsure	51 (10.20)
	Total	500 (100.00)

Extension Workers (CHEWS). It is important to note that at the PHC level, even though there are clear job descriptions for the various cadres of healthcare workers such as the nurses, CHOs, and CHEWs, in practice there is no clear distinction in the healthcare services provided to the clients by these health workers. In fact, in most centers, the CHOs and CHEWs are often referred to as nurses by the Clients.

Most respondents 481 (96.2%) agreed that the health service providers (HSPs) were polite, 9 (1.8%) disagreed, and 10 (2.0%) were unsure. Also, 477 (95.4%) agreed that the HSPs explain procedures well to clients, 16 (3.2%) disagreed, and 7 (1.4%) were unsure. Four hundred and seventy five (95.0%) agree that health-care providers do not delay clients, 13 (2.6%) disagree and 12 (2.4%) were unsure. Four hundred and sixty nine (93.8%) agreed that the HSPs were compassionate, 7 (1.4%) disagree and 24 (4.8%) were unsure. Four hundred and fifty nine (91.8%) agreed that the HSPs were punctual, 10 (2.0%) disagreed and 31 (6.2%) unsure. Four hundred and forty-nine (88.6%) agreed that the HSPs involve clients in decision making, 31 (6.2%) disagreed 15 and 26 (5.2%) were unsure. Four hundred and thirty two (86.4%) agreed that the HSPs ensure adequate privacy for their clients, 17 (3.4%) disagreed and 51 (10.2%) were unsure.

The association of client characteristics with satisfaction

Table 4 provides the Chi-square test results of the association of clients' characteristics and their satisfaction with the health services.

Age of respondents and satisfaction

The results show that satisfaction among the different age categories was variable. Those aged 18–27 years had 86% satisfaction rate, 28–37 years had 71% satisfaction rate, 38–47 years had 71% satisfaction rate, and 48–57 years had 86% satisfaction rate, while those 58 years and above had 75% satisfaction rate. Even though there were differences in the satisfaction rate of the different age groups, this was not statistically significant ($P = 0.505$).

Sex, marital status of respondents, and satisfaction

With regard to sex, males showed an overall satisfaction rate (83%), while females recorded (81%). This indicates that the male was more satisfied than the female. However, the difference in satisfaction rate was not statistically significant ($P = 0.753 > 0.050$). Again the null hypothesis that sex does not influence client satisfaction with PHC services in Calabar Municipality is retained.

For marital status, the singles and the married had the same satisfaction rate (81%, respectively). The divorced had a

Table 4: The association of socio-demographic variables with client overall satisfaction

Socio-demographic variable	n	Overall satisfaction	χ^2	df	P
Age (years)					
18–27	271	83.03	14.27	15	0.505
28–37	183	79.00			
38–47	35	71.00			
48–57	7	86.00			
58 and above	4	75.00			
Sex					
Male	47	83.00	1.20	3	0.753
Female	453	81.00			
Marital status					
Single	110	81.00	501.52	9	0.001
Married	386	81.00			
Divorced	4	75.00			
Occupation					
Civil servant	68	76.00	20.78	12	0.054
Self-employed	232	83.00			
Public servant	35	63.00			
Student	36	81.00			
Unemployed	129	84.00			
Level of completed education					
No formal education	13	92.00	52.37	9	0.001
Primary education	110	92.00			
Secondary education	229	83.00			
Tertiary education	148	68.00			
Monthly income					
Below ₦18,000	291	85.00	37.41	12	0.001
₦18,000–₦50,000	141	77.00			
₦50,000–₦100,000	43	77.00			
₦100,000–₦150,000	7	70.00			
Above ₦150,000	18	50.00			

lower 75% satisfaction rate. This difference was statistically significant ($P = 0.001$).

Occupation, level of education, and respondents satisfaction

Test results for occupation showed that differences in satisfaction rates exist between the occupational subgroups. The civil servants had 76% satisfaction rate, self-employed had 83%, public servants 63%, students 81%, and unemployed 84%; however, the difference is not statistically significant ($P = 0.054$).

With regard to the relationship of education with the satisfaction of health-care services, there are differences in the satisfaction rate of the subgroups. Those with no formal education and those that completed primary education both had 92% satisfaction rate, those that completed secondary education had 83% satisfaction rate, while those who have completed tertiary education were the least satisfied subgroup with 68% satisfaction rate. The difference was

statistically significant ($P = 0.001$), which shows that the level of education influences satisfaction with PHC services in Calabar Municipality.

Income and respondents' satisfaction

On the income level, the data showed that there are differences in satisfaction among the different income categories. Those earning below ₦18,000 monthly income had 85% satisfaction rate, those earning between ₦18,000 and ₦50,000 and between ₦50,000 and ₦100,000, both had 77% satisfaction rate. Those earning between ₦100,000 and ₦150,000 had 70% satisfaction rate. Those earning above ₦150,000 monthly are the least satisfied with 50% satisfaction rate. This was statistically significant ($P = 0.001$). Therefore, the level of income influences satisfaction with PHC services in Calabar Municipality.

DISCUSSION

The majority of the clients, 271 (54.2%) were aged between 18 and 27 years and clients above 58 years were the least 4 (0.8%). In similar studies conducted in different regions of Saudi Arabia,^[14] Sweden,^[15] and South Africa,^[16] more people between the ages of 20 and 30 years were involved. The possible reason for this may be because in most developing countries, those in the younger age-groups form a greater proportion of the population. This observation is in line with the demographic profile of Nigeria.^[17]

The analysis of the satisfaction rate, according to age-groups showed that respondents between 48 and 57 years had the highest (86.0%) satisfaction rate. These findings are in consonance with the findings of a similar study by Owens and Batchelor,^[18] that older respondents generally record higher satisfaction with health-care services. Alahmadi^[14] in his study also found that an increase in patient age shows a positive relationship with the level of satisfaction. According to him, this may be because older patients often have less expectation of health care and therefore are less demanding than young people. However, this differs from the findings of this study. Even though there were differences in the satisfaction rate of the different age groups, the difference was not statistically significant at the 0.05 level of confidence.

On sex, more females 453 (90.6%) than males 47 (9.4%) participated in this study. This reflects the actual pattern of PHC center utilization in Calabar Municipality. A study carried out in Ghana showed a preponderance of females to utilize health care.^[19] The reason given for this was that in situations where females do not seek medical care for themselves, they were more likely to accompany other patients especially children or husbands. The analysis of the satisfaction rate according to sex showed that males indicated a higher rate of satisfaction (83.0%) compared with females (81%). However, the difference in

satisfaction rate between the male and female was not statistically significant. Rahqvist and Bara^[15] in their work found that men and women tended to have a similar level of satisfaction with PHC. Furthermore, reports from several studies on the influence of sex on client satisfaction were contradictory.^[6]

The analysis of the satisfaction rate in relation to marital status showed that while the single and the married had the same satisfaction rate (81%, respectively), the divorced/separated clients had lower satisfaction rate (75%). This difference was statistically significant ($P = 0.001$) which indicates that marital status influences clients satisfaction with PHC in Calabar Municipality. The possible reason for this may be because the divorced/separated clients are more critical of the services they receive.

On occupation, the result shows that differences exist in satisfaction rates between the occupational subgroups. In descending order, the unemployed had 84% satisfaction rate, the self-employed 83%, the students 81%, the civil servants 76%, and the public servants 63%. $P = 0.054$ indicates that the relationship is not statistically significant.

With regard to the level of education, the difference in satisfaction rate between the subgroups was significant. The results show that the satisfaction rate decreases with an increase in level of completed education. Those with no formal education and those who completed primary education had 92% satisfaction rate, respectively, those who completed secondary education had 83% and those who had tertiary education had 68%. The difference in satisfaction rate was statistically significantly ($P = 0.001$). Studies in Saudi Arabia showed a similar pattern of association of literacy level with the level of satisfaction. This finding may be due to the fact that clients with higher education are more exposed and have higher expectations because they are more informed.

Drawing from Abraham Maslow's hierarchy of needs model^[20] which provides a framework for recognizing the dynamic interaction of social, cultural, and physiological factors and the influence on patients satisfaction based on their needs and expectation, it can be said that people with higher education will have higher expectation and will be more critical of the services they receive than the less educated folks as has been shown by the findings of this study.

The result of the study also showed that clients' satisfaction with health services in Calabar Municipality varied with the level of their monthly income. What is remarkable about the finding was that the satisfaction rate decreased with an increase in monthly income. Clients earning below ₦18,000 monthly income had 85% satisfaction rate, those earning between ₦18,000 and ₦50,000 and those earning between ₦50,000 and ₦100,000 both had the same satisfaction rate of 77%, those earning between ₦100,000 and ₦150,000 had 70% satisfaction rate and those earning above

₦150,000 had 50% satisfaction rate. $P = 0.001$ shows that there is a statistically significant association between income and the level of satisfaction with PHC services in Calabar Municipality.

It can be argued that people with higher incomes are more likely to compare the services they receive at the PHC facility with services in private health facilities unlike their lower-income counterparts who can barely afford health-care services in the private facilities. The higher income patients have need of recognition and may want to be treated specially. Thus, a higher income status confers relative choice advantage and such patients are likely to be more demanding and more critical of the service they receive.

On clients, satisfaction with components of the health facility environment/aspects of structure results shows that there was a high satisfaction rate with the various component of the physical environment and structural aspect of quality. However, none of the components had 100% satisfaction rating. Therefore, there is still a gap as far as the structural aspect of quality is concerned. For instance, the result showed the least satisfaction rate (56.2%) for the state of the toilet facilities. This implies that the state of the toilet facility gives the greatest concern to the clients. This finding is in consonance with the findings in a similar study in Ghana where it was found that cleanliness of basic amenities such as the toilet facility and the waiting rooms are aspects highly valued by clients.^[19] Therefore, there is a need for the government to intensify efforts to enhance the state of the physical environment of the PHC facilities in Calabar Municipality. This is important because improved client satisfaction will ultimately lead to improved utilization of health-care services of PHC.

Analysis of the client satisfaction with the attitude of health service providers shows a high positive response (Agree) with virtually all the attitude components for the health service providers comprising doctors and the others (Nurses, CHOs, and CHEWs). This might be a result of training programs on improved services introduced for the purpose of Sustainable Development Goals^[21] as well as the introduction of Service Compact with all Nigerians (SERVICOM). The SERVICOM is a redress system within the health facilities. With the advent of SERVICOM, most providers now check their negative attitude toward the clients. However, none of the components had 100% positive response. Specifically, the involvement of clients in decision making had the least (75.32) positive response. This finding reveals that the clients had the least satisfaction with the level of involvement of clients in decision-making concerning their treatment by health-care providers. Probable reason for this may be because, in many instances, health-care providers assume that their clients lack the necessary knowledge and skill to contribute meaningfully in decisions involving the diagnosis and treatment of their health problems. However, with the advances in information

technology, there is enhanced access to information, and people are getting more knowledgeable in their health problems and the available treatment options than in the past. Therefore, enhanced patient-doctor communication is advocated with the aim of improving clients' involvement in the decision-making process regarding his/her health problems. Satisfaction is multi-factorial with the only limited proportion of the variance of satisfaction that can be explained by client's socio-demographic characteristics. This study shows that marital status, level of education, and level of income influence client satisfaction. Age, sex, and occupation do not show a consistent pattern of association with client satisfaction. The clients generally show high satisfaction with components of the physical environment and the components on the attitude of health-care providers. However, there was a remarkable concern for the improvement of physical features such as the state of toilet facilities, drug availability, availability of working fans, and availability of seats in the waiting room. Moreover, the same holds in the area of provider's attitude like ensuring adequate privacy for clients and involving clients in decision-making concerning their treatment.

CONCLUSION

This study shows that marital status, level of education and level of income influence client level of satisfaction. Age, gender and occupation do not show consistent pattern of association with client level of satisfaction. The clients generally show high satisfaction rate with components of the physical environment and the components on attitude of health care providers. However, there was remarkable concern for improvement of structural features (such as the state of toilet facilities, drug availability, availability of working fans, and availability of seats in the waiting room) as well as improvement on provider's attitude such as involving clients in decisions concerning their treatment.

Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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Conflicts of interest

There are no conflicts of interest.

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