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Experiences of Spanish and Chinese-Speaking Patients with First Responders During Medical Emergencies

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Summary

Background: Clear communication is key to effective prehospital emergency medical services (EMS) delivery. Census data show that almost one-third of King County residents speak a language other than English at home, and an estimated 11% of King County residents do not speak English or do not speak English well, which can challenge care delivery and health outcomes of medical emergencies.

Objective: The objective of this needs assessment was to assess Spanish- and Chinese-speaking patients' perspectives of the communication during interaction with EMS providers at the scene of the emergency.

Methods: A survey (in both English and Spanish or Chinese) was mailed to patients who had been seen by first responders in the past 6 months and who had been identified as having a language barrier in the EMS database. In addition, the same survey was distributed during community events serving Spanish and Chinese residents in King County. The **survey** asked questions about patients' level of understanding of on-scene communication; interpreter assistance during communication and general satisfaction with the care that was delivered. In addition, respondents were asked an open-ended question reflecting their experience and suggestions for improvement.

Results: Over a 12-month period, **40** patient surveys were returned from the EMS identified patients with 30 of the 40 patients reporting they had been seen by first responders in the past six months. 371 surveys from community residents were returned during community events, of which **41** reported having called 9-1-1 in the past six months.

EMS identified patient information: most patients reported a positive experience with first responders, but one-third of respondents reported challenges in understanding first responders and 20% did not believe that first responders understood them.

Community-survey identified patient information: most community residents (Spanish and Chinese) who reported they had called 9-1-1 in the past six months, had a positive experience. Even so, 13% did not believe that first responders understood and/or used easy to understand words, suggesting some level of language barrier experienced at scene.

Qualitative survey responses support the generally positive experiences with on-scene providers, but also challenges with understanding and feeling understood by first responders.

Conclusion: This needs assessment suggests that non or limited English proficient Spanish and Chinese speakers in King County were generally satisfied with the prehospital emergency care they received from EMS, and that efforts for improving care delivery should focus on better communication (through interpreter services) with patients.

Full Report

Rationale: Emergency medical services (EMS) are an essential part of the healthcare system in the United States. Language discordance can challenge effective communication and adversely affect prehospital emergency care, potentially exacerbating pre-existing health inequities in limited English proficiency (LEP) patients.

Goal: This project aimed to assess Spanish- and Chinese-speaking patients' perspectives of the interaction with EMS providers at the scene of the emergency to evaluate if/how EMS service delivery can be improved to better support LEP residents in King County.

Project Design: A survey and a letter (in both English and Spanish or Chinese) explaining the intent of the project was mailed to patients who had been seen by first responders in the past 6 months and who had been identified as having a language barrier based on notations in the EMS narratives. The letter included a link to an online version of the survey, as well as a pre-stamped return envelope, in case patients preferred the paper version. Data collection for Spanish-speaking patients occurred over a 12-month period (August 2022 – August 2023), and data collection for Chinese-speaking patients occurred over a 5-month period (March 2023 – August 2023).

This project was a partnership between the Vulnerable Populations Strategic Initiative (VPSI) and seven fire departments throughout King County (Puget Sound Regional Fire Authority, Bellevue Fire Department, Renton Regional Fire Authority, Kirkland Fire Department, Bothell Fire Department, Valley Regional Fire Authority, and Redmond Fire Department) and used patient care data to identify Spanish- and Chinese-speaking patients. Surveys were mailed to eligible patients each week.

To obtain additional responses, we also partnered with Centro Rendu of St. Vincent de Paul in Renton and the Chinese Information Services Center for assistance with survey distribution at various community events.

Methods and Results:

The total patient sample was N=71, 30 patients identified via EMS records and 41 identified through community surveys. Although there were similarities in responses across the two groups, the questions on the surveys were not identical. As such we report the results for the two groups separately below.

I. Patient data collection: A total of 526 patients were mailed surveys between August 2022 and September 2023. We received a total of 40 surveys (33 from Spanish-speaking patients and 7 from Chinese-speaking patients), and of these 40, 30 patients noted they were seen by EMS in the past six months. The results are shown in Figure 1. (combining the two language groups: Spanish and Chinese).

Figure 1. Patient experiences among Spanish and Chinese speakers during 9-1-1 visit
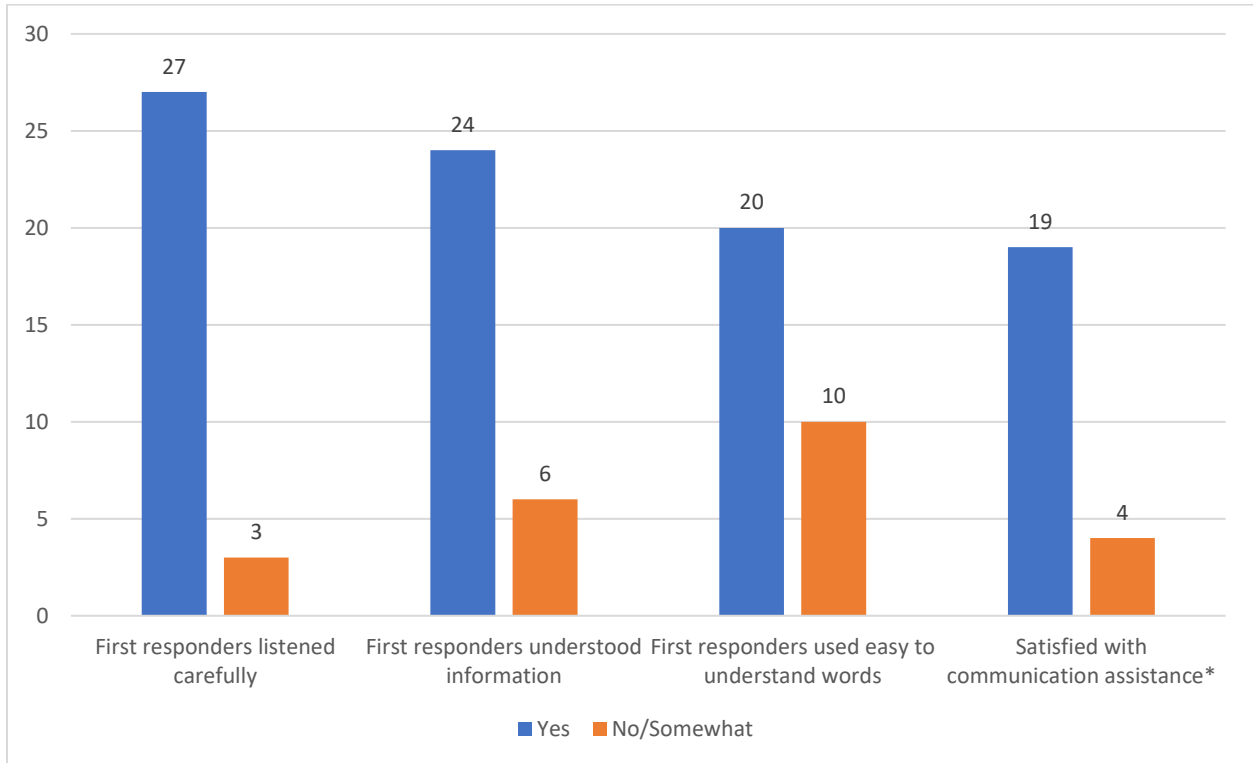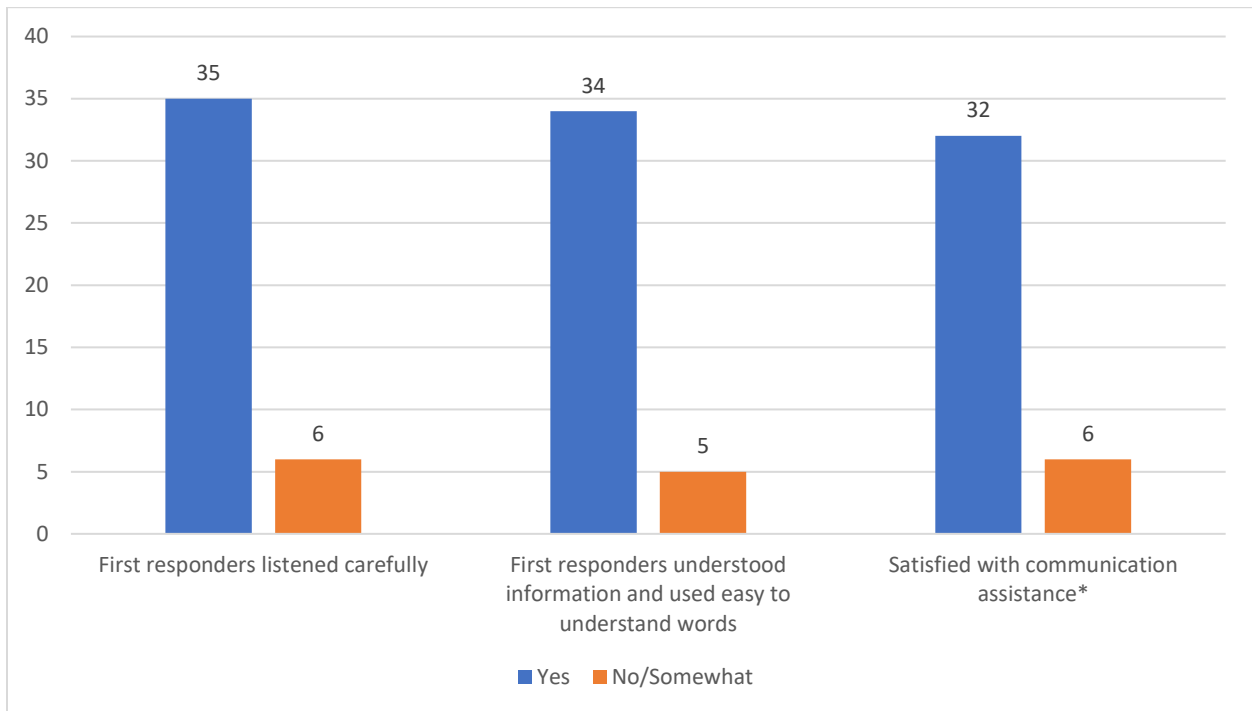

*only among people who reported that they had received help with communication during the 9-1-1 visit

Figure 1 shows that most patients had a positive experience with first responders, but one-third of respondents struggled to understand first responders and 20% did not believe that first responders understood them.

II. Community data collection: Surveys were also handed out at community events. A total of 371 surveys were returned (N=205 Spanish-speakers and N=166 from Chinese speakers). Of the 371 respondents, 41 reported they had been seen by EMS in the past six months and most reported positive experiences (see Fig 2).

Figure 2. Perspectives of Chinese and Spanish community residents who reported they had called 9-1-1 in the past six months (N=40)

*only among people who received help with communication

Figure 2 shows that most community residents (Spanish and Chinese) who reported they had called 9-1-1 in the past six months, had a positive experience. Even so, 13% did not believe that first responders understood and/or used easy to understand words, suggesting some level of language barrier experienced at scene.

Of the 327 respondents who had _**not**_ been seen by EMS **in the past six months**, 43 had called 9-1-1 **at some point in their lives** and 183 had not. Of the 43 who had called 9-1-1 in the past, almost one-third (29%) reported having reservations about calling 9-1-1 for a medical emergency. Almost all of the reservations were from Chinese respondents and all but one person reported **language barriers as a reservation** for not calling 9-1-1 in the future.

III. Qualitative feedback: Qualitative responses to an open-ended question about the patient experiences have been categorized into two broad themes: communication challenges and evaluation of service delivery. There were challenges with patients feeling understood as well as difficulties surrounding access to interpreter services. However, patients also praised the care provided by first responders, noting that they were patient, attentive, and compassionate.

Table 1: Examples of patient feedback on their recent (within 6 months) 9-1-1 visit

Theme 1: Communication Challenges	
Access to interpreting services	"Access to a professional interpreter or a type of interpreter system that could be able to translate faster or more effectively."
Communication difficulties	"Communication is difficult…sometimes those who translate sound confused." "I feel like if I call 9-1-1, they won't understand me."
Medical jargon	"Many times when a family member translates, doctors use medical terms and the family member does not know how to translate it into their language."
Theme 2: Evaluation of Service Delivery	
Compassionate professionals	They were very kind, listened, and helped me a lot, I am very satisfied. Their attention was excellent."

Conclusions: In general, most respondents reported positive experiences with on-scene care provided by the first responders, but there were communication challenges, especially with understanding first responders. Future efforts for improving care delivery for the LEP community should focus on improving communication with patients.