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Technical Meets Traditional: Language, Culture, and the Challenges Faced by Hmong Medical Interpreters

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Abstract

Introduction: Ineffective intercultural communication can occur due to inaccurate medical interpreting for limited English proficiency (LEP) patients. Research shows that Hmong patients experience poorer quality interpreter services than other LEP populations. This study's purpose is to understand Hmong medical interpreters' perceptions of the factors that affect their ability to make accurate medical interpretations during clinical encounters.

Method: A qualitative study was conducted with Hmong-speaking medical interpreters. The interviews were semistructured, audio recorded, and analyzed using conventional content analysis.

Results: 13 interpreters aged 29 to 49 years participated in the study. Three factors affected the interpreters' ability to make accurate medical interpretations for Hmong-speaking patients: (a) matched gender between the interpreter and patient, (b) culturally taboo topics in communicating about reproductive body parts and sexual health/activity, and (c) culture and generational language differences between interpreters and Hmong patients.

Discussion: Clinical encounters that match patient–interpreter ages, gender, and/or local culture may reduce communication barriers.

Keywords

translating; Hmong; communication barriers; language

Introduction

With the growing ethnic diversity of the United States, the current need to understand and improve intercultural communication between patients and health care providers is greater than ever. In the United States, approximately 67 million people (23% of the total population) are of a non-White ethnicity, and 61.6 million individuals speak a language other than English at home (Zong & Batalova, 2015). In total, 381 languages from every

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continent and linguistic family of the world are spoken in the country (U.S. Census Bureau, 2015). Of the total U.S. population, approximately 8% (25 million people) have limited English proficiency (LEP), defined as those who speak English less than well (Zong & Batalova, 2015).

Intercultural communication is defined as a type of social interaction between people of different cultures, as well as the study of these patterns of interaction across different cultures. Intercultural communication studies cast new light on the role of language in mediating interactions by investigating the fine details of linguistic variation, internal diversity, power structures, and negotiated identity (Hua, 2011). In the context of intercultural communication, interpretation is the processes of encoding and decoding messages, negotiation, and compromise to accommodate differing cultural frameworks of reference and identification (Bochner, 1982). More recently, the importance of linguistic diversity as a factor of social injustice has come to assume a prominent position in efforts to understand intercultural communication (Piller, 2016), and the implications for access to health care require more attention.

Medical interpreters are critical for ensuring effective communication between LEP patients and health care providers (Schwei et al., 2018). Both professional and family interpreters are used in health care encounters. Family interpreters are used when professional interpreters are inaccessible or unavailable (Jaeger et al., 2019; Kamimura et al., 2015; Smith, 2018; White et al., 2019). Evidence suggests that professional and family interpreters have different interpreting skills and may play different roles in the clinical environment (Hartford et al., 2019; Leanza et al., 2010). While professionals interpreters have been known to be cultural brokers, mediators, conduits, advocators, and more (Schwei et al., 2019; Wu & Rawal, 2017), family interpreters commonly act as advocates (Zendedel et al., 2018). Evidence has consistently indicated that the use of professional interpreters improves the quality of care for LEP patients, resulting in increased patient satisfaction with care, a better understanding of diagnoses and prognoses, and better health outcomes compared to family interpreters (Boylen et al., 2020; Hartford et al., 2019; Leanza et al., 2010).

However, even with the best technical translation, intercultural miscommunication can contribute to health disparities. Observational studies of Spanish, Hmong, and Japanese interpretation using video and audio recordings found that omissions and editorializations (i.e., when interpreters provide their own views on the interpretation of a word or phrase spoken by the patients and providers) were the most common sources of inaccuracies (Anazawa et al., 2012; Flores et al., 2012; Lor & Chewning, 2016; Nápoles et al., 2015). For example, professional medical interpreters omitted medical information from 35% to 47% of interpretations in clinical encounters (Anazawa et al., 2012; Flores et al., 2012; Lor & Chewning, 2016; negativeápoles et al., 2015). Inaccurately expressed interpretation can thus result in negative doctor–patient relationships (Cox et al., 2019) and poor medical care (Lor & Chewning, 2016).

Recognizing the multiagent nature of these linguistic interactions, the factors contributing to inaccurate interpretations could be influenced by the characteristics of patients, providers, and interpreters. When providers do not use professional medical interpreters,

the chance of errors in medical interpretations is greater than if interpreters were used. Flores et al. (2012) reported that the proportion of errors of potential consequence were higher (22%) among ad hoc medical interpreters compared with 12% among professional interpreters. Patient characteristics, including age, gender, and communication skills, can also influence effective patient–interpreter–provider communication (Malhotra et al., 2017). Likewise, the interpreter's social factors—such as age, race, ethnicity, gender, and socioeconomic status—are associated with their level of participation during patient–provider interactions (Angelelli, 2004). Several studies have reported the sources of problems that interpreters observed during patient–provider communication, including differences in illness perspective, expectations of the clinical encounter, and the communication styles of patients and providers (Hsieh, 2006, 2008; Hudelson, 2005; Lor et al., 2020).

While professional medical interpreters are trained in medical terminology (Hull, 2016; Ono et al., 2013), effective communication may be hindered by an absence of intercultural language skills. Patients with LEP reported that interpreters' fluency in English medical terminology and fluency in the patient's language (Lor et al., 2016) can influence the interpreters' accuracy in relaying messages (Flores et al., 2003; Flores et al., 2012; Lor & Chewning, 2016). More studies are needed to fully determine the factors that can cause interpreter error during medical interpretations.

Acknowledging that sources of intercultural miscommunication and inaccuracies in medical interpretation may vary by culture, language, and ethnicity, we chose the Hmong language for this study. Prior research has demonstrated that medical interpretations for the Hmong population have significant shortcomings (Lor & Chewning, 2016; Lor et al., 2016). Therefore, they present an ideal language for examining the factors that contribute to communication problems for Hmong patients. The purpose of this study is to understand Hmong medical interpreters' perceptions of the factors that affect their ability to make accurate medical interpretations during clinical encounters.

Background

The Hmong in the United States

In the United States, the Hmong population grew from 94,439 in the 1990s to 260,073 in 2010—a 175% increase (Hmong National Development, 2010). The Hmong are originally from China but arrived in the United States via Laos and Thailand as refugees of the Vietnam War in the 1970s (Duffy et al., 2004). They encountered challenges acclimating and acculturating to U.S. culture (Xiong et al., 2018). For example, Hmong cultural values and beliefs conflict with Western medical practices, as documented in the well-known book *The Spirit Catches You and You Fall Down* (Fadiman, 2012).

Cultural and language barriers prevent the Hmong from receiving high-quality health care (Lor, 2018). The Hmong are originally from an agrarian society (Cha, 2010) with no exposure to Western medicine. Their culture is also traditionally patriarchal, and kinship relationships—with exogamous clans and names for kin and in-laws that indicate relatedness with a high level of specificity—generally provide the framework for interactions within

society (Cha, 2010). They have a sophisticated body of cultural knowledge about health and treatment that is part of their shamanistic beliefs (Moua, 2020).

Hmong spoken in the United States has two dialects—White and Green. Until the 1950s, Hmong communication and transfer of knowledge were entirely oral, as the language lacked a written form (Duffy et al., 2004). Despite the recent development of a written Hmong language, oral communication continues to be the primary means of cultural transmission, and storytelling is a common mode of communication. Storytelling is more than the simple transfer of information; it is a complex set of structures that also reinforces social relationships and confirms shared cultural traditions for understanding daily life (Duffy et al., 2004).

Of the 327,000 individuals in the Hmong population in the United States, 37% have LEP (Budiman, 2021). Hmong patients have reported that low-quality interpretation contributes to poor interpersonal relationships with their providers, emotional distress, and an inability to follow medical treatment plans (Lor et al., 2016). However, it is unclear what medical interpreters perceive as the sources or factors that contribute to poor medical interpretation during health communication between Hmong patients, interpreters, and health care providers. Building on prior work focused on LEP Hmong patients' experiences, we aim to understand Hmong medical interpreters' perceptions of the factors that affect their ability to make accurate medical interpretations for LEP Hmong patients during clinical encounters. A holistic understanding of the sources from both Hmong patients and interpreters underpins effective intercultural communication in clinical encounters.

Method

This was a cross-sectional, descriptive qualitative study. As there is limited research on interpreters' perspectives of the factors that impact their medical interpretation, we used a subjective interpretation research method to understand the context of the data (Hsieh & Shannon, 2005). Furthermore, this study was approved by the university's health institutional review board, and the consolidated criteria for reporting qualitative research was used to enhance the quality and transparency of the study (Tong et al., 2007).

Sample and Data Collection

Interpreters were eligible to participate in this study if they (a) self-identified as a Hmong medical interpreter and (b) were over 18 years old. Purposive sampling was employed, and three methods of recruitment were applied. The first was through word of mouth (snowball sampling) during community events, where we asked participants to refer other potential participants to the study. Three potential interpreters were referred to us; however, on contacting them, they declined to participate in the study due to a lack of interest and time. The second recruitment method was to distribute a one-page study information sheet with the first author's contact information. Finally, a flyer was posted on the Hmong interpreter's Facebook page.

The first author is a PhD-prepared female researcher who studies health disparities in the Hmong community. She is bilingual and bicultural, was born in a refugee camp in

Thailand, and is a member of the local Hmong community. Participants were interviewed by telephone, by WebEx, or in person at their preferred location. No other research team members were present during the interviews. The interviewer had no prior relationships with the interviewees, and participants learned about the researcher's motivations and goals for the study as well as her background at the beginning of the interview during the consent process. Such information facilitated rapport and established trust with participants.

In semi-structured interviews, interpreters were asked about their experiences interpreting for Hmong patients in general, then specifically about interpreting challenges. For example, participants were asked, "What has it been like for you as a Hmong interpreter?" and "From your experience, what makes medical interpretation difficult?" In addition to the semistructured interview questions, we also shared the findings with subsequent interviewees and asked for any new information from participants as a method to achieve saturation (i.e., no new information is shared by the participants; Morse, 1995) and for member checking. The interviews were conducted in the language preferred by the interpreters (e.g., Hmong, English, or both), lasted between 45 and 90 minutes, and were audio-recorded. Data were collected from September 2019 to May 2020, and the interpreters received a $50 compensation for their time.

Data Analysis

Two bilingual Hmong nursing students (MJY, MNV), both fluent in spoken Hmong and proficient in the written language, transcribed and translated the audio-recorded interviews conducted in Hmong or both Hmong and English. Thereafter, the first author (ML) reviewed the transcripts to assess them for quality; then, in collaboration with the two nursing students, they verified any discrepancies in the transcriptions by relistening to the audio recordings together before changes were made. The discrepancies were often related to concepts that have multiple meanings; for example, *leeg* in the Hmong language could mean blood vessels or capillaries.

Conventional content analysis, an inductive approach used to analyze open-ended questions (Graneheim & Lundman, 2004; Hsieh & Shannon, 2005), was employed to analyze the data. Conventional content analysis is often utilized when there is limited research on the study of phenomena, consistent with this study's purpose—the factors that contribute to poor medical interpretation. NVivo was used to manage the data.

Three research team members (ML, MNY, NB) read through the transcripts several times to familiarize themselves with the data. Then, they separately coded the transcripts line by line using labels and wrote memos about their observations (thus creating an audit trail) after each transcript. For example, when an interpreter stated, "I am always scheduled to interpret for a female Hmong patient," this was coded as "gender matching." In another example, an interpreter shared, "If the patient was a female, they would prefer that the provider is a female and that the interpreter is a female because I noticed that when I interpret on behalf of male patients, they are not as open." This phrase was coded as "patient gender preference." Next, they compared their coding and organized the codes into themes. For instance, all the codes related to "gender" that included "gender matching" and "patient gender preference" were organized into a theme called "matching between interpreter's

and patient's gender." The process of coding and categorizing the data was iterative to ensure conceptual saturation (Morse, 1995). All the emerging themes were shared with a research team comprised of a linguist (NB) and a senior qualitative researcher. To ensure that the themes were consistent with the interpreters' experiences, we shared the findings with subsequent interviewees and asked for any new information. New information from the subsequent interviews was used to recategorized themes.

Results

Thirteen interpreters participated in the study. The majority were women ($n = 8$) with a mean age of 37.1 ± 6.52 years and interpreting experience of 14.2 ± 8.35 years. Most participants had some college education—either an associate's ($n = 8$) or bachelor's ($n = 3$) degree. Two participants did not report their education. However, 11 interpreters were foreign-born and two were born in the United States. Of the 13 interpreters, two received a certificate from the Certification Commission for Healthcare Interpreters, two were self-taught, one had not received any training, four received medical terminology training through a course, two received training within their health care organization, and two did not report their training. The interpreters reported that the trainings were provided in English and did not involve any Hmong language materials.

The interpreters described three factors that accounted for their medical interpretation inaccuracies. These factors were (a) the match between the interpreter's and patient's gender, (b) culturally taboo topics in communication, and (c) the Hmong interpreter's and patient's culture and generational language differences.

Matching Between Interpreter's and Patient's Gender

The cultural norms of Hmong communication can make medical interpretation complex. Communication is often segregated by gender, wherein women and men are expected to associate mainly with members of their own gender during social interactions. This cultural expectation is often challenged in the health care setting when the gender of a Hmong patient and their interpreter do not match.

Both male and female interpreters shared that Hmong female patients often request a female interpreter, but such a request is not always possible. Thus, Hmong male interpreters are frequently scheduled to interpret for Hmong female patients. However, Hmong male patients are less likely to make a "gender matching" request. Interpreters believe that gender matching is also relevant to the accuracy of medical interpretations for each patient's gender.

Interpreters' Perceptions of Patient Responses to Gender Mismatch.—Most of the female interpreters expressed having more difficulty interpreting for male patients, particularly older male patients who hold traditional beliefs, than male interpreters with female patients. In contrast to male interpreters, female interpreters reported that Hmong female patients do not feel free to say that they object to the mismatch between the interpreter's and patient's gender, whereas male Hmong patients do.

Female interpreters further perceived that older Hmong men withhold information during interpretation by using indirect language, making medical interpretation inaccurate. One young female interpreter made the following statement:

> I had a much older Hmong male patient, and he did not like the fact that I was a woman. … He didn't really say anything, and he just rolled his eyes at me … he was using a lot of words (in Hmong) that we didn't commonly use at that time. It made me feel like I didn't know what I was doing, and very nervous, which I hardly feel.
>
> (Interpreter #1007)

This female interpreter expressed her feeling of being marginalized in the interpretation process through the language used by an older male patient. In contrast, the male interpreters did not have the same experience; most shared that as long as they apologized and acknowledged the gender mismatch, it created a more accepting and trusting relationship between themselves and female patients. Male interpreters consequently did not experience female patients withholding information and did not encounter any hindrances to the accuracy of interpreting. One male interpreter explained,

> But I usually tell them, "Sorry, I'm a guy, but I'm here to interpret for you and I hope that you're okay with it." So, you have to establish that sort of comfort (and trust) for the interpretation encounter.
>
> (Interpreter #1008)

Culturally Taboo Topics in Communication

All the interpreters described how accurate communication is altered when health care discussions are related to cultural taboos in communication. Specifically, the discussion about patients' reproductive body parts and sexual health or activity are taboo. In Hmong culture, it is taboo to discuss these matters openly, and having an opposite-gender interpreter compounds the problem. A female interpreter confessed,

> It gets uncomfortable when I'm interpreting for a male, and he's going in for concerns about prostate issues or erectile dysfunction. I feel uncomfortable because I feel like I shouldn't be talking about this. All because of being raised as a Hmong child, and you're not supposed to talk to someone about that kind of stuff [referring to reproductive body parts] with someone who you're supposed to respect, look up to, and who is an elder.
>
> (Interpreter #1003)

The interpreters agreed that patients are more comfortable discussing such matters with same-gender interpreters. They also described a specific taboo around using words that designate reproductive organs (e.g., penis or vagina) even with patients of the same gender. When patients use vague descriptions and indirect terms to describe their reproductive body parts, the interpretation becomes less accurate and less precise. One interpreter described how her female patients avoided the word "*pim*" [vagina] in the Hmong language and used a vague, indirect term, "*chaw mos*" [private part]:

> Previously, when my female Hmong patient shares that she has pain in her private part, I was unable to interpret it accurately because it can mean any location down in the woman's area such as the cervix, the vagina, or labia.

Such interpretations illustrate the conflict between imprecise terms (e.g., "woman's private part") and efficient medical interpretation (e.g., "vagina") with cultural norms that are embedded in social structures through the interpreter–patient interaction.

Culture and Generational Language Differences Between Interpreters and Patients

Cultural and intergenerational communication differences between interpreters and patients contributed bidirectionally to a lack of accuracy in patient–provider communication. Such communication difficulties occurred (a) when there was a cultural and generational difference between the interpreter and patient and (b) when the interpreter's country of birth or the one in which they were raised differed from the patient's own. These differences in culture, generation, and birth/raised location were reflected in significant language differences.

Culture and Generation.—All the interpreters mentioned that accurate communication with Hmong patients was hindered when the patient was older and foreign-born. In particular, older Hmong patients tend to use *paj lus* (directly translated as "flower language"), metaphorical descriptions, and proverbs when reporting their symptoms. In the context of the long narrative style that Hmong patients prefer, the interpreters reported that these linguistic practices are unfamiliar and can be confusing. A middle-aged interpreter explained his communication interaction with older Hmong patients: "The older generation Hmong people tend to express symptoms and interactions in 'paj lus' and the newer generation would not know what the 'paj lus' is." (Interpreter #1004). One young interpreter agreed, " … in terms of the deep words [metaphorical terms in Hmong], I still don't know how to interpret those" (Interpreter #1010). The *"paj lus*" or metaphor, in turn, impedes their understanding and thus the accuracy of the medical interpretation from Hmong to English and from English to Hmong, regardless of country of birth or upbringing.

Metaphors.—Descriptions motivated by metaphors are often related to folklore and are an important component of oral culture. Elaborate and poetic language is commonly used in Hmong society as a way of enhancing and embellishing communication, which inevitably leads to variations in interpreted meanings. A full understanding of this poetic language can only be achieved when the speaker and listener have similar levels of traditional linguistic and cultural knowledge. One young interpreter born in the United Stated shared a metaphor he did not understand:

> A patient said, "Kuv ua qhov tsauv" [I have the wood ash], and at first, I didn't know what it was. Later, I learned that it was a metaphor referring to fever. The phrase "ua qhov tsauv" was used to describe the action that one would take when they are feeling chilly—to go sit by the wood-burning fire pit.
>
> (Interpreter #1013)

This example illustrates generational differences, but also that those born or raised in the United States learn only part of the Hmong language and not the meaning of the metaphors. These disparities, according to interpreters, contributes to the inaccuracy of medical interpreting.

Storytelling.—All the interpreters reported that many Hmong patients—particularly older individuals—explain and respond to providers' questions using a long narrative style that reflects their oral culture of storytelling. One interpreter stated, "Even if it's a yes or no question, they would go into more of a storytelling of the whole situation and never actually answering the question directly with 'yes' or 'no'" (Interpreter #1004). Thus, the basic information is in a fundamentally different format than expected by the interpreters and providers, and it contains details that may be deemed irrelevant to the question. An interpreter shared a Hmong patient's response to a provider's question about how his pain started: "[When the doctor asks] 'Does your stomach feel better?' sometimes they'll tell their story all the way from the beginning, from when they were living in Laos." (Interpreter #1005). While the long narrative is a common form of communication for Hmong patients, interpreters have difficulty interpreting it all into English.

Country of Birth or Upbringing.—With the relocation of the Hmong people from China to Laos and Laos to Thailand, the Hmong language has evolved to incorporate words from other local languages in regular daily use. These additional words are not used by younger U.S.-born interpreters and some younger Thailand-born interpreters who immigrated to the United States at a young age. Instead, these interpreters reported using English words that had incorporated into their Hmong language. Thai words were not used because these interpreters never had the opportunity to acquire such language. One interpreter who was born in the United States shared, "Being born in America, I grew up with more American language. And so, I used more English." (Interpreter #1003). This is a natural result of the Hmong living in Laos and then in refugee camps in Thailand. However, outside of the Lao and Thai contexts, these words may not be passed onto the next generation. An interpreter explained his experience: " … the Thai terminology and the Lao terminology are not present in my vocabulary compared to English." (Interpreter #1010).

All the interpreters acknowledged that the older form of the Hmong language is fading, replaced by a usage more influenced by life in the United States. Thus, while the older Hmong generation may use Lao and Thai words, U.S.-born or -raised Hmong may lack an understanding of these terms and incorporate more English terms into their language. Therefore, the different bilingual contexts in which members of the Hmong diaspora were raised result in a clash of terminology, and a pervasive sense of the language has somehow degenerated.

Discussion

We found that accurate medical interpretation is hindered when (a) there is a mismatch between the interpreter's and patient's gender, (b) discussion involves culturally taboo topics about reproductive body parts and sexual health or activity, and (c) differences exist in culture and generational language between the Hmong interpreters and patients. Specifically,

a large part of the inaccuracy of Hmong medical interpreting stems from the challenges of finding words and phrases that are sufficiently equivalent in Hmong and English (i.e., lexical matching) during medical interpretation. This gap affects intercultural communication.

We also learned that interpreters' proficiency in Hmong and their understanding of English medical terminology are critical to accurate interpretation. This finding confirms the concerns that Hmong patient have raised about their observations of some Hmong medical interpreters' skills in either Hmong or medical terminology (Lor et al., 2016). Despite these barriers, it is interesting to note that the "professional" nature of interpreters' interpreting work did not preclude them from encountering communication constraints resulting from the kinship-based norms of social interaction that characterize Hmong culture. Thus, professional interpreters also feel obligated to pay respect and follow "appropriate" language-use conventions when engaging with older patients because of their shared ethnic identification, even if they do not share direct kinship relations.

Furthermore, patients' use of *paj lus* or "flower language" was discussed as a factor in inaccurate medical interpretations. Most interpreters reported that the use of such language hindered the accuracy of their medical interpretations from Hmong to English. For example, the use of *paj lus* for describing fever in this study illustrates a lack of congruency between the Hmong and Western modes of communication. The expressive and often poetic traits of the Hmong language used by older Hmong reflects the Hmong understanding of bodily illness (Culhane-Pera et al., 2007; Lor et al., 2020). This finding highlights the need for more intercultural communication training for medical interpreters and health care providers.

The interpreters reported that the Hmong language is evolving in its American usage. Hmong patients—especially older adults and those who are foreign-born—often use borrowed Lao or Thai terms in their speech; since the interpreters do not have exposure to these formerly important contact languages, they perceive the words as a hindrance to accurate communication. Although the "borrowing" of words and phrases from other languages is a natural feature of bilingualism (Piller, 2016), research on how borrowed words affect health communication across generations and patient groups with different dialects in health care settings is limited. For the aforementioned older Hmong patients, the borrowing of Thai and Lao words was itself an adaptation made to accommodate the gaps between Hmong culture and the dominant local culture before migrating to the United States. We also hypothesize that the borrowed Lao or Thai term is an important additional layer of stress for second-generation Hmong interpreters, as their bilingual upbringing means they borrow from English. Future research could investigate how the evolving Hmong language impacts health communication.

Based on the interpreters' descriptions, Hmong cultural norms of communication about the reproductive system and sexual activity are a significant factor in inaccurate communication. This finding is consistent with other ethnic groups (Kamangu et al., 2017; Kasberg, 2013). The indirect, vague interpretation from an interpreter may be a Hmong cultural artifact that hinders their ability to precisely interpret reproductive system or sexual activity concepts. Here, we note that the desirability of clinical, objective language for health care interactions

is a professional requirement that dominates Western medicine but may not share by patients.

Clinical Implications

We found that female and male interpreters have different experiences. Specifically, female interpreters in this study seemed more troubled with communication problems than male interpreters. This difference in experience could be explained by the Hmong's patriarchal culture (Cha, 2010). Male interpreters shared that using an apologetic introduction eased the mismatch of patient–interpreter gender. Although this approach could work for female interpreters, we recommend that organizations prioritize gender matching when interpreters are requested.

The medical terminology challenge for medical interpreting could be that care providers use medical jargon. Providers can render communication ineffective by using medical jargon (Hassan 2018; Tucker et al., 2011; Warde et al., 2018). More medical training focusing on navigating both linguistic challenges and underlying gaps in health culture between Hmong patients and American providers could improve medical interpreting accuracy.

The use of Hmong patients' "flower language" and storytelling highlights the need for more cultural training for medical interpreters and health care providers. It is likely that this mode of communication is a part of the cultural process of establishing trust, clarifying social relationships, and creating an understanding of the patient's personal health experiences. Clinicians and interpreters may not realize or accept such a form of communication as the linguistic norm for Hmong patients, instead perceiving it as a hindrance to effective communication. It is possible that relevant health information is transmitted through *paj lus*.

This study has some limitations. We only conducted interviews with interpreters who interpret for the Hmong language. Therefore, the findings may not be generalizable to other language groups. Future studies could compare the factors identified by Hmong interpreters in this study to other language groups. Additionally, future research suggestions include the challenges faced by the patients themselves in working with professional versus family medical interpreters. Our participants were relatively young, and we did not assess for their religious affiliations. Hence, future research could study the differences in younger and older interpreters' experiences and how patients' and interpreters' religious affiliations impact patient–interpreter communication. Furthermore, the linguistic metaphors or flowery language were only specific to certain health conditions. We did not inquire about additional examples of linguistic metaphors due to the time constraints of the interviews. Future studies could examine different linguistic metaphors relating to animistic or naturalistic environments that the Hmong use to describe their health and illness.

Conclusion

The interpreters reported three factors that affect their ability to make accurate medical interpretations for Hmong-speaking patients: (a) match between interpreter's and patient's gender, (b) culturally taboo topics in communicating about reproductive body parts and sexual health or activity, and (c) culture and generational language differences between

Hmong interpreters and Hmong patients. Such information could inform future culturally and linguistically appropriate training for medical interpreters and health care providers, thus improving intercultural communication with LEP patients.

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