

Knowledge Translation Strategies for Healthcare Access in South Asian Immigrant Families

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LAY SUMMARY

Many South Asian immigrant families in Canada face challenges accessing healthcare due to language barriers. Often, children are asked to translate for their parents during medical appointments, which cause stress, misunderstandings, and even impacts the quality of care. This study explores how language barriers influence healthcare communication in these families and developed a solution to address the problem. A multilingual, user-friendly prototype website was created to support families in navigating the healthcare system. This website allows users to request professional interpreters, access health education in their preferred language, and share cultural preferences with healthcare providers. By reducing the burden on children as interpreters, the tool helps families communicate more accurately and comfortably, promotes culturally sensitive care, and creates trust in healthcare services. The findings highlight the importance of accessible language services in improving health outcomes and demonstrate the role of technology in bridging communication gaps, making healthcare more equitable for immigrant communities.

ABSTRACT

Language barriers limit equitable healthcare access for South Asian immigrant families in Canada. When professional interpreters are unavailable, children often act as informal translators, raising ethical concerns and causing communication errors. This Knowledge Translation (KT) study examined how these barriers affect healthcare experiences and guided the development of an intervention to improve communication. A literature review highlighted the negative impact of informal child interpretation and the benefits of professional interpreters in improving care quality and patient satisfaction. Guided by the Knowledge-to-Action Framework, a multilingual website was designed as a KT tool, offering real-time interpreter requests, culturally tailored care notes, and accessible health education resources. The website aims to reduce the reliance on children as interpreters, support patient-centered care, and enhance health literacy. Evaluation strategies include tracking website usage, conducting surveys to measure awareness and confidence, and engaging community stakeholders to assess impact and sustainability. This initiative demonstrates that technology-enabled KT strategies can improve healthcare access, support cultural competence among providers, and reduce inequities for immigrant families, providing a scalable model for other linguistically diverse populations.

KEYWORDS:

Language barriers, South Asian immigrants, healthcare access, medical interpretation, cultural competence, knowledge translation



INTRODUCTION

Effective communication is essential to deliver equitable healthcare, however many South Asian immigrant families in Canada are constrained by language barriers that limit their access and capacity to access quality health services.¹ These challenges often result in miscommunication, delayed diagnoses, missed vaccinations, and poorer health outcomes.² One common but problematic response is the reliance of children as informal translators during medical visits.³ This not only creates emotional stress for youth and increases the risk of misinformation but can cause discomfort for parents who do not wish to discuss sensitive health issues in front of their children.

This KT report investigates how language barriers impact the use of healthcare services by South Asian immigrant families and focuses particularly on childrens' roles as interpreters. This report presents a background review of current evidence, a focused PICO(ST)-framed research question, and a detailed application of the Knowledge-to-Action (KTA) Cycle to propose effective, evidence-informed knowledge translation (KT) strategies. In addition, the appendix includes a website designed as a KT tool to support immigrant families in navigating the healthcare system more effectively.

To explore the influence of language barriers on access to healthcare among South Asian immigrant families, systematic searches of scientific research were conducted. Boolean operators were useful for limiting and refining the search.⁴ The phrase "language barriers" AND "healthcare access" AND "South Asian families" was used to limit the search to those studies that reported on language barriers specific to this particular demographic. Additionally, "language barriers" OR "communication issues" helped to capture a broader range of studies related to healthcare communication, while "children" NOT "adults" narrowed the focus to research involving children as informal interpreters.⁴ Nesting was applied to group similar terms such as "language barriers" AND ("immigrants" OR "immigration") which restricted the search on immigrant populations. Truncation such as "*"immigrant"* was done to capture variations such as "immigrants" and "immigration".⁴ Quotation marks were used around phrases such as "language interpretation" ensured that only articles focused on this specific aspect of healthcare communication were retrieved.⁴ The search was conducted in sources such as PubMed and Google Scholar.

Literature reveals consistent evidence that language discordance between patients and healthcare providers strongly impacts care quality, patient satisfaction, and health outcomes.⁵ One of the most prominent findings in studies is the reliance of children as informal interpreters in health care when professional interpretation services are unavailable or underused. It was found that children will translate both medical terminology and sensitive health issues to parents, in the event that the physician and patient are not using the same language.⁶ This raises issues of miscommunication and inappropriate diagnosis, along with ethical and emotional challenges. Kaufert & Putsch (1997) also note that parents withhold information during consultations where children are present because of embarrassment or cultural taboos, which leads to gaps in clinical information and treatment delays.⁷ Children face emotional burdens, including feelings of responsibility for their parents' health and discomfort in translating sensitive topics.⁸ A study conducted by Gulati et al. (2012) explored the communication challenges faced by immigrant parents of children with cancer.¹ The findings highlighted that language difficulties influenced parents' roles in caregiving and their ability to comprehend complex medical terminology. The findings stressed that there was a barrier due to languages affecting parents' participation in care provision and the understanding of complex medical terminologies.

Literature relating to language barriers in health consists of qualitative and quantitative studies. Quantitative studies, such as national surveys, contribute to prevalence of language barriers but aggregate diverse South Asian populations, thus limiting cultural specificity. For example, in Gulati et al. (2012), data was aggregated across various ethnic groups, which is likely to overlook specific individual community issues.¹ While quantitative research provides broad information, it can lack the cultural richness captured

by qualitative research. Qualitative research, such as focus groups and interviews, provides a better understanding of the emotional and cultural lives of families. One research study, by Lauridsen et al. (2024), highlights the informal interpreters, particularly children, in medical settings. This study indicates children are likely to bear emotional burdens in acting as interpreters during sensitive situations, which may lead to incomplete or inaccurate information.⁹ Even though such qualitative studies are helpful in understanding the lived experience of immigrant families, they are based on small samples and are not generalizable.

Furthermore, many studies do not account for factors such as socioeconomic status or length of immigration, which can influence the reliance on children as interpreters. Although many reports demand trained interpreters and culturally appropriate care, there is insufficient exploration of how these interventions operate in South Asian populations. Few studies explore institutional barriers, such as financial constraints or administrative challenges, that prevent the use of professional interpreters. For instance, a study by Jacobs et al. (2004) discusses the lack of availability and cost of professional interpretation services, which are significant barriers for immigrant families in healthcare settings.¹⁰ Despite existing research, there is a need for more substantial, systematic research exploring language access interventions that are specific to South Asian populations. Future research will need to include more diverse and larger samples and examine how cultural sensitivity and policy in institutions can facilitate communication. Studies that include both patient and provider perspectives will be essential in developing comprehensive strategies to address language barriers in healthcare.

METHODS

This Knowledge Translation (KT) report aims to investigate the impact of language barriers on healthcare communication within South Asian immigrant families in Canada, particularly with a focus on the practice of children serving as informal interpreters for parents during medical encounters. The report aims to support healthcare providers by identifying and translating evidence-based strategies that minimize reliance on child interpretation and promote equitable, patient-centered care. The specific objectives include the following: (1) to assess the risk and impact of child interpretation in clinical settings; (2) to evaluate the effectiveness of professional interpreter services and culturally tailored communication tools; (3) to develop evidence-informed recommendations for healthcare providers to implement in linguistically diverse environments.

To guide this analysis, the report applies this PICO(ST) framework as follows: the Population (P) consists of South Asian immigrant families in Canada with limited English or French proficiency; the Intervention (I) focuses on the use of professional medical interpreters and culturally tailored communication approaches; the Comparison (C) group would use informal interpretation provided by children during healthcare visits; the Outcome (O) includes improvements in healthcare access; the Study Design (S) is qualitative research, which captures lived experiences and communication challenges in-depth; and the Timeframe (T) refers to the first five years after arrival in Canada, a critical period for health system navigation and adaptation.

The KT report is guided by the following research question: Among South Asian immigrant families in Canada, how does the use of professional medical interpreters and culturally tailored communication strategies, compared to the use of children as informal interpreters, impact healthcare access

during the first five years of resettlement?

Language barriers are a major obstacle to equitable healthcare for South Asian immigrant families in Canada with limited English proficiency. These barriers often lead to misunderstandings, delayed diagnoses, and poor treatment outcomes.¹¹ In many cases, children are relied upon to interpret during medical visits, which can compromise communication accuracy and place emotional strain on the child.⁹ Drawing on the Knowledge-to-Action (KTA) Framework, the problem has been clearly identified in the literature as a barrier to culturally safe, patient-centered care. Through knowledge inquiry, studies including Lauridsen et al. (2024), have demonstrated that reliance on informal interpreters, such as children, leads to clinically significant communication errors and poorer health outcomes.⁹ The next stage of knowledge creation is knowledge synthesis, which combines existing research into clear summaries. A large body of evidence supports the conclusion that professional interpretation services improve care quality, reduce disparities, and alleviate the psychological burden placed on young family members. These findings align with course concepts such as cultural humility and health equity, and have been consolidated into actionable best practices—such as integrating professional language services within care teams and providing staff with cultural competence training.⁹

Knowledge acquired from the inquiry and synthesis stages now forms a refined, context-sensitive knowledge tool: the recognition that system-level support for trained interpreters is a critical equity intervention. The KTA Cycle emphasizes that for this knowledge to be actionable, it must be tailored to local contexts (e.g., high South Asian immigrant populations) and made accessible to healthcare decision-makers, practitioners, and community advocates.¹² Therefore, this KT initiative seeks not only to identify a problem, but to support ongoing movement through the action cycle, toward implementation, evaluation, and sustainability of language support policies.

To ensure uptake and sustainability, information must be adapted to the South Asian immigrant community's social, cultural, and linguistic environment within Canada.¹² Professional interpretation is shown to augment communication and care quality¹⁰; however, without context, even strong evidence will fail to influence practice. This population of knowledge users, some of whom experience structural and cultural obstacles to health care, require KT materials that are linguistically appropriate, culturally secure, and logistically feasible.¹² Translated learning materials—such as interpreter-request systems in multiple South Asian languages and health care workers trained in cultural humility—can make knowledge more appropriate and useful. Translating knowledge in this way acknowledges not just the demand for language access but also the nuances of social dynamics, such as stigma, gender expectations, and intergenerational expectations, that shape South Asian family interaction with the health system. This tailor-made response facilitates actionable change and aligns with the KTA co-creation and local adaptability orientation.

RESULTS

One of the KT strategies to implement includes a user-friendly website, (refer to appendix), designed to help immigrant families navigate the Canadian health system. The website allows users to easily select the language of their preference, generating content available in real-time

translation. It includes an Interpreter Request Portal, where patients can request a professional interpreter before a medical appointment to avoid being reliant on children as interpreters. If an on-site interpreter is not available, virtual alternatives will be provided to ensure effective and respectful communication. In its efforts to support inclusive care, the website includes a Cultural Care Notes in which users can record cultural requests, such as a preference for same-gender providers, religious considerations, or traditional practices. These preferences can be shared with healthcare teams to help guide culturally sensitive care.

In addition, a Health Education Hub is integrated into the website, providing easy-to-understand materials and videos, in multiple languages and with audio options, regarding topics such as vaccinations, chronic disease management, prenatal care, and mental health. The Health System Navigation Guide component helps immigrants understand how to access different parts of the healthcare system, from walk-in clinics to emergency services, using visual guides and translated explanations. In the Ask Us tab, users are able to type in questions or concerns on the website using their own language, which will be translated to English for healthcare professionals, establishing a simple yet powerful communications bridge. Overall, this website aims to reduce language and cultural barriers while enhancing trust, comfort, and clarity during healthcare interactions.

To incorporate technology-enabled knowledge translation (TEKT) practices, the website developed is a practical, digital tool to reduce communication gaps and support evidence use among Canada's South Asian immigrant families in the healthcare sector. Digital TEKT approaches such as websites, online training, and tailored messaging can increase public health practitioners' knowledge and uptake of evidence.¹⁵ Additionally, the website is integrated with real-time translation and an Interpreter Request Portal (Figure 1) to facilitate more ethical and accurate communication, reducing reliance on children as interpreters. The Health Education Hub (Figure 2) features multilingual audio and video, making it accessible for low-literacy users. Also, the Cultural Care Notes section (Figure 3) Tab helps users communicate cultural needs, supporting providers in providing more patient-centered care. These practices align with KT best practices, emphasizing that tailoring knowledge to specific contexts and needs, especially through online channels, can bridge the research-practice gap and promote equal access to healthcare.

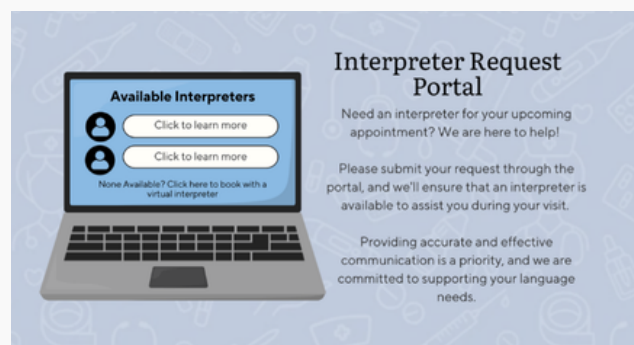


Figure 1. Interpreter Request Portal: This feature enables patients and families to request professional interpretation services in real time, reducing reliance on children as interpreters and promoting ethical, accurate communication between healthcare providers and South Asian immigrant families.

To address potential barriers, such as limited digital literacy or access to reliable internet and devices, the website could include offline features, simplified interfaces, and visual

navigation to support low-literacy users. Clinics could also provide on-site guidance or digital kiosks to ensure equitable access. Additionally, the website's real-time translation and Interpreter Request Portal would promote more ethical and accurate communication, reducing reliance on children as interpreters. The Health Education Hub's multilingual audio and video content ensures accessibility for low-literacy users, while the Cultural Care Notes Tab allows families to express cultural needs, helping providers offer more patient-centered care. Collectively, these features align with KT best practices, emphasizing that tailoring knowledge to specific contexts and needs, especially through accessible, inclusive online channels, can bridge the research-practice gap and promote equitable healthcare access.

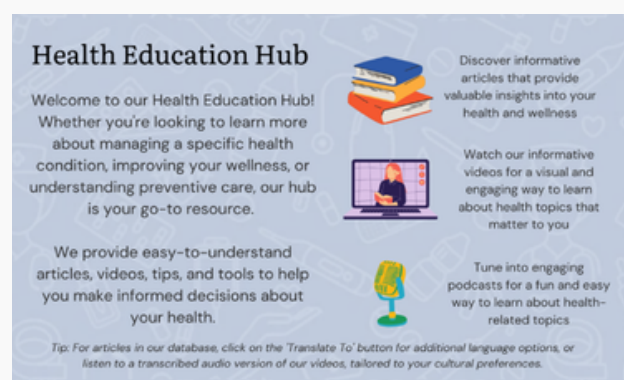


Figure 2 Health Education Tab: An interactive library featuring multilingual audio, video, and visual resources to enhance health literacy among users with varying literacy levels. The hub supports culturally relevant and accessible health education for South Asian communities.



Figure 3 Cultural Care Notes: A section allowing patients to share cultural practices, dietary preferences, and care considerations with healthcare providers. This tool facilitates patient-centered care by helping practitioners understand and respect individual cultural needs.

DISCUSSION

Several barriers impact effective knowledge use including help-seeking stigma, low awareness of interpretation services, and inadequate provider training on cultural competence.¹³ Even when interpretation services are available, some patients may feel uncomfortable or embarrassed sharing personal health information with someone they don't know, especially about sensitive issues. This emotional barrier can prevent full disclosure and lead to inaccurate medical assessments.⁹ Systemic issues, such as underfunding and insufficient staffing of qualified interpreters, also prevent best practices from being applied consistently.¹⁰

Key facilitators can improve KT strategies for South Asian immigrant families. Raising awareness within healthcare institutions about patient-centered care and health equity fosters an environment where inclusive policies thrive.¹⁴ Digital KT tools, like online interpreter request forms, culturally tailored infographics, and mobile apps, offer accessible options for families. Brown et al. (2020) noted that technology-enabled knowledge translation (TEKT) strategies are most effective when designed to meet users' cultural and practical needs.¹⁵ Partnerships with South Asian cultural organizations and community leaders are crucial for building trust, spreading awareness, and ensuring sustainable implementation.¹² These facilitators, aligned with evidence-based practices, can help bridge knowledge gaps and reduce health inequities faced by South Asian immigrant communities.

To evaluate how knowledge is being used, the assessment will focus on three levels: conceptual, instrumental, and strategic.¹⁴ Conceptual use will be measured through pre- and post-surveys, tracking changes in awareness and confidence regarding the healthcare system. Instrumental use will be assessed by tracking website usage, such as interpreter requests and educational content views. Strategic use will be explored through interviews with healthcare providers and community stakeholders to understand the tool's impact on broader discussions of culturally safe care. Evaluation will also occur at structural, process, and outcome levels.¹⁶

At the structural level, the focus will be on changes like improved access to professional interpreters and the integration of cultural preferences. Process-level assessment will involve surveys and website analytics, while outcome-level assessment will examine improvements in healthcare experiences, such as fewer missed appointments and increased trust. Administrative data may be used to look for reductions in health complications due to language barriers.¹⁷ The design includes an exploratory phase, where a pilot website will be tested with a small group to gather feedback on its relevance and usability. The pragmatic phase will involve ongoing data collection and adjustments to keep the tool effective. Sustainability is also a priority.¹⁶ To ensure long-term impact, community groups and healthcare providers will promote the website, and plans will be made to integrate it into routine healthcare intake processes. Securing funding for ongoing maintenance and interpreter services will be critical for scaling up the intervention.¹⁷

CONCLUSION

To conclude, language barriers pose a significant obstacle to equitable access to healthcare for South Asian immigrant families in Canada. The reliance on children as informal interpreters during medical visits compromises communication and places emotional and ethical burdens on parents and children. This report advocates for professional, culturally competent interpretation services through a knowledge translation intervention: an accessible, multilingual web site that is able to provide available tools for interpretation, health education, cultural preferences, and healthcare navigation. Through technology, community engagement, and cultural competence, the web site will allow for more respectful, informed, and inclusive care, while monitoring and evaluation will ensure responsiveness and scalability. Finally, the implementation of language-access tools for families will reduce child dependency, enhance trust in the health system, and improve health outcomes for South Asians in Canada.

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Appendix

Link to Website (KT Tool): <https://saharahealth.my.canva.site/>