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Perceptions of Patient-Provider Communication in Breast and Cervical Cancer-Related Care: A Qualitative Study of Low-Income English- and Spanish-Speaking Women

Melissa A. Simon · Daiva M. Ragas ·
Narissa J. Nonzee · Ava M. Phisuthikul ·
Thanh Ha Luu · XinQi Dong

Abstract To explore patient perceptions of patient-provider communication in breast and cervical cancer-related care among low-income English- and Spanish-speaking women, we examined communication barriers and facilitators reported by patients receiving care at safety net clinics. Participants were interviewed in English or Spanish after receiving an abnormal breast or cervical cancer screening test or cancer diagnosis. Following an inductive approach, interviews were coded and analyzed by the language spoken with providers and patient-provider language concordance status. Of 78 participants, 53 % ($n = 41$) were English-speakers and 47 % ($n = 37$) were Spanish-speakers. All English-speakers were language-concordant with providers. Of Spanish-speakers, 27 % ($n = 10$) were Spanish-concordant; 38 % ($n = 14$) were Spanish-discordant, requiring an interpreter; and 35 % ($n = 13$) were Spanish mixed-concordant, experiencing both types of communication throughout the care continuum. English-speakers focused on communication barriers, and difficulty understanding jargon arose as a theme. Spanish-speakers emphasized communication facilitators related to Spanish language use. Themes among all Spanish-speaking sub-groups included appreciation for language support resources and preference for Spanish-speaking providers. Mixed-concordant participants accounted for the majority of Spanish-speakers who reported communication barriers. Our data suggest that, although perception of patient-provider communication may depend on the language spoken throughout the care continuum, jargon is lost when health information is communicated in Spanish. Further, the respective consistency of language concordance or interpretation may play a role in patient perception of patient-provider communication.

Keywords Patient-provider communication · Low-income women · Cancer-related care · Qualitative research

Introduction

Low-income, uninsured and underinsured women have demonstrated comparatively low breast and cervical cancer screening rates in the United States [1–3]. Particularly, language barriers have been associated with underutilization of breast and cervical cancer screening services among low-income non-English speaking women and present challenges to follow-up care and treatment [4–6]. In the wake of substantial growth of the U.S. Spanish-speaking population, many studies have examined language barriers to the prevention and treatment of breast and cervical cancer [4, 6–9].

M. A. Simon (✉) · D. M. Ragas · N. J. Nonzee ·
A. M. Phisuthikul · T. H. Luu
Department of Obstetrics and Gynecology, Northwestern University Feinberg School of Medicine, 633 N St. Clair, Suite 1800, Chicago, IL 60611, USA
e-mail: m-simon2@northwestern.edu

M. A. Simon
Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

M. A. Simon
Department of Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

N. J. Nonzee
Robert H. Lurie Comprehensive Cancer Center, Northwestern University, Chicago, IL, USA

T. H. Luu
Rush Medical College, Chicago, IL, USA

X. Dong
Department of Internal Medicine, Rush University Medical Center, Chicago, IL, USA

Considerable reports of poor patient-provider communication exist among Spanish-speaking patients with low English proficiency [8], and particularly among patients experiencing language discordance with their health care providers [10, 11].

Previous studies have underscored the importance of language-concordant patient-provider relationships, reporting that language concordance is optimal for patient satisfaction, communication, and overall quality of care [10, 12–14]. Research has shown that language concordance fosters improved patient-provider relationships and may lead to more favorable physical health outcomes [11, 12, 15–17]. Other studies have affirmed the value of interpretation services for alleviating language barriers within health care, suggesting that high-quality interpretation positively affects communication and health outcomes among language-discordant patients [18–20]. Nonetheless, interpretation has been described as an "imperfect" solution for patients experiencing language discordance with providers, potentially due to inadequate interpersonal care, lower patient satisfaction, or poorer perception of the quality of care received [12]. The importance of employing culturally and linguistically appropriate tactics in patient-provider interactions, clinical care, and the health education of minority populations remains a strong focus in the health communication literature and in the national public health agenda, emphasizing the need for a patient-centered approach to health information exchange [17, 21, 22].

The cancer care setting has been hailed as a "promising laboratory" for studying patient-provider communication [23]. In response to this call, we explored patient perceptions of patient-provider communication in breast and cervical cancer-related care among low-income English- and Spanish-speaking women. We considered the language spoken between the patient and provider as well as patient-provider language concordance status. To our knowledge, this is the first study to qualitatively examine patient perceptions of patient-provider communication in relation to both the language spoken and patient-provider language concordance status among low-income English- and Spanish-speakers in a single analysis. This study further adds to the literature by exploring perceptions of Spanish-speakers who experience a combination of patient-provider language concordance and discordance throughout the care continuum, defined as mixed language concordance. Herein, we examine communication facilitators and barriers reported by low-income English- and Spanish-speaking women receiving breast or cervical cancer-related care at safety net clinics.

Methods

Sampling and Data Collection

Participants were recruited as a purposive sample of English- and Spanish-speaking women receiving follow-up care at a network of federally qualified health centers (FQHCs) in Chicago or suburban free clinics in a collar county of Chicago after an abnormal screening test or diagnosis for breast or cervical cancer. Women who were cognitively impaired, institutionalized, previously treated for cancer, or under the age of 18 were ineligible for the study. Patient populations at all sites included predominantly low-income, uninsured or underinsured ethnic minority women. All sites provided access to free screening and diagnostic services to women regardless of insurance status through the Illinois Breast and Cervical Cancer Program. All sites provided access to either a certified interpreter or bilingual clinic staff member in the absence of a Spanish-speaking provider.

From March 2008 to December 2010, trained, bilingual research assistants conducted semi-structured, face-to-face interviews with participants in English or Spanish. The framework of the Chronic Care Model and elements of the Socio-ecological Model guided the development of the interview guide [24, 25]. Interview questions were designed to assess barriers and facilitators to breast or cervical cancer screening, follow-up care, and, if applicable, treatment. Questions related to dimensions of overall health; access to health care, including provider and cultural factors; and rationale for screening and follow-up elucidated patient perceptions of patient-provider communication barriers and facilitators. Interviews conducted in English were audio recorded and transcribed in English. Interviews conducted in Spanish were audio recorded, transcribed in Spanish, translated into English, and back-translated into Spanish. Demographic information was collected through direct patient inquiry. All participants provided written informed consent. This study was approved by the Institutional Review Boards of Northwestern University and University of Illinois at Chicago.

Data Coding and Analysis

A team of four data analysts coded interviews following the inductive methodological approach of Hruschka et al. [26] using Atlas.ti 6.2 qualitative data analysis software [27]. The research team iteratively read the same set of transcripts and independently generated codes. Each team member's code list was compared and reconciled to synthesize a single codebook. During this process, related codes were identified and placed into categories through a consistent team consensus method. For each interview transcript, a team of two readers applied the identified codes and code categories. Additional codes and code categories generated through the coding process were reconciled using the previously described reconciliation method. Intercoder reliability was calculated using Cohen's kappa of 0.8 or greater by comparing the application of codes by each reader in the pair for each transcript [26].

Following transcript coding, the research team analyzed transcript content to synthesize data and identify themes related to patient-provider communication. Themes were rank-ordered by frequency of discussion, and relationships among themes were noted. To more fully examine patient perceptions of patient-provider communication, themes were investigated by the language spoken with providers and patient-provider language concordance status during breast or cervical cancer-related care. Both variables were self-reported. Participants who reported speaking the same language as providers were classified as language-concordant, while participants who reported using an interpreter to communicate with providers were classified as language-discordant [14, 17, 28]. Participants who reported speaking the same language as some providers and using an interpreter to communicate with other providers were classified as mixed-concordant. All English-speakers were language-concordant by definition. For the purpose of this analysis, participants were categorized by language spoken (English-speakers or Spanish-speakers), and Spanish-speakers were further categorized into three sub-groups (Spanish-concordant, Spanish-discordant, or Spanish mixed-concordant).

Table 1 Sample characteristics

	English-speakers		Spanish-speakers		Total	
	$n = 41$		$n = 37$		$n = 78$	
	n	(%)	*n*	(%)	*n*	(%)
Age[a]						
21–30	15	(37)	4	(11)	19	(24)
31–40	5	(12)	8	(22)	13	(17)
41–50	15	(37)	17	(46)	32	(41)
51–65	5	(12)	7	(19)	12	(15)
>65	1	(2)	0	(0)	1	(1)
Race/Ethnicity						
Hispanic/Latina	5	(12)	37	(100)	42	(54)
African American	23	(56)	0	(0)	23	(29)
White	13	(32)	0	(0)	13	(17)
Diagnosis						
Cancer	6	(15)	5	(14)	11	(14)
Non-cancer	35	(85)	32	(86)	67	(86)
Cancer care type						
Breast	24	(59)	26	(70)	50	(64)
Cervical	17	(41)	11	(30)	28	(36)
Clinic type						
FQHC	22	(54)	25	(68)	47	(60)
Free clinic	19	(46)	12	(32)	31	(40)
Language concordance status						
Concordant	41	(100)	10	(27)	51	(65)
Discordant	0	(0)	14	(38)	14	(18)
Mixed-concordant	0	(0)	13	(35)	13	(17)

[a] One participant did not report age

Results

Sample

Of the 81 women enrolled in the study, 78 participants were included in the final analysis (Table 1). Three Spanish-speaking women whose patient-provider language concordance status was not reported were removed from the analysis. Of the total sample, 54 % was Hispanic, 29 % was African American, and 17 % was white. Participants ranged in age from 21 to 66 years with a median age of 43 years. All women received an abnormal breast or cervical cancer screening result, and most women (86 %) received a negative breast or cervical cancer diagnosis. Of the study participants, 53 % ($n = 41$) spoke English with providers and 47 % ($n = 37$) spoke Spanish. All English-speakers were language-concordant with their providers. Among Spanish-speakers, 27 % ($n = 10$) were Spanish-concordant, 38 % ($n = 14$) were Spanish-discordant, and 35 % ($n = 13$) were Spanish mixed-concordant.

Qualitative Results

English-Speakers

Overall, English-speakers' reviews of patient-provider communication were mixed, as participants reported a proportionate number of barriers and facilitators. English-speakers' dialogue focused more on communication barriers, however, evidenced by longer and more detailed discussions of communication barriers than facilitators. Approximately one-third of the English-speaking group reported that providers thoroughly communicated health information, specifying comprehensive explanation of cancer abnormalities and health issues and adequate response to questions as facilitators of care:

> "Personally, I think that I trust him because like I said I've been with him for a while and he takes his time with his patients on letting them explain what might be wrong with them or what they think…and let them know what his suggestions might be about what's wrong" (African American; abnormal breast cancer screen)

One woman who received an abnormal Pap smear indicated that her provider's efforts to thoroughly explain health information eased her care experience: "the doctors explain everything to me when something is wrong like the abnormal pap; he explained it, you know like verbatim…after that it made it a little more easier" (African American; abnormal cervical cancer screen). Another woman, while reflecting upon first learning of her abnormal mammography, commented that her providers thoroughly explained the results and their implications to her: "…they explained it all…I didn't even have to ask questions because they explained everything before" (White; abnormal breast cancer screen).

On the other hand, approximately one-third of English-speakers reported poor provider communication of health information, identifying insufficient explanation of cancer abnormalities and health issues and inadequate response to questions as barriers to care:

> "I could have been told exactly what is an abnormal Pap smear just instead of saying oh you have an abnormal Pap smear we're going to reschedule you. At that very moment explain to me what it is, what can become of it and what can become of me if you ignore it and deny it" (African American; abnormal cervical cancer screen)

Some of these women further indicated that providers explained medical procedures poorly. For example, a participant who underwent several surgical procedures throughout breast cancer treatment described her experience:

> "I didn't know that they were going to do this until they were taking me up and I was like what?…rather than it being a shock you should tell people when you come in the day of surgery we're going to do a little test while we inject some dye into your nipple so that it goes with the duct so the surgeon can see this. Then you're going to have a needle placed right in the tumor so he knows where to cut. You know it was a lot that wasn't told to me…The oncologist should tell you and the surgeon should too since he's going to be operating. He knows what they're going to do. I think he should tell you. But that wasn't told to me" (African American; breast cancer)

Participants added that poor quality or lack of information received from providers deterred follow-up care, prompting them to skip appointments:

> "It's like your questions are not answered and it's like you still left here with the same thing you came here with…A lot of times I be having like a negative attitude about it like you know why should I go?…So a lot of times I just skip it" (African American; abnormal cervical cancer screen)

Several women turned to the Internet as a resource when they were unable to comprehend the information providers presented regarding the results of a screening test or diagnostic procedure:

> "I took a lot of information, like everything they told me I didn't understand. So, I went home and I looked it up on the Internet…I was really relieved because I mean I was scared by the doctor…like, 'what? What do I have? I don't understand. What the hell does this mean,' you know? It totally relieved me, because the doctor didn't tell me" (Hispanic; cervical cancer)

As they reflected on the content of provider communication, English-speakers also discussed provider verbal communication style. About one-quarter of English-speakers reported that providers' dialogue throughout breast or cervical cancer-related care was unclear or confusing. These women pointed to providers' use of medical jargon as a major source of confusion, indicating that difficulty interpreting medical terminology was a barrier to communication:

> Interviewer: Do you leave your Doctor's office feeling like you understand everything that was explained to you?
> Interviewee: I don't know really to tell you the truth. Because some things…I guess they be using the doctor terminology, I can only take it in sometimes (African American; abnormal cervical cancer screen)

In the same regard, participants expressed appreciation for providers who communicated in lay terms. One participant described her providers as "down to earth," explaining, "they're not always using the medical terms that I really don't understand" (African American; abnormal cervical cancer screen). Another participant expressed her appreciation for the way her provider actively translated medical jargon into lay terms for her:

> "If I have a question and [the doctor] will bring up a word like a doctor word I can't pronounce and he will break it down to me what it meant…So, I feel very relaxed and comfortable" (African American; abnormal cervical cancer screen)

Spanish-Speakers

Spanish-concordant Very few Spanish-concordant participants mentioned patient-provider communication barriers. Rather, Spanish-concordant participants reflected on communication facilitators and positive communication experiences related to Spanish language use. Appreciation for the patient's native language and, more specifically, having a language-concordant provider arose as major themes among Spanish-concordant women, as participants often noted both factors as facilitators of communication. One participant stated:

> "It's better if you get a doctor who speaks Spanish because you can understand better what they are explaining to you. And then, you can explain yourself

> better, because I can't speak English. So for me it would be difficult if the doctor spoke very little Spanish because then he wouldn't understand what I was telling him" (Hispanic; abnormal breast cancer screen)

Overall, Spanish-concordant participants spoke optimistically about communication with their Spanish-speaking providers. For example, when asked whether she perceived speaking Spanish as an obstacle to receiving adequate care, one woman replied, "no, because they have people…that speak Spanish or translate everything to us." Many women attributed clear provider communication directly to the use of Spanish language. For example, one woman stated, "I explained everything in and he answered also, in Spanish. We had good communication and I understood everything he said" (Hispanic; abnormal breast cancer screen). Common use of the Spanish language fostered a sense of security and confidence in care for Spanish-concordant women:

> Interviewee: That's why…I like him because he does talk the same language
> Interviewer: Why do you believe that he understands you?
> Interviewee: Because thank God, he speaks Spanish too (Hispanic; abnormal breast cancer screen)

Spanish-discordant Despite the need for an interpreter to facilitate communication, most Spanish-discordant participants spoke positively about communication with language-discordant providers. Clear, thorough provision of health information from the provider to the patient arose as a common theme. Specifically, women highlighted providers' abilities to clearly outline procedures, explain cancer abnormalities and health issues, and address questions and concerns as facilitators of care. One woman, for example, said of her provider, "…he takes his time to ask me if I'm all right, he explains me what he is going to do to me step by step, he takes his time for me" (Hispanic; abnormal cervical cancer screen). Another described:

> "Any question I ask him he answers, and he always gives me a sheet like this one regarding what is happening to me, he gives me examples, he tells me at which stage I am…He always gives me information" (Hispanic; abnormal cervical cancer screen)

Overall, almost all Spanish-discordant participants perceived patient-provider communication experiences positively and expressed appreciation for interpretation services. Interpreters provided Spanish-discordant women with a sense of confidence and were perceived as facilitators of patient-provider communication:

> "[The doctor] spoke very little, but I always have the translator. There are things that he understands and things that I can understand, but there is always a translator so I don't have any doubts, everything is very clear" (Hispanic; abnormal cervical cancer screen)

Another participant stated, "I feel okay because it is as if we spoke the same language because as I told you they provide me with an interpreter and I don't distinguish the person" (Hispanic; breast cancer).

Though Spanish-discordant participants spoke of patient-provider communication positively and were markedly appreciative of interpreters, some participants voiced a preference for Spanish-speaking providers. Although they were satisfied with interpreters and the quality of interpretation, they anticipated that communication would have been enhanced with a Spanish-speaking provider. For example, one participant commented:

> "I like her, but I would like for her to speak well her Spanish…but anyways she always has someone to translate for you to tell her, but that's fine because she is a doctor" (Hispanic; abnormal breast cancer screen)

Another woman echoed this sentiment:

> "I like how the doctor attends me. The only thing is that she speaks in English, but she always has someone to translate for her and, well, I mean. If she could talk in Spanish it would be better, but as she doesn't, it's ok" (Hispanic; abnormal breast cancer screen)

Spanish mixed-concordant Spanish mixed-concordant participants received cancer-related care from a combination of language-concordant and language-discordant providers. The majority of these women spoke Spanish with primary care providers but required an interpreter to communicate with specialists during follow-up care for an abnormal screening test. Reviews of patient-provider communication varied depending on whether the communication was language-concordant or language-discordant; however, mixed-concordant participants reported barriers only in the context of language-discordant communication. Spanish mixed-concordant participants were the only Spanish-speaking sub-group in which almost all women discussed at least one communication barrier.

Mixed-concordant participants perceived communication with their Spanish-speaking providers positively, reporting only facilitators in the context of language-concordant communication. They associated receiving care from a Spanish-speaking provider with clear communication, security, and trust. For example, the following participant described the way that speaking

Spanish with a provider fostered her medical understanding and confidence in communication:

> “It helps me because I’m 100 % sure he’s talking about what I have. Because when we used to go to the other clinic I could understand [the other doctor] and we could communicate [in English]. There weren’t interpreters in that clinic. But I always left with the doubt that may be he didn’t understand me well or maybe I couldn’t explain myself well; and that’s why I always ask that [the current doctor] speak in Spanish, to be 100 % sure of what he’s telling me” (Hispanic; breast cancer)

Further, mixed-concordant women attributed trust in providers to their ability to communicate in Spanish: “I always trust them because they speak Spanish, and they ask you about your health, and if you have a question or something, they always answer” (Hispanic; abnormal breast cancer screen).

Mixed-concordant participants’ perceptions of communication with language-discordant providers were less favorable. All communication barriers discussed were related to the lack of common language between the patient and the provider. Though they were reportedly content with interpretation services, many mixed-concordant women perceived communication with language-discordant providers poorly due to perceived insufficient provision of health information or miscommunication by the provider. For example, one participant explained:

> “At that time I could not ask her [questions]. I didn’t know what she was talking about. She examined me but I couldn’t ask her questions. The only thing that her assistant told me was that I was well, but I wanted to ask questions that I still have…I think that sometimes it’s a lack of communication from the doctor to the patient, because I think that the language is not a problem, because one can ask for a translator…”(Hispanic; abnormal breast cancer screen)

Another woman’s narrative regarding insufficient provision of health information highlighted communication difficulties that arose after transferring from a Spanish-speaking provider to a non-Spanish speaking provider:

> “Our communication has not been clear because I do not understand the language and I think [the doctor] gets impatient because I cannot tell him what my problems are. He has to wait for someone to do some translating…The other one paid attention to what I was telling him because he could understand me. This one didn’t. I saw this one did everything in a hurry. He even gave me the letter with what I was to present myself…he gave it to me badly” (Hispanic; abnormal breast cancer screen)

Often, mixed-concordant participants disregarded their communication barriers with language-discordant providers, deeming them insignificant due to the availability of interpreters to provide translation and “solve the problem.” Echoing the sentiment of several mixed-concordant women, one participant commented on an obstacle: “there’s the language, but there’s always a helping hand around” (Hispanic; abnormal breast cancer screen).

Overall, mixed-concordant women expressed a marked preference for receiving care from language-concordant providers. The majority of mixed-concordant participants emphasized the importance of receiving health information in their native language directly from the provider, as the following woman explained:

> “For me it is a great advantage…A great, great advantage…There are things that I would not know if the translation is the correct one of what I want. And for me, direct information from the doctor to me in my language is the best. I can express myself in English but not with the exact words. And likewise, I don’t receive them the same” (Hispanic; abnormal breast cancer screen).

Discussion

Among low-income English- and Spanish-speaking women receiving breast and cervical cancer-related care at safety net clinics in our study, perceptions of patient-provider communication differed; English-speakers focused on personal experiences of communication barriers, such as providers’ use of medical jargon, while Spanish-speakers emphasized communication facilitators related to Spanish language use. Further, Spanish-speakers made no mention of medical jargon in the context of direct patient-provider dialogue or interpretation. While Spanish-speakers perceived both language concordance and quality interpretation as facilitators, all Spanish-speaking sub-groups ultimately preferred Spanish-speaking providers to interpretation. Most notably, mixed-concordant participants reported the majority of communication barriers among all Spanish-speakers.

Obvious differences were noted in the focus of English- and Spanish-speakers’ interviews, as English-speakers accentuated patient-provider communication barriers while Spanish-speakers underscored communication facilitators, suggesting that perception of patient-provider communication may depend on the language spoken throughout the care continuum. These observations contrast with existing reports of greater dissatisfaction with provider communication among Spanish versus English speakers [29, 30], perhaps influenced by a different population or health care system. In our study, provider communication style emerged as a communication barrier for English-speakers, who, unlike Spanish-speakers, reported difficulty understanding medical jargon and expressed appreciation for providers who used lay terms. Interestingly, providers' use of medical jargon was predominantly discussed by African American women. Research has indicated that providers often overestimate the health literacy of minority patients [31, 32], and overestimation may occur most frequently with African American patients [33].

The translation of information across languages merits consideration as a possible explanation for the observed contrast between English- and Spanish-speakers' perceptions in our study. Technical terminology may be avoided or simplified when interpreters translate medical information from English to Spanish [34]. Likewise, Spanish-speaking health care providers may explain information differently in Spanish than in English, possibly due to cultural differences or lesser mastery of technical vocabulary in a non-native language [14]. Providers may overestimate English-speaking patients' health literacy and, as a result, explain too little or use medical language that is overly advanced for lay individuals [33, 35, 36], leaving patients unsatisfied with the health information received.

Overall, Spanish-speaking participants in our study spoke very little about the content or style of provider communication and focused on their appreciation for the use of Spanish language in their care. Because Spanish-speakers emphasized the use of their native language as an important factor of positive health care experiences, they may have been compelled to accentuate communication facilitators over barriers when discussing patient-provider communication. Considering cultural influences, Spanish-speaking women may be less critical of their health care providers or less willing to share negative feedback due to the Latino value of simpatía, which emphasizes kindness, politeness, and conflict avoidance [37–39].

Common themes arose among Spanish-concordant, Spanish-discordant, and Spanish mixed-concordant sub-groups related to trust, security, and confidence due to general Spanish language use in breast and cervical cancer-related care. While Spanish-speaking women perceived communication experiences with Spanish-speaking providers and interpreters positively, participants from all three sub-groups voiced a preference for Spanish-speaking providers, suggesting that Spanish-speaking participants felt most comfortable with language-concordant providers. This finding supports previous studies that have identified language concordance as a facilitator of patient-provider communication and patient satisfaction [10, 12–14], and adds to debates surrounding the impact of patient preference on patient-provider communication [29, 40].

Most notably, the Spanish mixed-concordant sub-group accounted for the majority of communication barriers reported by Spanish-speakers overall, which occurred in the context of language-discordant communication. In our study, mixed-concordant participants perceived communication with non-Spanish-speaking providers poorly, despite stating contentment with interpretation. Mixed-concordant participants additionally revealed a strong preference for Spanish-speaking providers. These findings suggest that patients who experience mixed language concordance may perceive patient-provider communication differently than purely language-concordant or language-discordant patients. Further, low-income women experiencing mixed language concordance may have a stronger preference for Spanish-speaking providers in the care continuum. Experiences related to inconsistent language concordance status among low-income women receiving care in the safety net remain unaddressed in the literature, but deserve attention in a linguistically diverse health care system in which the availability of language-concordant providers could vary between clinic settings and from visit to visit. Though several studies have explored language concordance and interpretation in the context of patient-provider communication among Spanish-speaking patients [10, 14, 28, 41–43], this study is, to our knowledge, the first to suggest that the respective consistency of language concordance or interpretation may play an important role in patient perceptions of patient-provider communication quality and satisfaction.

Several study limitations exist. As a qualitative study, participant narratives may have been subject to recall bias and demand characteristics. To reduce these effects, health care providers were not present during interviews and interviewers were neither providers nor clinic staff. Second, interpreters or other persons that could have been present during clinical interactions, such as clinic support staff or patient advocates, may have influenced perceived quality of or satisfaction with patient-provider communication. Third, because our data were based on participant perception via self-report, we were unable to assess the Spanish language proficiency of language-concordant providers or the actual quality of interpretation. Fourth, the health literacy of participants was not formally analyzed as a potential confounding variable, and functional health literacy may play a key role in health information exchange and patient comprehension [13, 17, 30, 44]. Sudore and colleagues found, however, that while adequate health literacy was an effective safeguard against poor communication when providers and patients spoke the same language, it did not mitigate poor communication between language-discordant providers and patients even in the presence of an interpreter [14]. This particular finding underscores the value of examining patient-provider communication experiences in relation to language concordance status. Furthermore, a favorable sample size achieved for a qualitative study strengthens our findings.

This study represents an important contribution toward optimizing health care quality for low-income women receiving breast and cervical cancer-related care in the health care safety net. Our findings have several implications. Medical jargon may be lost when health information is translated from English to Spanish. Avoiding or translating medical jargon for all patients, regardless of the language spoken, may, in turn, alleviate some patient-provider communication barriers among low-income patients [14, 44]. Future research should investigate low-income Spanish-speaking women's perceptions of patient-provider communication as related to language nuances and cultural values versus actual quality of communication. Finally, efforts should be directed toward exploring the prevalence of mixed language concordance status among Spanish-speaking women receiving cancer-related care in the safety net and its impact on both perceived and actual quality of patient-provider communication. Our findings posit that respective consistency of language concordance or interpretation may be associated with improved health communication experiences in breast and cervical cancer-related care for low-income women.

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