

Impact of Language Barrier on Quality of the Health Care and Patient Satisfaction at Family Medicine Clinics, King Faisal Specialist Hospital

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Abstract: Background and objectives: The language barrier in the healthcare setting poses many challenges in terms of achieving a high level of satisfaction among patients and healthcare professionals. Moreover, it can lead to miscommunication between medical professionals and patients, making the delivery of high-quality healthcare extremely challenging.

Many known healthcare institutions offer interpreter services to overcome these problems and to improve patient satisfaction, and communication, as well as access to health care. However, these services can increase the cost and duration of treatments, indirectly.

This study aims to assess the language barrier in primary healthcare settings and measure patient satisfaction with their primary care physicians (PCP).

Methods: A cross-sectional study was conducted using the GMC's (general medical council) Counsel's patient questionnaire as an assessment tool. The study population included adult patients attending the primary and urgent care outpatient clinic at a tertiary hospital. Data was collected through June and July of 2022.

Statistical analyses will be performed through SPSS and Tables edited by Microsoft Excel 97.

Results: This study included a total of 425 participants, of which 85.2% were Saudi and 14.8% were non-Saudis. 39.3% spoke both Arabic and English, whereas 46.8% were Arabic speakers only and, 13.9% spoke English exclusively. Only 10% reported the presence of a language barrier and their satisfaction mean was 80.9, and out of them, only 1.9% had no access to an interpreter or a translator forming an actual barrier of which they had a satisfaction mean of 76.6.

We found that the satisfaction percentage was higher among older patients and Females. And patients reported that longer visit duration could improve their overall satisfaction.

Conclusion: language barrier demonstrates a challenge in healthcare and patient communication. An interpreter service can greatly improve patient satisfaction and the overall quality of care provided. and as such higher levels of satisfaction can be achieved even among institutions with diverse patient populations.

INTRODUCTION

Recognizing patient expectation is an important objective for primary care physicians which represents the first contact of health care services. Previous studies have examined the role of primary care in patients' health and identified the high importance of the primary care physicians' performance on health outcomes(1)(2) as well as on improved patient's satisfaction(3).

Patients who visited their primary care physician more often and used them as the main source of information related to their health issues and status, were more likely to be healthier, hospitalized less, and spent less on annual healthcare expenditures(2).

Several studies suggest that failure to identify patient expectations can lead to patient dissatisfaction with care, lack of compliance, and inappropriate use of medical resources.(4)

Patient satisfaction is associated with ethnic, regional and socio-demographic differences, due to differences in service quality, patient-doctor communication, and the patient's perceptions.(5)

Satisfaction from primary care physician performance may be achieved by improving the communication skills of the primary care provider, encouraging interpersonal interaction and devoting more time to the patient during the visits.(5)

Multiple studies have proven that if physicians allow sufficient time for exchanging information (a consultation of at least for 10 min), the satisfaction level can be enhanced(6)(7)(8) A study done in Saudi Arabia has showed that most patients highlighted poor communication being the major factor affecting depth of relationship rather than physician's professional competency.(9)

Language barriers are responsible for reducing the satisfaction of medical providers and patients, as well as the quality of healthcare delivery and patient safety.(10) Individuals who are not proficient in the native language of

the region may experience reduced satisfaction with their healthcare experiences and encounter greater difficulty accessing their regular healthcare providers. A study conducted in Saudi Arabia showed that 25% of foreign patients reported that they had difficulty communicating with medical professionals and decreased satisfaction with their healthcare; 20% of medical professionals reported that health outcomes (i.e., healthcare errors, understanding patient needs, feeling satisfaction, and trust in nursing care needs) were always affected by language barriers(11).

A recent study conducted in six hospitals in the US found that adverse events were more prevalent among patients who had limited English proficiency in comparison to those who were fluent in English.(12)

Other studies found that among patients who did not speak the local language, 49% had trouble understanding a medical situation, 34.7% were confused about how to use medication, 41.8% had trouble understanding a label on medication, 15.8% had a bad reaction to medication due to a problem understanding their healthcare provider's instructions(13).

Moreover, Language barriers have a major impact on the cost and quality of healthcare. A study done among asylum seekers in Switzerland showed higher health care costs if there were language barriers between patients and the health professionals. The majority of these heightened expenses were linked to patients who utilized interpreter services. However, using interpreter services lead to more targeted health care, concentrating higher health care utilization into a smaller number of visits and prevents the escalation of long-term costs.(14)

The presence of language barriers can pose significant challenges when it comes to delivering healthcare of superior quality. The purpose of this study is to explore whether patients' satisfaction level regarding their primary care physician performance differs across the cross-cultural communication. And if the Language barriers have a major impact on the satisfaction of medical providers and patients.

Aims of work:

Our primary objective is to measure patient's satisfaction with their primary care physician (PCP) visit. Whether they or their PCP are English or Arabic speaking.

As for the secondary objective we aim to assess the limitations of communications, and to inquire ways to improve patient care from the patient's perspective.

METHODS

This is a cross-sectional study that was conducted through a self-administrated questionnaire. Participants were randomly selected from adult patients who are 18 years and older, attending KFSHRC's outpatient primary clinic or the urgent care clinic, and Arabic or English-speaking. The calculated sample size is 384 using the simple random sampling formula.

The effect size was based on the assumption since no previous studies have been done. We assumed that 50% of the participants would have a high satisfaction rate.

Questionnaires both in Arabic and English were distributed, the questionnaire included demographic data, Visit details, and the GMC (general medical counsel's patient satisfaction survey as a satisfaction measurement tool. (15)

Data collection took place from June -July 2022, Data was analyzed using SPSS 24.0 version statistical software. Descriptive statistics including mean, standard deviation, frequencies, and percentages were used to describe the quantitative and categorical variables. The correlation was tested using Spearman's test.

Categorical variables were compared using chi-square and Fisher's exact test.

The means of continuous variables were compared using the Mann-Whitney test and the Kruskal-Wallis test. A p-value of <0.05 and 95% CI is used to report the statistical significance and precision of the results.

Ethical approval was obtained from the office of research affairs (ORA) of King Faisal Specialist Hospital and Research Centre Riyadh. (RAC # 2221096). Verbal consent was obtained from participants prior to filling the questionnaire.

Approved surveys were distributed and collected within 9 months of the date of distribution. Then data analysis and main outcomes took place for 3 months after the sample collection

RESULTS

Sample characteristics:

The total number of participants in our study was 425, 85.2% of them were Saudis and only 14.8% of them were non-Saudis. Female participants were 51.1% and male participants were 48.9%. The mean age of respondents was 45.65 years ranging from 18 to 92 years. Among the study sample, Arabic speakers were the majority of our participants counting 199(46.8%) followed by both Arabic and English speakers. Majority of patients had higher levels of education with bachelor's degree.

Patient population consisted of employees and their dependents. Of which 225(52.9%) were dependents where 166(39.1%) were employees.

As there was a translator/interpreter service and bilingual speaking physicians 296(69.6%). Only 45(10.6%) of our sample reported that they had a language barrier, and 37(8.2%) of them had access to a translator/interpreter.

However, 1.9% of the sample, which represents 17.8% of those who had a language barrier, had an actual barrier as there was no attending translator/interpreter. And satisfaction mean was 71.9.

Sample satisfaction and associated factors:

Patients showed higher levels of satisfaction in the GMC patients satisfaction questionnaire as shown in graphs 1-6. The overall satisfaction mean was 89.3(15.9), with a significant difference between males and females where females were more satisfied. Patients with physicians who spoke both languages were more satisfied with a mean of 91.2(13.9). Along with participants who did not report a

language barrier with a mean of 90.3(15.1). In addition to that, higher levels of satisfaction were found with older patients, non-Saudis, and dependent participants with a visit with their usual doctor. On the other hand, level of education, languages spoken, and having a translator was not statistically significant to the overall satisfaction.

DISCUSSION

Effective communication among patients and health care workers is a major contributor in providing safe and appropriate health care. As well as providing good communication among patient's and clinicians. Patient satisfaction, better outcomes, and compliance to medical instructions are all affected by the quality of communication. (16)

Language barriers or language differences are a key cause of miscommunication between medical providers and patients. This miscommunication contributes to decreased satisfaction among both healthcare professionals and patients, a decline in the quality of healthcare delivery, and compromised patient safety. It appears to decrease access to primary and preventive care, impair patient comprehension, decrease patient adherence, and diminish patient satisfaction.

In addition, studies indicate that language barriers contribute to medical professionals' incomplete understanding of patients' situations, delayed treatment or misdiagnoses, poor patient assessment and incomplete prescribed treatment. (17)

Moreover, a cross-sectional survey by Binsalih et al that investigated the experience and degree of satisfaction of patients among healthcare professionals in a tertiary hospital, higher satisfaction was observed in patients admitted in a Saudi tertiary care hospital in communication skills of doctors and nurses. (18)

The challenges to existing medication safety practices include communication difficulties arising from the multilingualism of patients and the diverse backgrounds of healthcare providers. A cross-sectional study by Mahrous, investigated patients' perception, and satisfaction regarding discharge information received from health care professionals. The study found that 42% of the patient are not satisfied with the clarity and the use of the language of health care providers in communicating post discharge information. (19)

In this study, we measured patient's satisfaction with their primary care physician (PCP) visit as the main outcome; in the presence of an official interpreter in a tertiary care center with physicians/patients from different backgrounds aiming to assess the impact of language barriers on the delivery of healthcare and the impact of interpreters in reducing the language barrier.

Our study included 432 patients from a tertiary healthcare center with a diverse background communicating in Arabic the native language, English, or both. These patients had frequented the Family medicine and polyclinic department

for various reasons and thus showed a general understanding of the possible limitations.

In order to address language barriers, certain healthcare institutions offer interpreter services. Nevertheless, the provision of these services raises significant challenges related to accessibility and financial strain. Previous studies have shown that most healthcare institutions have poor access to interpreter services or no services at all. (16)(20)

A barrier was considered when the patient and the physician do not use the same language, demonstrated as an English-speaking physician caring for Arabic only speaking patient. 10% of our patients reported the presence of a language barrier and out of them, only 1.9% had no access to an interpreter or a translator forming an actual barrier.

In our study, satisfaction was found higher among older patients, females and non-Saudi patients. Which can be explained by that physician are all fluent in English.

In contrary, A study conducted in Saudi Arabia showed less satisfaction among foreign patients with 25% of them reporting difficulty communicating with medical professionals. 20% of medical professionals expressed that language barriers affected medical errors, patient understanding, overall satisfaction. (11)

Among those who found a language barrier, satisfaction mean was 80.9, and among those who didn't get provided an interpret, satisfaction mean was 76.6 which indicated high satisfaction levels despite language barrier. In contrary, a study by Ngo-Metzger et al reported that patients with language-discordant providers received less health education and lower quality care. (21)

Another study showed that the overall satisfaction of patients regarding their nurse's care was 90%. (22)

The use of interpreter services contributed to increased physician visits, prescription drugs by physicians, and receipt of preventative services among patients. (23)

Use of trained medical interpreters has been shown not only to decrease clinically meaningful communication errors, (24) but also to be an effective way of enhancing the quality of care and overall patient satisfaction. (25) Furthermore, Non-English-speaking patients that requested interpreter services had more office visits and inpatient services. An interpreter services was estimated to cost at about \$ 4.7 million annually. (26) However, the need for an interpreter was reported by physicians and nurses in 43.2% and 36.5% cases. Similarly in another study, 40% of patients have called for an interpreter. (23)(27) In the absence of an interpreter, a Family member was used in 17 encounters (31%). (28)

Whoever implementing online translation tools such as Google Translate and MediBabble can be an alternative in the absence of an interpreter service, and ultimately improve both quality of healthcare and overall satisfaction among both health care workers and patients. (10)

A study by Bernard et al reported that health care professionals associate language barriers to be a contributor of workplace stress, similarly Srivastava et al reported that evidence shows a significant relation between workplace stress and decreased satisfaction among healthcare providers (29)(30)(31)

Patient reported that their satisfaction could be improved by longer duration visits. Even though the government offers programs to support expatriate healthcare workers, the problems continue to escalate. Thus, the quality of healthcare and safety of patients and healthcare workers are still at risk. (32)

CONCLUSION

The presence of language barriers can create significant challenges in delivering healthcare of high quality. They have a negative impact on the quality of healthcare, patient safety, and the satisfaction of medical professionals and patients. The findings from this study underscore the necessity to enhance communication between patients and healthcare providers as a means to achieve healthcare that is both of high quality and safe. According to experts, the initial step in dealing with this issue is to first assess the language and communication needs of the population. (33) Health care facilities may provide language services such as hiring interpreters, using written materials, or communication boards. In addition, the Ministry of Health could also require Arabic language proficiency test for professionals, expatriates, and non-Arabic speakers applying for work in Saudi Arabia. The language proficiency test should cover language knowledge, speaking ability, reading ability, and listening ability. Addressing this communication barrier plays a significant role in developing strategies like organizational safety and has the potential to decrease healthcare costs by reducing medical errors. (34)

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Table1: Sociodemographic variables

Variable	N (%)
Age	
<21	14(3.3)
21-30	77(18.1)
31-40	89(20.9)
41-50	74(17.4)
51-60	101(23.8)
>60	70(16.5)
Gender	
Female	217(51.1)
Male	208(48.9)
Nationality	
Non-Saudi	63(14.8)
Saudi	362(85.2)
Level of education	
Elementary school or less	50(11.8)

Intermediate – high school	134(31.5)
Bachelor	186(43.8)
Postgraduate	55(12.9)
Affiliation	
Employee	166(39.1)
Dependent	225(52.9)
Other	34(8.0)

Table 2: Descriptive variables

Variable	N (%)
Languages spoken	
Arabic	199(46.8)
English	59(13.9)
both	167 (39.3)
Was there language barrier?	
Yes	45(10.6)
No	380(89.4)
If yes, was there a translator?	
Yes	8(1.9)
No	37(8.7)
System	380(89.4)
What language did your Primary care physician speak?	
Arabic	163(38.4)
English	129(30.4)
Both	133(31.3)
Was there translator?	
Yes	108(25.4)
No	317(74.6)

Table 3: Measuring Satisfaction

Variable	N (%)
Being polite	
Poor	2(0.5)
Less than satisfactory	4(0.9)
Satisfactory	22(5.2)
Good	87(20.5)
Very good	310(72.9)
Making you feel at ease	
Poor	3(0.7)
Less than satisfactory	9(2.1)
Satisfactory	26(6.1)
Good	85(20.0)
Very good	302(71.1)
Listening to you	
Does not apply	5(1.2)
Poor	3(0.7)
Less than satisfactory	16(3.8)
Satisfactory	25(5.9)
Good	72(16.9)
Very good	304(71.5)
Assessing your medical condition	
Does not apply	13(3.1)
Poor	6(1.4)
Less than satisfactory	7(1.6)
Satisfactory	28(6.6)
Good	74(17.4)
Very good	297(69.9)
Explaining your condition and treatment	
Does not apply	15(3.5)
Poor	7(1.6)
Less than satisfactory	15(3.5)
Satisfactory	19(4.5)

Good	75(17.6)
Very good	294(69.2)
Involving you in decisions about your treatment	
Does not apply	28(6.6)
Poor	4(0.9)
Less than satisfactory	10(2.4)
Satisfactory	33(7.8)
Good	66(15.5)
Very good	284(66.8)
Providing or arranging treatment for you	
Does not apply	35(8.2)
Poor	5(1.2)
Less than satisfactory	8(1.9)
Satisfactory	26(6.1)
Good	78(18.4)
Very good	273(64.2)
This doctor will keep information about me confidential	
Does not apply	4(0.9)
Strongly disagree	1(0.2)
Disagree	2(0.5)
Neutral	23(5.4)
agree	95(22.4)
Strongly agree	300(70.6)
This doctor is honest and trustworthy	
Does not apply	3(0.7)
Strongly disagree	1(0.2)
disagree	6(1.4)
neutral	20(4.7)
agree	92(21.6)
Strongly agree	303(71.3)
I am confident about this doctor's ability to provide care	
Yes	405 (95.3)
No	20(4.7)
I would be completely happy to see this doctor again	
Yes	393(92.5)
No	32(7.5)
Was this visit with your usual doctor?	
Yes	313(73.6)
No	112(26.4)

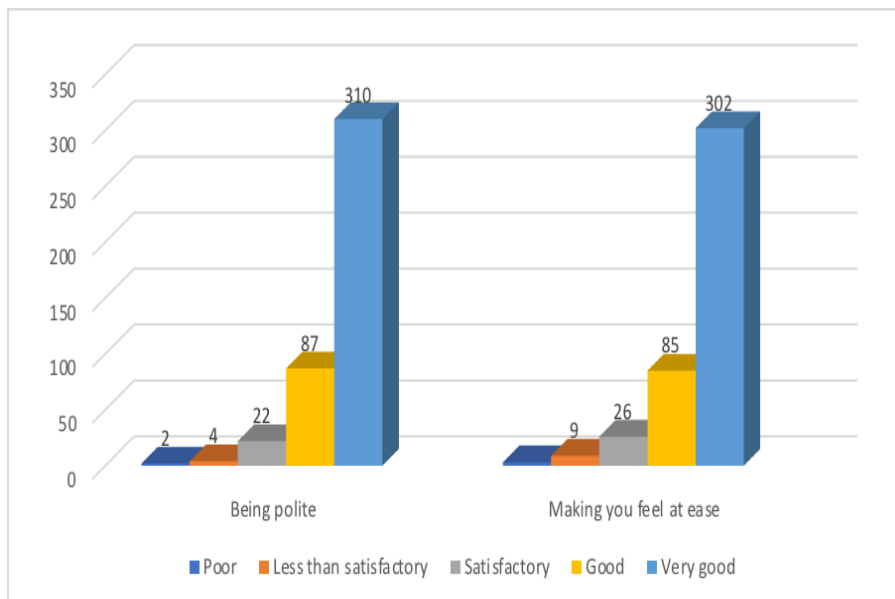


Figure 1

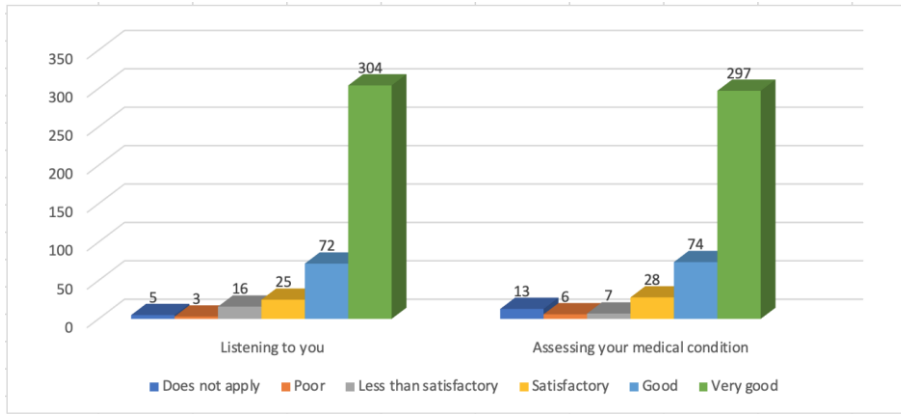


Figure 2

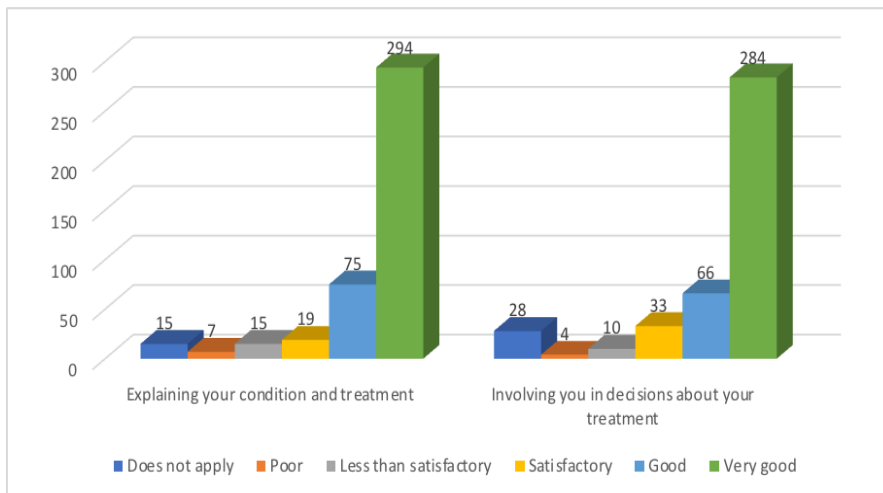


Figure 3

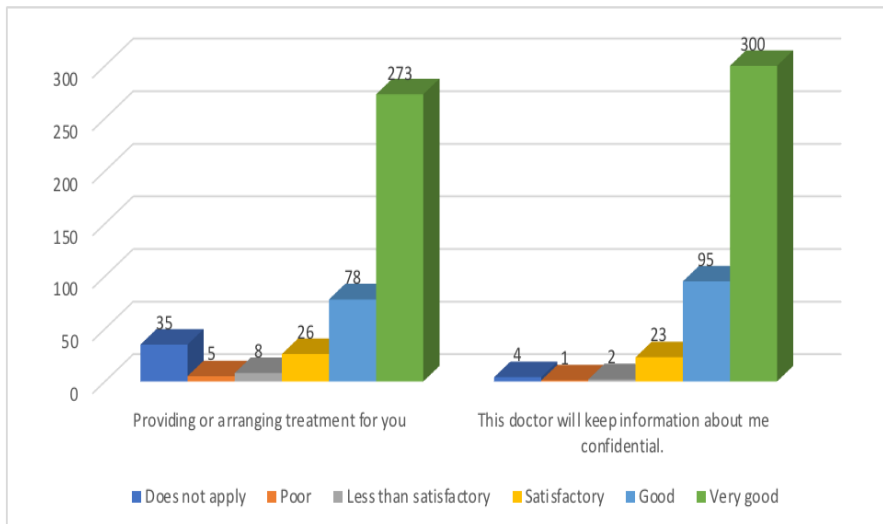


Figure 4

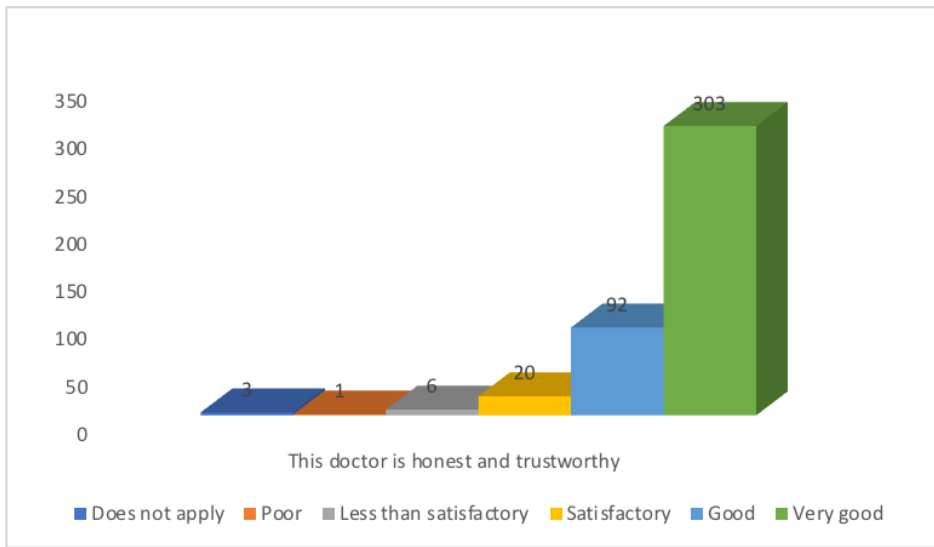


Figure 5

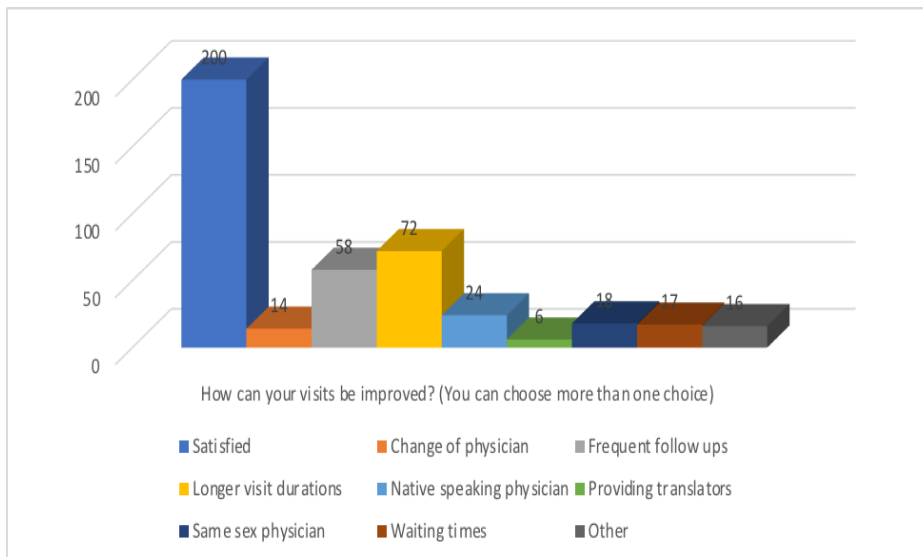


Figure 6