Survey Methodology of International Patients: Preliminary Report of International Patient Satisfaction

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Introduction

As the United States' immigrant and refugee populations grow, providing healthcare to them is becoming increasingly more challenging in our already stressed healthcare system (1). For the purpose of this paper, we will define international patients as immigrants and refugees who often are non-English speaking. Caring for these patients provides many rewards but also many challenges for the medical staff. The primary goal of this study is to determine an efficient methodology in surveying international patients. Specifically, another goal is to determine preliminary results on the quality of patient care at the University of Virginia (UVA) International Family Medicine Clinic.

The challenge of providing healthcare for international patients often involves differences in cultural perspectives on healthcare. In addition, differences in patients' expectations, along with their lack of verbal ability to communicate effectively and efficiently with the medical staff also play a major role (2,3). Moreover, another challenge comes from the physicians instead of patients, where physicians may feel unsatisfied in treating refugee patients (4). In 1998, Blochliger *et al*. in Switzerland found that the best outpatient treatment of refugees is provided by a small group of physicians with adequate training and experience in treating refugee patients (5). Many institutions have followed that recommendation or have conducted their own research in the field and created specialized primary care units to effectively address this concern.

In the community surrounding UVA, the population consists of approximately seven percent immigrants and refugees or foreign-born population. More than ten percent of this population are over the age of five but speak a language other than English at home, according to the U.S. Census Bureau (6). In the United States, 11.1 percent of the population are foreign-born (7) and 17.9 percent speak a language other than English at home (6). These data strongly suggest that our healthcare providers today should be aware of this population and their needs, and make strong efforts to provide high quality and efficient care for them. The Family Medicine Department at UVA is one of those institutions that has a specialized clinic for international patients. Currently, there are six physicians and one nurse practitioner working at the UVA International Family Medicine Clinic. Our providers are specially trained in caring for international patients using hospital and Cyracom (telephone) interpreters. Our patients come from a variety of backgrounds and locations such as refugees from Somalia and immigrants from Mexico and many other countries. The patients are referred to the International Family Medicine Clinic through a variety of sources including the International Rescue Committee, Charlottesville's primary refugee resettlement agency.

The goal of this paper is to describe the methodology in surveying the international patient population regarding their satisfaction with their healthcare, and to describe the preliminary findings from the survey. This pilot study was designed primarily to develop a methodology to collect patient satisfaction information from limited-English proficient International Family Medicine Clinic patients. According to the literature, there has been limited research conducted in the field of understanding international patients' satisfaction in United States; therefore, this research is the first step in determining the methodology along with the quality and efficiency of our healthcare for international patients. The ultimate goals of our research include refining the survey to assess patient satisfaction in the International Family Medicine Clinic; assessing the effectiveness of using professional interpreters; and determining any cultural and language barriers that are still present that may prevent the providers from treating patients.

Most of the research conducted in the area of international patient healthcare satisfaction has been done in other countries. Expectation is a major factor in determining satisfaction of care where satisfaction is related to patients' perception of the care they want to receive. The more the providers meet patients' perception or expectation, the more satisfied the patients will be with the service (3). In a study conducted in Israel with native Israeli and Russian immigrant populations, the researchers found that the 250 Russian immigrant patients were much more satisfied and had scarcely any discrepancy between their expectations of the physicians than the 200 native Israeli patients. The Israeli patients expressed less satisfaction and many more discrepancies in their expectations (8). In another study done in Switzerland, the researchers analyzed 343 patients' expectations of the consultation along with the physicians' expectations and their similarities. The results found no evidence that immigrant patients' expectations differed from those of the Swiss patients and physicians had no difficulty in identifying

expectations of both. However, they did find that most physicians were poor at identifying patient expectations in general (9). These results and conclusions of many other studies suggest that in providing healthcare for international patients, our understanding of patient expectations and physician expectations in conjunction with cultural and language barriers still require further research and analysis (1,3-5,10). In the United States, Young *et al.* confirmed the importance of understanding patient expectations in the patient-physician relationship that has been found in other countries (11). From Dyregrov's study on Bosnian refugees based on a scale of 1 to 5 with 1 being negative and 5 being the most positive experience, they found that refugees rated participations in research to be positive ranging from 3.9 in younger children to 4.5 in women (12). From this source and past experiences of our staff we were assured that refugees and immigrants are willing participants in medical research.

Methods

The study was conducted during a two-month period from June 22nd to Aug 22nd, 2004. During this period, I spent about fifteen hours per week at the International Family Medicine Clinic at UVA hospital recruiting patients to participate in the study. A total of three physicians and one nurse practitioner were the primary care providers. The providers were aware of the survey and they were encouraged to ask patients to participate in the survey.

We determined that a simple survey questionnaire given by our staff would be the most appropriate surveying method for international patients. This method of in-person, formal interview was found by Ford *et al.* to provide the most feedback and to gather information quickly and immediately after the patient's experience (13). In addition, we determined to conduct the survey after the providers completed the visit to provide the most accurate data from the patient in the event that the patient was reluctant to express dissatisfaction about the physician during treatment and unable to have a full perspective of the care received during their visit (14). Moreover, a face-to-face interview method was used because we realized the significant difficulties that may arise due to language barriers in self-administered surveys and mail-in surveys, in which case survey questions have to be translated into multiple languages and the literacy of patients may be too low. In addition, we recognized that telephone surveys may also present difficulties to patients without a telephone and confuse patients who lack an understanding of patient surveys because they have never been exposed to this before. Often during the survey I had to explain and clarify certain questions, which could have only taken place through an in-person interview process.

The survey is given in person, immediately after the patient's visit to the UVA Family Medicine International Clinic. The survey is given in English accompanied by interpreters from the hospital or through Cyracom telephone interpretation services. In limited situations, a family member acted as the interpreter.

Physicians experienced in caring for international patients generated the survey questionnaire. A total of 20 items was generated. The questions reflected their interest in the satisfaction of the international patients under their care, gathering further understanding of any barriers that may still exist during visits, and providing an objective measurement of the overall satisfaction of the international patients at the UVA International Family Medicine Clinic. The survey questionnaire has primarily a compilation of "yes," "no," and other forced choice questions along with questions that determine the patient's age, time spent in United States, and country of origin. The questionnaire also includes other demographic information such as age and gender. "Yes" and "No" questions such as "Were you satisfied with the interpreter services?" and "Did the physician or nurse practitioner take care of your concerns and problems today?" were used to simplify their responses and create less confusion during interpretation. However, we did use one open-ended question at the end of the survey to allow for feedback from the patients (see survey question form). We limited the number of open-ended questions because meanings may be lost in translation and to reduce the length of the survey. Since our survey contains no personal identification, our study was exempt from our IRB review and no written informed consent was issued to the patients.

After the completion of surveys, the data were imported into S-plus statistical analysis version 6.1. Frequency analysis and Fisher-exact test for comparison were applied to the data and presented in table format.

Results

We approached a total of 51 international patients of all demographics and ethnicity. A total of 46 patients agreed to be surveyed. We asked them four questions addressing satisfaction. These four questions provided four different aspects involved in patients' satisfaction and allowed us to capture a more specific satisfaction quality. These questions were: if the patient was comfortable expressing his or her problems to the physicians and nurse practitioners; if the provider was able to address all of their concerns and issues; if the patient understood provider's instructions; and if the patient was simply satisfied with the provider (See survey form). We received a 100 percent satisfaction response from 32 patients that were asked if they were satisfied with the provider (Table 1). We received a 100 percent satisfaction response from 46 patients that were

asked if they felt comfortable expressing their concerns to the provider and if the providers addressed all their concerns (Table 1). 91.3 percent of 46 patients understood the instructions given by the providers (Table 1). These four patients that did not understand their instructions interestingly fell into the group of patients that have been in United States for less than 6 months (Table 2).

Aside from patient satisfaction with the provider, we also studied their satisfaction in terms of the interpretations. We asked patients the type of interpreter that was used and if they were satisfied with the interpretation. Of the 35 patients that required an interpreter, 21 (60 percent) of them used the hospital provided interpreters, 5 (14.29 percent) used the Cyracom telephone interpretation service, and 9 (25.71 percent) received interpretation from family or friends. When a different interpreter was used for the survey questionnaire, we asked the patients if they were satisfied with the interpretation service during their visit. 20 patients fell into this category and they all responded with 100 percent satisfaction of the interpretation services (Table 1).

In addition to overall satisfaction, we also asked some social/medical care questions such as difficulty in paying for healthcare and prescribed medications. The results showed that 21.74 percent of patients had difficulty paying for healthcare and 23.91 percent of patients had difficulty paying for recommended medications (Table 3). There was no significant distribution of difficulty in paying for healthcare and medication by grouping patients into regions; 20.80 percent of patients from Africa, 25 percent of patients from Asia, and 21.40 percent of patients from Central America (Table 3) experienced difficulty.

When we cross-tabulated the difficulty paying for healthcare and medication with the time patients spent in the United States, we noticed that time spent in the United States is independent of difficulty in paying for healthcare. A slightly larger percentage of the population reported difficulty in the group of patients that have only been in the United States for less than three months. However, if we look at their responses to difficulty in paying for medication, we noticed that there is a progressive increase in difficulty with an increased amount of time spent in the United States.

Conclusions

From the satisfaction survey, we found that of the 20 patients we asked about interpretation satisfaction, 100 percent said they were satisfied. Other patients were not asked mainly due to the fact that the same interpreters were used for their visit and their survey questionnaire. In addition, 91.3 percent of patients responded with firm understanding of the instructions that were given by their respective providers. The data is fairly limited and our sample size is too small to use statistical analysis. However, it is fairly obvious that patients were pleased with the use of interpreters in their visit. Therefore, we can be fairly certain that using an organized team of professional interpreters would improve communication and satisfaction of the patients.

As stated in the introduction, many patient satisfaction studies expressed the correlation between patient expectations and patient satisfaction. It is likely that the international patients did not have high expectations and received care that they perceived as satisfactory healthcare. From literature of previous studies, patient expectations must be considered as a factor of satisfaction, and rate of satisfaction does not correlate with the quality level of health care. However, it does not mean that the care was inadequate; it simply implies that patient satisfaction may be different depending on patient expectations. Since our patient responses were tremendously positive, it simply means that our patients were satisfied with their care without further assumptions such as the quality of providers, system, and organization. A negative control should be conducted with the same patient satisfaction survey given to native English-speaking patients seen by the exact same providers in the same clinic. A comparison between the two groups would show greater insight into these expectation phenomena.

From the survey, we noticed that there are large number of patients that are satisfied with their care but complained about the expenses for healthcare and medications. A total of 21.7 percent of patients had difficulty paying for healthcare and 23.9 percent had difficulty paying for medications (Table 1). No data has been collected on the native population in this area and further studies need to be conducted to determine whether international patients have more difficulty paying for health services than the native population.

There was no significant correlation between the time in the U.S. and patient understanding of instructions given by providers. However, it is noted that all of the patients that did not understand instructions came from the groups who had spent under six months in the United States. This result may be suggestive of poor interpretation, but the reason may also be a result of newly arrived immigrant and refugee patients' unfamiliarity with the U.S. health care system and unforeseeable understanding by the patients. Further analysis and research are needed to determine the significance of this correlation.

The main goal of our project was to determine an efficient procedure in obtaining patient satisfaction data from international patients. With so little research addressing the satisfaction and care of this population in the United States, we determined that one reason for the lack of literature on this topic might be due to the

challenging obstacles in conducting research on this population. From the limited literature on this issue, the obstacles are mainly language and cultural barriers (1,9,15). As a result, at the UVA International Clinic in Family Medicine, hospital-hired professional interpreters and Cyracom services are provided for non-English speaking patients. Our survey was conducted in-person immediately after their visit at the clinic. On-site and in-person interviews for the survey were determined to be the best method due to bias from time lag, translation issues, and the high cost of mail surveys (13). During the entire survey process, many questions had to be repeated, explained, or clarified by the surveyor. In addition, the in-person interview process allowed the surveyor to assess the difficulty and clarity of each question based on direct or indirect patient responses such as their tone of voice and facial gestures. Out of a total of 51 patients asked to participate in the survey, we had a satisfactory refusal rate of only 9.8 percent. A refusal rate of less than 10 percent is a great accomplishment for any type of survey, along with satisfaction data from interpreters; this suggests that our current surveying method is productive and efficient.

A surprising result came from a cross-tabulation of patients that did not understand instructions with the type of interpreters used during their visit. To our surprise, all four patients that did not understand their instructions had hospital interpreters (Table 4). Three of the four patients spoke a rare language called Mai Mai. This data was again not statistically significant due to our limited sample size, which suggests that a greater sample size should be obtained in the future. However, since Mai Mai is such a rare and difficult language, it is expected and consistent with our findings. Nevertheless, we cannot ignore culture barriers that may have contributed to misunderstanding.

Even with a well-organized clinic, it is sometimes difficult to achieve total satisfaction or understanding between providers and patients when caring for international patients. However, a well-organized clinic directed specifically to care for international patients with experienced and qualified providers and interpreters can greatly increase care.

From this preliminary research, we determined an efficient and cost effective procedure of conducting international patient surveys with limited refusal rate. In summary, the procedure involves an in-person formal interview immediately after patient visit and a simplified survey questionnaire to decrease the amount of confusion that may arise during interpretation, and have a clear understanding that there may be unforeseen obstacles when interviewing this population. The benefit of an efficient and effective surveying process is to increase the amount of research on this ever-growing population of international patients, and possibly provide effective treatments in spite of challenging obstacles such as culture and language barriers.

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