RESEARCH ARTICLE

Self-Reported Barriers to Healthcare and Interpreter Preferences for Patients with Limited-English-Proficiency in an Urban Emergency Department

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Abstract

Introduction: In the United States, limited English proficient (LEP) patients often use emergency departments (ED) as their primary source of healthcare. Beyond language barriers, little is known about what other barriers LEP patients face to utilizing emergency care. The authors attempted to identify other barriers as well as gather data regarding patient preference for interpretation modality.

Methods: A survey was administered to LEP patients at an urban, academic ED from June 2016 to September 2018. Participants rated 17 predetermined barriers and reported preferred interpretation modality.

Results: The study population included 87 LEP participants from 13 countries, speaking 8 primary languages. The most common barriers "of high concern" were "paying the bill" (n=19), "wait time" (n=18), and "belief that professional care probably would not help" (n=15). A majority of participants (n=60, 61%) preferred in-person professional interpreters to other forms of interpretation.

Conclusions: Addressing these specific barriers may improve access and utilization of emergency care for LEP patients. In-person professional interpreters should be utilized whenever possible.

Keywords: Social Determinants of Health, Emergency Care, Interpreter Services, Immigrants, Refugees

Background

Over the past decade, the United States has seen a dramatic increase in immigration, with foreign-born individuals comprising nearly 50% of the nation's population growth. Today, the immigrant population, which includes refugees, asylum-seekers, and undocumented individuals, consists of about 43 million people or 13.4% of the national population.¹ This influx has bolstered economic growth and contributed to a rich cultural diversity throughout the country. However, providing healthcare to this vulnerable population presents multiple challenges. This study seeks to elucidate the major barriers to receiving healthcare for immigrants, refugees, and other limited English proficient (LEP) patients, by gathering information from patients in the Emergency Department (ED): a place where many of these patients first access the U.S. healthcare system.

Immigrants face many challenges to accessing healthcare. After arriving in the U.S., many experience significant declines in their health status, 2,3 including increased prevalence of chronic diseases, such as hypertension. diabetes and However. barriers prevent them from receiving the medical care they require. These barriers include socio-economic factors. unfamiliarity with the U.S. healthcare system, and not speaking the same language as their providers. Refugees and asylum seekers are a particularly vulnerable community, as many have experienced

significant trauma and torture resulting in physical injuries, as well as serious mental health problems, including post-traumatic-stress disorder, depression, and anxiety. Refugees' health issues become more acute with the added stressors of the asylum process and navigating the various complex systems of a new country.⁴

Multiple prior studies have shown that linguistic barriers are a common cause of why LEP patients are unable to access healthcare. Language is an essential element to navigating the healthcare system; in order to ensure effective healthcare, patients need to be able to communicate their concerns to providers who in turn need to be able to ensure that patients care understand their decision making.⁵ Other common barriers to healthcare include stigma surrounding mental health, lack of immigrant community support, limited financial resources, lack of health insurance, limited knowledge of the host country's healthcare system, cultural beliefs of healthcare, and logistical issues transportation, appointment including availability, or childcare needs.^{2,4,6,7} Due to these multiple factors, LEP patients often utilize emergency departments (ED) for non-emergent issues or delay utilizing other sources of care until their health issues become acute or life threatening.⁸⁻¹¹ In fact, many LEP patients use the ED as their principle source of healthcare. 5,11-13

Importance: Previous studies specific to emergency care have also shown that linguistic barriers play a significant role in patient satisfaction and utilization of the ED. Specifically, LEP patients who were not provided an interpreter or had an ad hoc interpreter were largely dissatisfied with

their care, especially in regards to courtesy, respect, promptness of service, and completeness of care.^{2,4,6,9,14,15} These patients have also received suboptimal care due to poor communication.¹⁶⁻¹⁹ Such linguistic discordance has also corresponded with patients being less willing to return to the same ED in the future.^{9,14,20-22}

Goals of this Investigation: Beyond language barriers, however, little is known about what other barriers LEP patients face to accessing or utilizing emergency care. In order to ensure accessible and quality care for patients who use the ED as their primary source of healthcare, this study sought to determine what other barriers to healthcare immigrants, refugees, and other LEP patients face in the ED. Additionally, the authors assessed patients' preferred interpretation modality. Addressing these barriers and preferences of LEP patients may in turn create systems to facilitate better care and lower healthcare costs for Englishspeaking patients in the ED, many of whom often face similar barriers to accessing healthcare. 23-25

Methods

Study Design and Population.

The authors used a quantitative survey to assess the barriers to emergency care for LEP patients seeking healthcare at the Emergency Department (ED) in an urban, academic, safety net hospital. The Institutional Review Board at the authors' institution deemed this study exempt. Data was collected from June 2016 to September 2018. All procedures were in accordance with the ethical standards of the responsible committee on human experimentation

(institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants included in the study.

Study participants were drawn from LEP patients seeking care in the ED at an urban academic medical center. Inclusion criteria included being 18 years of age or older, and utilizing formal (professional interpreter services including in-person. telephone. or video) informal (accompanying family members or friends) interpreters during their current ED visit. Patients less than 18 years of age and prisoners were excluded. A convenience sample of 200 study participants was recruited. Our sample size was determined in order to work with normally distributed data.

Survey Content and Administration.

In order to develop the preliminary questionnaire, the authors completed a search of peer-reviewed literature related to barriers to medical care for immigrants, refugees, and other limited-English (LEP) proficiency individuals. The authors then conducted a focus group with 22 professional interpreters from their hospital's Interpreter Services Department to further refine the questionnaire. Focus group participants were asked to discuss the questionnaire and provide feedback on the terminology and questions utilized. The results of this focus group assisted in developing a culturally sensitive and informative questionnaire for the target population (Appendix 1).

Using this quantitative questionnaire, the authors collected basic demographic data

on age, sex, country of birth, educational attainment, primary language, and length of residency in the United States. The authors also assessed previous ED experiences, satisfaction with current ED visit. preferences for interpretation modalities. and barriers to accessing or utilizing the ED, including concerns about confidentiality, finances, physical examination and testing, language barriers, and the availability of interpreters and healthcare providers from similar cultural backgrounds.

If a research assistant was in the department during the patient's visit, the questionnaire was administered in-person by a research assistant working with a speaking professional interpreter patient's primary language; when a research assistant was not available, patients were able to complete a paper questionnaire which had been translated into the five most common non-English languages spoken among patients receiving care at this hospital: Spanish, Haitian Creole. Portuguese, Cape Verdean Creole, and Vietnamese.

Data Analysis.

Participants were asked to rate on a four-point Likert scale (A lot/Some/A little/Not at all) the likelihood that each barrier to accessing or utilizing the ED discouraged them from seeking healthcare. Responses were then dichotomized into low and high concern, where low concerns include ratings of "A little" and "Not at all" and high concern included ratings of "Some" and "A lot." Descriptive statistics were used to describe the demographics of study participants and to draw comparisons

of preferences for interpretation modalities and barriers to accessing or utilizing the ED. All statistical analyses were performed using Statistical Package for Social Sciences (SPSS) version 24.

Results

Demographics

The study population was comprised of 87 LEP participants from 13 countries

and speaking 8 primary languages. Gender distribution was approximately equal, with 41.4% male vs. 44.8% female. A majority of participants were Spanish speaking (n=56, 64.4%) and have lived in the US for more than 5 years (n=49, 56.3%). The largest proportion of participants where between the ages of 35-44 (n=22, 25.3%) and born in the Dominican Republic (n=22, 25.3%) (*Table 1*).

Table 1: Demographics of Study Participants

<u>Characteristics</u>	<u>Value</u>		
Gender			
Male	36 (41.4%)		
Female	39 (44.8%)		
Missing	12 (5.7%)		
Age			
18-24	7 (8%)		
25-34	9 (10.3%)		
35-44	22 (25.3%)		
45-54	10 (11.5%)		
55-64	16 (18.4%)		
65-74	13 (14.9%)		
75+	5 (5.7%)		
Missing	5 (5.7%)		
Primary Language			
Spanish	56 (64.4%)		
Haitian Creole	15 (16.1%)		
Cape Verdean Creole	7 (8%)		
Vietnamese	3 (3.4%)		
Multiple	2 (2.3%)		
Other*	4 (4.4%)		
Missing	1(1.1%)		
Country of birth			
Dominican Republic	22 (25.3%)		
Haiti	14 (16.1%)		
El Salvador	13 (14.9%)		
Cape Verde	10 (11.5%)		
Guatemala	6 (6.9%)		

Puerto Rico	5 (5.7%)		
Colombia	3 (3.4%)		
Vietnam	2 (2.3%)		
Other**	5 (5.5%)		
Missing	7 (8%)		
Education Level			
None	5 (5.7%)		
Primary	26 (29.9%)		
Secondary	38 (43.7%)		
University	13 (14.9%)		
Masters/Doctoral	3 (3.4%)		
Missing	2 (2.3%)		
Length of Stay in the U.S.			
More than 5 years	49 (56.3%)		
Less than/equal to 5 years	31(35.6%)		
Missing	7 (8%)		
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^{*}Other: Portuguese, Portuguese Creole, Armenian, Polish

Barriers to Emergency Care

This study assessed 17 different barriers to accessing or utilizing emergency care among patients seen in the ED. Participants ranked the likelihood of these barriers delaying or discouraging them from seeking care on a four-point Likert scale. Overall, the top three barriers that participants expressed high concern about delaying or discouraging care were:

"concern about paying the bill" (n=19), "concern about wait time" (n=18), and "belief that professional care probably would not help" (n=15). Participants expressed low concern about barriers regarding examination by healthcare providers, blood draws and imaging, or previous negative experiences in this ED (*Table 2*).

^{**}Other: Brazil, Honduras, Chile, Armenia, Poland

Table 2: Perception of Barriers to Accessing or Utilizing Emergency Care

Barriers	High Concern ("A lot" or "Some")	Low Concern ("Not at all" or "A little")	Missing
Concerns about paying the bill	19	45	23
Concern about wait time	18	51	18
Belief that professional care probably would not help	15	44	28
Belief that the problem would get better by itself	12	52	23
Concern that people I know might find out	10	65	12
Uncertain availability of providers who speak my language	10	57	20
Uncertain availability of interpreter services	10	55	22
Concerns about what people I know might think, say, do, or feel	8	62	17
Preference to get alternative forms of care (e.g. family, traditional/religious healing or alternative/complementary therapies)	8	56	23
Concerns that my family will not be permitted to be present during my treatment	8	55	24
Uncertain availability of professionals from my own ethnic or cultural group	7	56	24
Concerns about having blood drawn	6	61	20
Concern about being examined by a healthcare provider	5	62	20
Concern about taking medications	5	62	19
Concern about being studied	4	62	21
Having had bad experiences with professional care in this or any other *** site	3	66	18
Concern about having x-rays, CT scans, or other imaging	2	62	23

Subgroup Analysis

Country of Origin and Primary Language.

Among participants who expressed high concern for these 17 barriers, a majority of individuals were born in the Dominican Republic and spoke Spanish as their primary language (*Appendix* 2). Specifically, of those individuals born in the DR, more participants expressed concern about paying the bill (n=7), concern about wait time (n=6), and belief that professional

care probably would not help (n=6). Of note, concerns about family not being permitted during treatment were expressed most frequently by El Salvador-born individuals compared to those born in other countries. In addition, despite having an equal number of responses from the Dominican Republic and Cape Verde voicing concern about the availability of professionals from their own ethnic or cultural group (n =3), the proportion of Cape Verdean participants

with this concern was notably larger due to the larger total number of Dominican participants (n=22 total Dominican respondents v. n=10 total Cape Verdean respondents, as seen in *Table 1*). *Sex.*

In comparing participant response by sex, the most frequently selected concerns among male participants were concerns about paying the bill (n=9) and concern about wait time (n=9). Similarly, more female participants selected concern about paying the bill (n=9), concern about wait time (n=7), and belief that professional care probably would not help (n=7). Compared to females, more male participants notably expressed concern about what people they know might think, say, do or feel (n=5 v. n=2) and concerns about taking medication (n=5 v. n=0) (*Appendix 3*).

Length of Stay in the U.S.

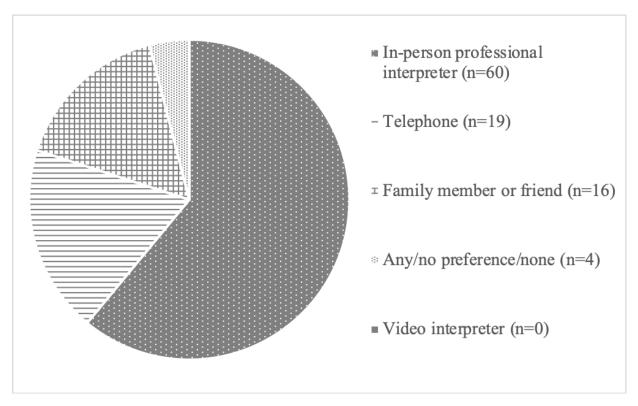
Participants who had stayed in the U.S. for less than or equal to 5 years most frequently expressed concern about wait time (n=10), while those participants who have stayed in the US more than 5 years

were most often concerned about paying the bill (n=12). Those who expressed concern about people they know finding out about their health issues were more often individuals who have lived in the U.S. for more than 5 years compared to living in the U.S. less than or equal to 5 years (n=9 v. n=1). Individuals who have lived in the U.S for less than or equal to 5 years more frequently believed that professional care would not help (n=9 v. n=3) and were concerned about what people they know might think, say, do or feel (n=7 v. n=1) (*Appendix 3*).

Interpretation Modality

Study participants were asked about their preferred interpretation modality during their ED visit. Of those that selected a single preferred modality, a majority reported preference for in-person professional interpreters (n=60, 61%) over interpretation via telephone interpreters, family members, or friends (*Figure 1*).

Figure 1: Preferred Language Modality*



*Among participants who selected one modality

Limitations

The results of this study rely on a small sample size, from a single site; as such the authors are unable to draw broad conclusions applicable emergency to departments in other settings. Additionally, participant expression of preferences, especially with regards to interpretation modalities, may have been impacted by the presence of in-person interpreters when completing this questionnaire. Respondents for this study were a self-selecting group of patients who chose to respond to the survey, which may not reflect the views of their communities as a whole. This group is drawn exclusively from patients who had the resources, ability and desire to access emergency care in this hospital. This

excludes a large section of the LEP population who may have required emergency care but never presented to the hospital due to potential unreported barriers. Finally, the study was intended to be descriptive and exploratory, carried out with the intention to conduct further studies that would be larger in scope as well as qualitative.

Discussion

This study documents the challenges to accessing emergency medical services for LEP patients, which includes and goes beyond potential language barriers. Despite the limited scope, the findings suggest changes, to ED policies and procedures, that could improve the care delivered to a highly

vulnerable population of patients. In addition, addressing barriers to care for LEP patients may also improve the care delivered to other patients facing psycho-socio-economic barriers to emergency care.

Barriers to Emergency Care

As noted in the introduction, many studies have shown that not speaking the same language as their medical provider is a major barrier to health care for LEP patients. This study supported this finding, but also showed that other barriers were of higher concern for this population of patients, including payment for the visit, wait times, and concern that medical care would not improve their problems. As a hospital known in the community to routinely care for LEP patients, it is possible that many patients choose to come to the authors' hospital because they believe that the language barriers may be less of an issue. As such, addressing the concerns of LEP patients becomes more important as this reputation would bring a larger number of LEP patients seeking care.

Another way to interpret these results is that the barriers facing LEP patients are also the barriers facing non-LEP patients-high cost of health care, long wait times, not believing medical care would benefit the problem, concern for confidentialityaddressing SO concerns would improve patient care across the board. On a larger scale, these issues can be addressed by advocating for health care reforms; working to increase health literacy patients and their communities; increasing funding support for interpreter services and for the medical education system for additional doctors, PAs, NPs, and nurses to care for increasing numbers of patients.

On a smaller scale, other possible interventions could be providing information in appropriate languages about financial resources for paying medical bills, expected wait times, patient rights under HIPAA laws, and/or testimonials of community members helped by medical providers at the This information could hospital. distributed at popular community gathering sites outside the hospital (e.g. communities of faith, community centers, gyms), as well as in the hospital waiting room. Other methods of reaching out to patients could include mainstream media (e.g. local TV, newspapers, radio) and social media campaigns. These campaigns and information distribution could be further targeted to specific communities. For example, information about ED wait times the right to have professional interpretation services could be distributed in welcome packets to new immigrants at refugee clinic; and information addressing concerns about taking regular medications could be posted in men's bathrooms in the hospital or at community gathering sites.

Modes of Interpretation

This study found a clear preference for in-person professional interpreters over using friends/family, phone, and video interpretation, However, twice as many patients reported utilizing phone interpreters for their visits compared with in-person interpreters. Other studies have found that phone interpreters and family members is a

poor substitute for a professional in-person interpreter in terms of acquiring accurate and useful histories to formulate medical treatment plans.^{26,27} As a perceived barrier to patients, investing in hiring more professional interpreters would improve patient care and the perceived experience of LEP patients. Adding more interpreters also reduce wait times would interpreters, as at the authors' hospital it is not uncommon for providers to wait an extended period of time for an interpreter to arrive before a patient's history and physical exam can be completed, or a treatment plan explained, or discharge instructions given. Therefore, adding more interpreters may indirectly address the other high concern barrier of wait times in the ED.

In addition, it is worth noting that a notably larger proportion of Portuguese Creole/Cape Verdean-speaking patients listed concerns for not having interpreters or providers who do not speak their language or who are from a different ethnic/cultural group. At the study site, despite this language being the third most commonly spoken language, there are comparatively fewer providers that speak this language; therefore interpreters are in higher demand, and wait times for in-person interpreters is longer. Hiring additional Portuguese Creole interpreters would address this problem.

Future Directions

Future studies could survey a larger number of participants, including both patients presenting to the Emergency Department as well as potential patient in the community that have chosen to delay or not seek health care. This latter group would be particularly interesting to focus on, as the barriers these patients face are likely higher and potentially different than those who actually present to the hospital. Future studies could also focus on the impact of one of the interventions mentioned above; as well as qualitative studies focusing on patients and interpreters.

In summary, this study demonstrates that LEP patients face a number of barriers to accessing emergency medical care. In addition, LEP patients often face the same challenges faced by English-proficient marginalized and vulnerable communities. These challenges include health care costs, wait times, and beliefs that medical care will not help. Language barriers can be mitigated by providing reliable, in-person (preferred) interpreters. Although these barriers can generally be applied to the majority of ED patients, they commonly impose larger burdens on those with psycho-socioeconomic barriers. More studies and programs that work to address the barriers to emergency care for the most vulnerable communities may also improve care for all patients.

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