The Relationship between Race/Ethnicity, Sex, and Language in Patient-Physician Encounters among Bangladeshi-Americans

Submitted by Subha Hanif
Biology

To
The Honors College
Oakland University

In partial fulfillment of the
requirement to graduate from
The Honors College

Mentors: Florence J. Dallo, PhD MPH and Patricia A. Wren, PhD MPH

Department of Health Sciences

Oakland University

(03/01/13)

Abstract:

This study will investigate the issue of patient-physician communication/relation in the Bangladeshi-American community in Hamtramck, Michigan. The specific components that will be explored are race/ethnicity, language, and sex of patients and providers. The data will be collected to analyze if any of these factors are associated with patient-physician relation in a primary care setting. The patient's and the provider's perspective will both be considered. The study proposes to explore whether race/ethnicity, language and sex of the provider affects patient satisfaction and care among the Bangladeshi-American community.

Introduction:

Patient-physician communication has been a widely studied topic in which all have strived to better understand the interaction between the patient and provider. With an increasing culturally diverse group, it has become crucial for physicians to adapt and better understand their rapidly changing patient population. In current times, there has been a strong demand for improvement of patient-physician relations, specifically pertaining to communication skills and patient participation in medical decision-making (Eamranond, Davis, Phillips, & Wee, 2011). Many questions have been raised about racial/ethnic backgrounds and medical communication. Questions exist pertaining to whether cultural influences affect decision-making and what outcomes this presents to patient satisfaction (Schouten & Meeuwesen, 2006).

Racial concordance between patient and physicians has shown to be a significant part of the patient-physician relationship. In a study that observed how race/ethnicity and gender of patients and physicians affect physicians' participatory decision-making styles found that African American patients rate visits as significantly less participatory than white patients (Cooper-Patrick et al., 1999). Other studies have shown that patient satisfaction is greater when there is race concordance between patient and physician (Saha, Komaromy, Koepsell, & Bindman, 1999; Street, O'Malley, Cooper, & Haidet, 2008; Cooper et al., 2003; Traylor, Schmittdiel, Uratsu, Mangione, & Subramanian, 2010). Hispanic, African American, and Asian American patients were all significantly more satisfied if

they had a physician that belonged to their racial/ethnic group (Laveist & Nuru-Jeter, 2002). Ethnic minorities were also found to perceive bias in health care than Caucasians and felt that belonging to another ethnic group would allow for better health care benefits (Johnson, Saha, Arbelaez, Beach, & Cooper, 2004; Traylor et al., 2010). One study indicated that patients that are not engaged and do not participate in talking to the physicians contribute more to health disparities than time spent with the physician (Johnson, Roter, Powe & Cooper, 2004). In terms of patient satisfaction, it was found that patients may feel a greater sense of trust, comfort, and interpersonal care with physicians of their racial background. African Americans, Caucasians, and Asians felt that treating patients with respect was indicative of their patient satisfaction (Saha, Arbelaez, & Cooper, 2003). The similarity in culture and personal beliefs seem to breed mutual understanding, cultural competence, and tend to make more patients abide by physician recommendations. (Laveist et al., 2002; Saha et al., 1999; Street et al., 2008).

Evidence from prior research has also shown that discordance of language between patient and physicians exists. Eamranond et al. (2011) determined whether patient-physician language concordance was connected to different rates of screening. It was found that Spanish-speaking patients that were treated by language-concordant physicians received more screening recommendations for cardiovascular risk factors and cancer than those patients that were treated by language-discordant physicians (Eamranond et al., 2011).

Another study found that 26% of Spanish-speaking Hispanic patients had Hispanic physicians and 60% of Asian Americans, who are non-English speakers, had Asian physicians (Traylor et al., 2010). Julliard et al. (2008) showed strong evidence (more than 80%) that participants in their study believed there were problems in communicating with their physicians due to language. Many patients felt that language problems often made the providers more impatient or frustrated when caring for the patient.

Some interesting research and observations have been found pertaining to whether gender plays a role in patient-physician interactions. Cooper-Patrick et al. (1999) found that female physicians have more satisfactory visits with patients than male physicians. Many women felt that it was easier to talk about genital and reproductive issues with female physicians, and female physicians were more likely to report current mammography (Julliard et al., 2008; Jerant, Betakis, Fenton, Tancredi, & Frankis, 2011). Other studies have investigated the issue that female doctors tend to discuss therapeutic interventions more often than male providers. Also, since male and female patients are treated differently, there is evidence of bias when physicians make decisions about treatment and care (Bertakis & Azari, 2007). Female physicians also tend to provide more satisfactory care to female patients when she uses a more sex-congruent communication (Schmid Mast, Hall, & Roter, 2007).

In terms of immigrant populations, one study concluded that cultural differences accounted for less satisfactory visits between patient and physician.

(Wachtler, Brorsson, & Troein, 2006). Another study thoroughly investigated the differences in patient-physician relations between foreign-born and U.S. born patients. Patients born in other countries expressed interest for female physicians, especially in subjects pertaining to genital exams, compared to male providers. There was a strong correlation between foreign-born women and trust in their physician's medical training, whereas U.S. born women tended to thoroughly investigate before choosing their respected providers. Among foreign-born patients, they valued qualities of empathy and understanding in physicians (Julliard et al., 2008).

Many studies have investigated factors such as race/ethnicity, sex, and language and their association with patient-physician communication in immigrant and minority communities. However, through a literary search it was found that there is a lack of information regarding health issues and the Bangladeshi-American population in the United States. Furthermore, there is little evidence of studies that have determined factors that influence interaction between patient and physician in the Bangladeshi-American community. Exploring this ethnic group can allow us to better understand what factors are associated with the relationship between the patient and physician.

According to the 2010 United States Census Bureau results, Asian Americans, the ethnic group to which Bangladeshi-Americans belong, consisted of 21.4% of Hamtramck's population (*2010 Census Data for Southeast Michigan*). As a densely populated city of Bangladeshi-Americans, Hamtramck

can be considered a location that lends itself to a good sample size for a study in this ethnic group. This study will investigate the issue of patient-physician communication/relation in the Bangladeshi-American community in Hamtramck, Michigan. The specific components that will be explored are race/ethnicity, language and sex of patients and providers, and if any of these factors are associated with patient-physician relation in a primary care setting. The patient's viewpoint and the provider's perspective will both be considered. The aim of this study is to explore whether race/ethnicity, language and sex of the provider affects patient satisfaction and care among Bangladeshi-American community.

Methods:

This study included a total of 50 Bangladeshi-American individuals age 18 or older that reside in Hamtramck, Michigan. A primary screening of participants was first conducted in the waiting room of the family medicine clinic. Each prospective participant was asked the following questions: 1. If he/she is a Bangladeshi-American 2. If he/she can speak and understand Bengali or English 3. If he/she would like to participate in this study. If individuals answered yes to all three questions, then they were selected as participants for this study.

After the primary screening, the selected participants were provided with an informed consent form, which was also translated in Bangla. The participants were then asked to fill out a survey consisting of thirty-three questions while waiting for the physician in the exam room. The survey questions pertain to demographics, quality, barriers to accessing medical care, insurance, and satisfaction of care that he/she receives at the clinic by the provider. All the quality questions included “always, often, and rarely” as answer choices. The questions pertaining to satisfaction of care and trust/confidence included “a lot, fair amount, and not much” as categories on the multiple-choice portion. If need be, the participants had the questions read to them orally to ease understanding. The surveys were taken from Saha et al’s (1999) study and many questions were original. The questions were translated in Bangla for those who do not read or write English. The questionnaire was designed to take fifteen minutes to complete. In addition, the Bangladeshi-American family physician was also asked

to complete a survey that included questions about demographics and difficulties in communicating with a diverse population.

All data collected was kept confidential and all the participants remain anonymous. The data analysis was conducted through Statistical Package for the Social Sciences (SPSS) and chi-square analysis was performed where appropriate. All p-values less than 0.05 were considered statically significant.

Results:

Table 1 shows the characteristics and demographics of the patient sample that participated in the study. There was a total sample size of 50 Bangladeshi-Americans. A majority were male (58%). Respondents who were in the age range of 30-39 years comprised 46% of the participants. Only 14% of the individuals were in the age range of 50 to 64 years. A large number of the individuals who decided to complete the survey were also married and only 30% were single. The study further illustrated that the majority of participants (86%) were foreign born. Most of these foreign born individuals consider Bangladesh their place of birth. Only seven individuals were born in the United States. Forty-eight percent of the participant pool did not report having any chronic conditions such as diabetes, heart disease, and/or hypertension. In terms of access to health care facilities, 72% or 36 patients indicated that he/she had health insurance.

Table 2 indicates a chi-square analysis relating nativity status and health insurance with patients' responses to questions on quality of health care received. Question 1 asked if the patient felt that the doctor involved him/her in the decision making process. The data from Table 2 shows that the Question 1 correlation with health insurance demographic was found to be statically significant ($p=0.013$). Question 3 asked how much confidence and trust patients have in the physician's treatment. Similarly, when question 3 was compared to health insurance a p value of 0.002 was deemed significant.

Figure 1 illustrates patient-physician gender concordance and the level of comfort the Bangladeshi-American patients felt with the physician. In response to the question, would you feel more comfortable with a physician of the same gender, 34 individuals felt that having a physician of the same gender would lead to greater comfort. The second figure illustrates the relationship between racial concordance the level of care received. The question asked the participants if he/she felt that the care he/she receives would be different if he/she belonged to another ethnic background. Thirty-four individuals felt that the care received would be different if they belonged to another ethnic background. Figure 3 shows that 40 participants felt that they did not require an interpreter in understanding the physician's advice after or during the visit.

The Bangladeshi-American physician that was surveyed has been in practice for over fifteen years. He is fluent in both Bengali and English and communicates on a regular basis with his patients in both languages. The family medicine clinic was established to deliver emergency and primary care for patients seven days a week in Hamtramck. From analysis of the physician's survey, it seemed that the physician had the greatest difficulties when treating patients who were uninsured or had transportation problems in attending scheduled appointments.

Discussion & Conclusion:

This study found that the there was a relationship between how involved the patients were in the health care decision-making process with the physician and health insurance (p=0.013). Question 1 asked the participants if he/she felt the physician involved him/her in decisions. Of the 14 individuals who reported to not have health insurance, 8 indicated a response of "rarely" and the remaining 4 indicated "often" for their response to Question 1. This is in contrast to the 27 patients that felt the physician "always" involved him/her in the decision-making process. Interestingly, a study conducted by Dey and Lucas (2006) explored health care access and utilization by immigrants. The researchers concluded that those native-born individuals were more likely to be insured than foreign-born patients. Likewise, our results indicated that 13 of the 14 individuals who were uninsured were born in Bangladesh and had immigrated to the United States at some point. This finding suggests that patients who are not born in the United States face the obstacle of trying to obtain medical insurance to access primary health care services. The majority of our respondents (72%) reported having medical insurance. These numbers are somewhat similar to Johnson et al's (2004) study, which found 13.6% of Asian Americans claimed to not have health insurance.

Our statistical analysis suggests that Question 3**,** involving the amount of trust and confidence patients have of the physician who is treating him/her, is correlated with health insurance as well (p=0.002). From the 14 individuals who

did not have any form of health insurance, 8 patients claimed that they have “not much” or “fair amount” of trust. This is in contrast to a majority of the individuals who do possess health insurance and have “a lot” of trust and confidence in the physician’s treatment.

Previous studies that have explored patient satisfaction and quality of health care received in various ethnicities provide some interesting findings. A study conducted by Taira et al. (1997) reported that Asian Americans were less likely to trust physicians whom did not involve him/her in the decision-making process. This correlation is evident in our data on Bangladeshi-Americans. There were 21 individuals that marked the “fair amount” or “not much” category to the question about how much confidence and trust he/she has in the physician. Among these patients, 12 of them also indicated “often” or “rarely” in the response to whether physician involves the patient in the decisions made about care and treatment.

The study by Dallo, Borrell, and Williams (2008) reported that individuals not born in the United States were more likely to claim that physicians did not involve him/her in the decision-making process. In contrast to their findings, our results did not imply a statistically significant relationship between nativity status and the extent to which the physician involves the patient in the decisions regarding treatment. ($p=0.564$) This may imply that this variable does not greatly affect this issue in the Bangladeshi-American community that visits this family

medicine clinic. However, there certainly may be more factors affecting this relationship that we did not explore.

In another study by Eamranond et al. (2011) it was found that Spanish-speaking patients who had Spanish-speaking physicians were more likely to receive health screenings. Although our study did not explore preventive care services in the Bangladeshi-American community, our study did explore the issue of language concordance in communication between the patient and the provider. Of the 50 respondents, 40 individuals answered “no” to the question of whether he/she sought an interpreter in understanding the doctor’s advice after or during the visit. This finding is in accordance of what we thought to expect due to the cultural and linguistic similarities of the patients and the provider at this practice. In Julliard et al’s (2008) study, which observed the language barrier evident in Latino communities, it was found that interpreters create difficulties in discussing medical information. However, since our study involved a Bangladeshi-American physician, the majority of patients did not believe that an interpreter was needed to convey his/her thoughts. This finding is consistent with other studies that have concluded that Hispanic patients were more likely to have Spanish-speaking physicians (Traylor et al., 2010).

In our study, 34 of the 50 individuals responded that he/she would feel more comfortable with a physician of the same gender. This suggests that these Bangladeshi-Americans are more likely to share their concerns and thoughts with physicians of the same sex. A study conducted by Bertakis and Azari (2007)

investigated the issue of patient gender and patient practice style and found that there are several significant differences between the care delivered by female and male physicians. Mast, Hall, and Roter's (2007) study also shows support that a female-female relationship between patient and provider are rated as more patient-satisfactory than others. Even though our study included a male, Bangladeshi-American physician, the patients' indication that gender concordant connections are favored is what we would expect.

In terms of racial/ethnic concordance between patient and provider, our study found that 34 respondents felt that if he/she belonged to another ethnic background the care received would be different. When filling out the survey responses, many participants mentioned that they felt there was bias in the care that they received in comparison to Caucasians in the United States. In other studies that explored the racial concordance reported that patients who have physicians of the same race rate their visits more satisfactory and the decision-making process more favorable (Cooper et al., 1999). Laveist and Nuru-Jeter's (2002) study also had similar findings and hypothesized that the preference for race-concordant relationships may be due to a greater feeling of trust and comfort with these physicians. This study also goes on to claim that it may be also due to societal racism where patients are wary of physicians from other ethnicities because of previous encounters with inferior care or discrimination. In our case, it is evident that most patients were very satisfied with the care that

they received with the Bangladeshi-American physician due to cultural and linguistic similarities.

There were several limitations in this study. First, the sample size of 50 is considered small and it limits us in how much can be generalized about the Bangladeshi-American community. Second, this study only surveyed a Bangladeshi-American physician and this may have selection bias. Third, the patients that were chosen for the sampling were concentrated in the age group of 30-39 and 40-49 and very few elderly and young adults individuals were surveyed. The age of the physician that treated the patients was also limited in this study.

In summary, this study points to some interesting observations regarding health insurance and the Bangladeshi-American community. Those participants that reported to have medical insurance were more likely than others to indicate that the physician involved him/her in the decision-making process. In addition, patients that had health insurance were more likely to have a higher level of confidence and trust in the physician's treatment and care. The majority of Bangladeshi-American patients also felt that having a physician of the same gender would increase the comfort level. The language barrier was not a concern to many of these individuals because the physician that was treating him/her was fluent in Bengali. Finally, the majority of the respondents felt that belonging to another ethnic group would affect the level of care that would be received.

To our knowledge, no other study has explored the communication between Bangladeshi-American patients and providers in Hamtramck, Michigan. Our study is unique in that this population has rarely been studied in terms of health care outcomes. However, further research needs to be done that explore a larger sample size and measures different age groups. In addition, future studies need to concentrate on assessing the difference in care and communication received by Bangladeshi-American patients when a physician of the same gender and different is treating this population. Along with this, the patients' perceptions of the treatment received by Bangladeshi-American physicians and physicians from other racial groups should be compared.

References

Bertakis, K.D. & Azari, R. (2007). Patient gender and physician practice style. *Journal of women's health, 16*(6).

Cooper-Patrick, L., Gallo, J.J., Gonzales, J.J., Vu, HT., Powe, N.R., Nelson, C. & Ford, D.E. (1999). Race, gender, and partnership in the patient-physician relationship. *The Journal of the American Medical Association, 282*(6).

Cooper, L.A., Roter, D.L., Johnson, R.L., Ford, D.E., Steinwachs, D.M., & Powe, N.R. (2003). Patient-centered communication, ratings of care, and concordance of patient and physician race. *Annals of internal medicine, 139*(11).

Dallo, F.J., Borrell, L.N., Williams, S. L. (2008). Nativity status and patient perceptions of thee patient-physician encounter: result from the Commonwealth Fund 2001 survey on disparities in quality of health care. *Medical Care, 46*(2).

Dey, A. N., Lucas, J. W. (2006). Physical and mental health characteristics of U.S.-and foreign-born Adults: United States, 1998-2003. *Advance data*, (369).

Eamranond, P.P., Davis, R.B., Phillips, R.S., & Wee, C.C. (2011). Patient-physician and language concordance and primary care screening among spanish-speaking patients. *Medical care, 49*(7).

Jerant, A., Betakis, K.D., Fenton, J.J., Tancredi, D.J., & Frankis, P. (2011). Patient-provider sex and race/ethnicity concordance: a national study of healthcare and outcomes. *Medical care, 49*(11).

Johnson, R.L., Roter, D., Powe, N.R., & Cooper, L.A. (2004). Patient race/ethnicity and quality of patient-physician communication during medical visits. *American journal of public health, 94*(12).

Johnson, R.L., Saha, S., Arbelaez, J.J., Beach, M.C., & Cooper, L.A. (2004). Racial and ethnic differences in patient perceptions of bias and cultural competence in health care. *Journal of general internal medicine, 19*(2).

Julliard, K., Vivar, J., Delgado, C., Cruz, E., Kabak, J., & Sabers, H. (2008). What Latina patients don't tell their doctors: A qualitative study. *Annals of family medicine, 6*(6).

Laveist, T.A. & Nuru-Jeter, A. (2002). Is doctor-patient race concordance associated with greater satisfaction with care? *Journal of health and social behavior, 43*(3).

Mast, M. S., Hall, J. A., & Roter, D. L. (2007). Disentangling physician sex an physician communication style: Their effects on patient satisfaction in a virtual medical visit. *Patient education and counseling. 68*(1).

Saha, S., Arbelaez, J.J., & Cooper, L.A. (2003). Patient-physician relationships and racial disparities in the quality of health care. *American journal of public health, 93*(10).

Saha, S., Komaromy, M., Koepsell, T.D., & Bindman, A.B. (1999). Patient-physician racial concordance and the perceived quality and use of health care. *Archives of internal medicine, 159*(9).

Schouten, B.C. & Meeuwesen, L. (2006). Cultural differences in medical communication: A review of the literature. *Public education and counseling, 64*(1-3).

Schmid Mast, M., Hall, J.A., & Roter, D.L. (2007). Disentangling physician sex and physician communication style: Their effects on patient satisfaction in a virtual medical visit. *Patient education and counseling, 68*(1).

Street, R.L. Jr., O'Malley, K.J., Cooper, L.A., & Haidet, P. (2008). Understanding concordance in patient-physician relationships: Personal and ethnic dimensions of shared identity. *Annals of family medicine, 6*(3).

Stewart, M.A. (1995). Effective physician-patient communication and health outcomes: a review. *Canadian medical association journal, 152*(9).

Taira, D. A., Safran, D. G., Seto, T. B., Rogers, W. H., Kosinski, M., Ware, J., Lieberman, N., & Tarlov, A. (1997). Asian-American patient ratings of physician primary care performance. *Journal of general internal medicine, 12*(4).

Traylor, A.H., Schmittdiel, J.A., Uratsu, C.S., Mangione, C.M., & Subramanian, U. (2010). The predictors of patient-physician race and ethnic concordance: A medical facility fixed-effects approach. *Health services research, 45*(3).

Traylor, A.H., Subramanian, U., Uratsu, C.S., Mangione, C.M., Selby, J.V., & Schmittdiel, J.A. (2010). Patient race/ethnicity and patient-physician race/ethnicity concordance in the management of cardiovascular disease risk factor for patients with diabetes. *Diabetes care, 33*(3).

United States Census Bureau. (2010). *2010 Census Data for Southeast Michigan* [Data file]. Retrieved from http://library.semcog.org/InmagicGenie/DocumentFolder/ QuickFacts2010 Census.pdf

Wachtler, C., Brorsson, A., & Troein, M. (2006). Meeting and treating cultural difference in primary care: A qualitative interview study. *Family practice, 23*(1).

Appendix:

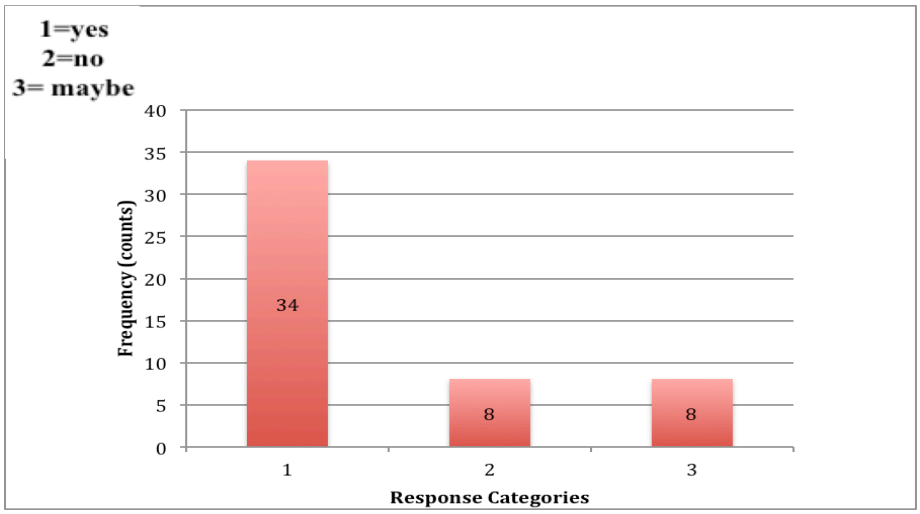

Figure 1. Patient-Physician Gender Concordance and Comfort Level

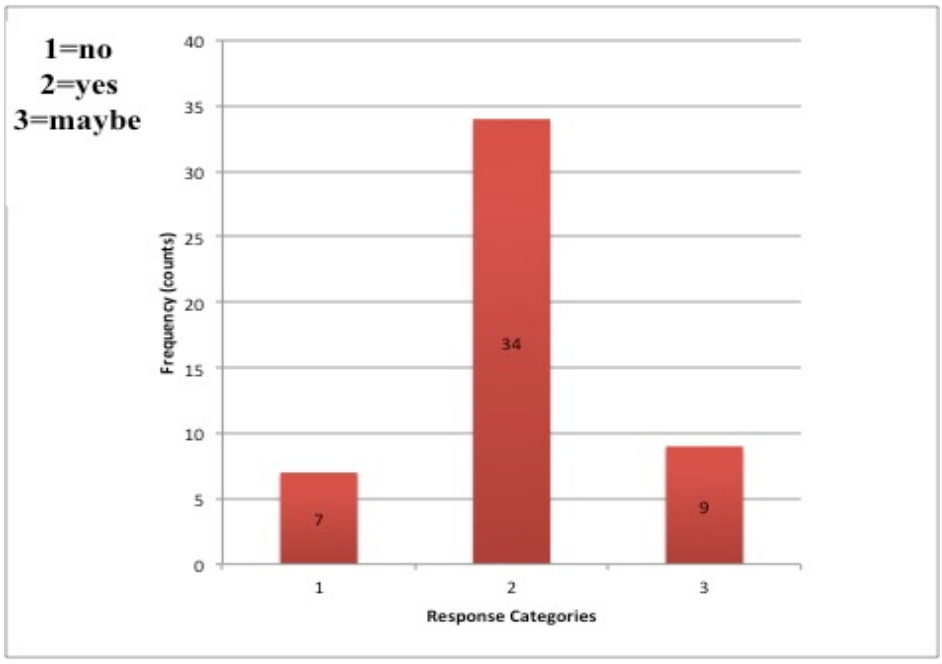

Figure 2. Patient-Physician Racial Concordance and Care Received

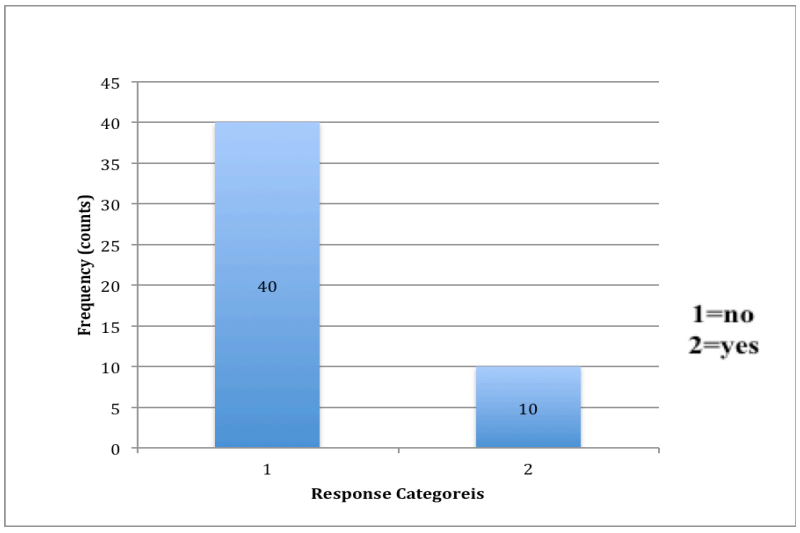

Figure 3. Interpreter Use

Table 1. Characteristics of the Bangladeshi-American Patient Sample

Variable	Frequency	%
Age (years)		
18-29	9	18
30-39	23	46
40-49	11	22
50-64	7	14
Sex		
Male	29	58
Female	21	42
Martial Status		
Married	35	70
Single	15	30
Education Level		
Some high school or high school graduate	22	44
Some college or college graduate	28	56
Nativity Status		
Foreign born	43	86
US born	7	14
Chronic conditions		
Heart disease/ diabetes/Hypertension	20	40
None	24	48
Other	6	12
Physician visits		
> 1 year to two years	21	42
2 to more than four years	29	58
Health Insurance		
Yes	36	72
No	14	28

Table 2. Chi-Square Analysis Correlating Nativity status and Health Insurance with Patients' Responses

	Nativity Status	Health Insurance
Q1: Did the doctor involve you in decisions about your care as much as you wanted?		
Pearson Chi-Square Value	1.146487835	8.554376658
Asymp. Sig. (2-sided p value)	0.563693893	0.013881638
Q2: Are you able to communicate well with your doctor and ask questions?		
Pearson Chi-Square Value	0.996677741	1.133
Asymp. Sig. (2-sided p value)	0.607539023	0.568
Q3: How much confidence and trust do you have in the doctor treating you?		
Pearson Chi-Square Value	1.432309724	12.70417423
Asymp. Sig. (2-sided p value)	0.488627489	0.001743105