# Experiences in Broker-Facilitated Participatory Cross-Cultural Research: Overcoming Practical and Ethical Challenges

International Journal of Qualitative Methods Volume 16: 1–9 © The Author(s) 2017 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/1609406917706883 journals.sagepub.com/home/ijq



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#### Abstract

Health researchers are increasingly using community-based participatory research approaches because of the benefits accrued through ongoing community engagement. The documentation of our research partnership highlights key ethical and analytical challenges researchers face in participatory research, particularly in projects partnering with service providers or cultural brokers in cross-cultural settings. In this article, we describe how choices made to accommodate a participatory research approach in the examination of vaccination behavior impacted the process and outcomes of our qualitative inquiries. First, we found that employing multiple interviewers influenced the breadth of discussion topics, thus reducing the ability to achieve saturation in small study populations. This was mitigated by (a) having two people at each interview and (b) using convergent interviewing, a technique in which multiple interviewers discuss and include concepts raised in interviews in subsequent interviews to test the validity of interview topics. Second, participants were less engaged during the informed consent process if they knew the interview affected knowledge cocreation, as the focus of the conversation then mirrored those traits. For future research, we provide recommendations to reduce ethical and analytical concerns that arise with qualitative interview methods in participatory research. Specifically, we provide guidance to ensure ethical informed consent processes and rigorous interview techniques.

#### Keywords

knowledge construction, qualitative analysis, research relationships, collaborative research, cross-cultural research, qualitative research, informed consent, interviews

## What is already known?

Participatory research garners benefits and legitimacy through ongoing community engagement. Participatory research also faces many logistical and analytical challenges as community researchers have varying levels of research training and often have full-time jobs and life commitments outside of research projects.

## What this paper adds?

Our article highlights ethical and methodological challenges resulting from accommodations required to conduct participatory research. We also offer recommendations to alleviate disadvantages of broker-facilitated research, particularly in interview methods and informed consent procedures.

Introduction

Health researchers are increasingly using community-based participatory research (CBPR) approaches because of the

benefits accrued through ongoing community engagement. Using CBPR is suggested to ensure research question relevance (Halkoaho et al., 2016; Meza, Drahota, & Spurgeon, 2015), build respectful relationships between research and practice communities (Drahota et al., 2016), and aid with cross-cultural research requirements such as language interpretation (Lee, Sulaiman-Hill, & Thompson, 2014) or culturally sensitive interpersonal communications (Spector, 2012).

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CBPR in university-service provider health research partnerships is particularly important, as it increases the implementation of recommendations from research findings into practice (Bellamy, Bledsoe, Mullen, Fang, & Manuel, 2008; Spector, 2012). Partnering with service providers is especially effective in cross-cultural research where service provider partners act as "cultural brokers." Cultural brokers connect culturally different groups together in ways that respect the values and social differences between groups (Eide & Allen, 2005). Furthermore, cultural brokers "speak on behalf of community interests, lending voice to community needs, strengths and ideas so that researchers are better able to prioritize community perspectives and values" (Spector, 2012, p. 254). In turn, brokers help to build and maintain respectful relationships between researchers and communities (Crist & Escandón-Dominguez, 2003; Wallin & Ahlström, 2006).

While knowledge of CBPR with community members or medical research participants as collaborators is growing, literature describing CBPR that involves service providers as collaborators is more limited. Anya Spector's literature synthesis of CBPR with service provider collaborators (2012) is an excellent article describing benefits for, contributions by, and challenges of conducting CBPR projects with service providers. However, it highlights that our current understanding of benefits and challenges of CBPR with service providers is very high level with few project scale practice recommendations of how to respond to practical and ethical challenges of these types of research projects.

Spector (2012) found that time requirements to fulfill job and research duties, financial costs of planning and conducting research, and communication and value disconnects between researchers and service providers all challenged the practical function of CBPR projects in service provision settings. In addition, partnerships face ethical challenges of using cultural brokers in research. For example, various levels of research training in brokers conducting data collection or analysis can limit the qualitative rigor of CBPR studies (Lee, Sulaiman-Hill, & Thompson, 2014). Cultural broker conducted CBPR can also limit voluntariness during recruiting and informed consent processes (Liamputtong, 2008; Mistry, Berardi, Bignante, & Tschirhart, 2015). Often the authors of relevant literature warn of these challenges without offering recommendations for future researchers and collaborators to design and conduct their individual projects in ways that avoid common pitfalls to CBPR with service provider collaborators.

In this article, we document our own experience initiating and conducting research with a service provider organization partner. We present the challenges and opportunities we experienced both for the initiation and conduct of CBPR. We also offer recommendations to alleviate disadvantages of brokerfacilitated research, particularly in interview methods and informed consent procedures.

# University of Alberta—Multicultural Health Broker CBPR Partnership

To contextualize our findings, it is important to understand the nature and rationale of our research project. Our research was conducted to determine how foreign-born women in Edmonton, Alberta, Canada, access and use immunization information to make vaccination decisions for themselves and their children. We based our research on recent studies showing that Canadian health communications often fail to meet the information needs of new immigrants (FitzGerald, Boulet, McIvor, Zimmerman, & Chapman, 2006; Oxman-Martinez & Hanley, 2005; Replanski, 2006). Authors of these studies attribute the lack of information access to limited English language skills, competing cultural frameworks, and limited health or general literacy (Litonjua, Carey, Weiss, & Gold, 1999; Oxman-Martinez & Hanley, 2005; Zanchetta & Poureslami, 2006). Unfortunately, developing health information without the direct involvement of community members is an ongoing trend, which has consequences of not adequately meeting the unique needs, challenges, and priorities of new immigrants (Litonjua et al., 1999; Zanchetta & Poureslami, 2006). From these previous studies, we saw a crucial need to identify the best communication approach to inform adults from foreignborn populations about communicable disease control and management (Agency for Healthcare Regional Quality, 2007; Cabana, Lara, & Shannon, 2007). Our objective for the overall research project was to use a CBPR approach to understand the immunization information and communication needs of immigrant mothers from various cultures.

## Community-Driven Participatory Research Collaboration

We conducted this research using a community-driven participatory research (CDPR) approach informed by broader CBPR methodologies. CDPR is not in itself a methodology or knowledge generation strategy but rather a research initiation point in which the community research partners identify the topic of interest, drive the research question development, and choose the degree of their participation in subsequent research phases (Schulz, Israel, & Lantz, 2003). The collaboration was between a community/health service provider partner, the Multicultural Health Brokers Cooperative (MCHB), and an academic team, the authors of this article who all work in the University of Alberta. The University of Alberta's Human Research Ethics Board of Health approved the research.

MCHB is responsible for developing programs to support many groups within the larger foreign-born population in the city. However, their primary responsibility has always been to assist women to access perinatal services, as they learn about the health-care system in their new Canadian contexts (MCHB, 2003). In day-to-day interactions between brokers and clients, the brokers assist women in learning to maneuver the Canadian health system. This involves booking health appointments, offering transportation and day care, and completing documentation requirements for different health services.

We approached MCHB expressing our interest in working with them given their role in community health. After introducing our research team at an all-staff meeting, the MCHB as a whole initiated this research by stating their concerns about current immunization communication strategies targeted toward mothers of local foreign-born communities. MCHB is very active as a research partner for different health projects with outcomes affecting immigrant populations and thus had a very clear articulation of their research interests and goals. Each partner had different stakes and goals in conducting this research and thus chose the weight and description of their individual role accordingly.

Individual MCHB representatives (hereafter referred to as the "brokers") interested in working directly with the academic research team volunteered and offered required assistance in kind. Brokers who volunteered included representatives from the South Asian community (n = 2), Chinese community (n =1), Bhutanese refugee community (n = 1), and management of MCHB (n = 1). Brokers made clear their interests in creating research questions and aiding with translation; however, they were neither interested in conducting the research themselves nor wished to participate through co-learning, capacity building, or other principles on which researchers normally base participatory research projects. Thus, the brokers drove the project focus and objectives, but the academic partners designed and implemented the research.

The academic team assumed overall responsibility for conducting the research (data collection, analysis, and write-up), yet the brokers participated where they desired or in situations where their specific capacities were required, such as recruitment and translation. Given their connections, language skills, and membership in the community as immigrants themselves, the brokers participated throughout the project to facilitate the research process. They recruited participants, informed culturally appropriate interview strategies, conducted some interviews, translated a number of the foreign language interviews, helped with analysis credibility exercises, and informed knowledge translation and recommendation development.

#### Research Participants

The brokers recruited mothers from South Asian (n = 8), Chinese (n = 10), and Bhutanese refugee (n = 5) communities in Edmonton through their existing client-service provider relationships. Inclusion criteria were that participants (a) be immigrants who arrived in Canada within the last 8 years, (b) currently be living in Edmonton, and (c) have at least one child under the age of 8 years. The age limit was chosen to increase the likelihood that parents had recent experiences accessing immunization information for childhood vaccinations, of which scheduled vaccinations are heavily concentrated under age 8.

## Research Conduct

Between March and September 2013, participants each completed a semistructured interview, approximately 30 min to 1 hr in length. We co-developed the interview guide with the brokers. We contributed knowledge of methodological rigor to develop questions that were not leading and would help focus the discussion. Brokers contributed knowledge of cultural requirements for appropriate semantics and phrasing and how to conduct the interviews in ways that made the participants feel comfortable.

We gave participants the option to speak English or their origin language in their interviews. Initially, the brokers expressed interest in attending each foreign language interview as language interpreters. One of the brokers' primary roles was to expose academic assumptions or ignorance of cultural nuances that could impact appropriate research conduct and representative analysis. The brokers were instrumental in their input of how to conduct interviews to maximize the ease, openness, and/or candidness of the participants. South Asian and Bhutanese refugee brokers warned that although our academic representative was not threatening to the community members, women would not open up to her quickly, or fully, unless a trusted community member (such as a broker) also attended the interview. Therefore, we agreed to have a broker attend each of these interviews.

Over time, however, the brokers found their regular job commitments too demanding to continue with the research project as planned. Process changes such as this, while challenging to research rigor, are not uncommon within a participatory process that must accommodate the needs of all research partners. Thus, we recruited one PhD student and one postdoctoral fellow from within the School of Public Health to conduct foreign language interviews with each participant; the former was fluent in Mandarin and Cantonese, the latter in Urdu, Hindu, and Hindustani. A total of six individuals helped conduct the interviews: three brokers, the two hired interviewers, and one member of our academic team. The Bhutanese broker attended all five and translated four of the Bhutanese interviews. The Chinese broker helped recruit participants but did not attend the interviews. Instead, a hired translator conducted nine Chinese interviews. A South Asian broker attended two interviews and a hired translator conducted three of the eight South Asian interviews. Our academic team representative attended all 23 interviews and personally conducted the English language interviews (one with a Chinese participant, one with a Bhutanese refugee, and three with South Asian participants).

There were two people at each interview who required a translation: our academic representative and the foreign language interviewer. The interviewer clarified the purpose of the research and how each interview attendee (interviewer or broker, participant, and academic representative) contributed to the research. The interviewer also made explicit our roles in relation to the research and in relation to one another. Thus, participants knew the backgrounds of each researcher at the interview and how each person at the interviews was connected.

The academic partners were responsible for data analysis. Using content analysis informed by the constant comparative method (Charmaz, 2006), we analyzed transcripts of the recorded and translated interviews. Bilingual MSc students who were not involved in the research verified translated interviews for interpretation accuracy. We used NVivo 10 qualitative analytic software to organize, manage, and analyze the data. While creating the codebook, we attempted to increase the credibility of the analysis by employing member-checking exercises with the individual participants. We designed the member-checking exercise to assess our interpretation or understanding of the accounts and perspectives of the participant (Lincoln & Guba, 1985). Before leaving each interview, the academic representative explained the purpose of member checking and invited the participants to voluntarily provide their contact information for the purpose of member checking. However, our member-checking exercises yielded limited results. While all 23 participants provided their information, only 5 (22%) responded to the exercise for further discussion (1 South Asian and 4 Chinese participants).

The brokers were Chinese, South Asian, and Bhutanese refugee community members themselves. In addition, the brokers were the immediate beneficiary in this participatory project. Therefore, we conducted a holistic member-checking exercise, in the form of a debriefing session, with the brokers. During this session, we aimed to assess our independent analysis and also give the brokers an opportunity to discuss their initial reactions to the preliminary outcomes from an organizational perspective. During the debriefing session, the brokers offered organizational insight, as service providers, into what the findings meant to them for future immunization information delivery. Additionally, as immigrants themselves who shared lived experiences with their clients, the brokers offered insights into how different health systems and processes affect women's ability or decisions to take up vaccinations. Thus, broker insights helped to compensate for the lack of participation by the mothers in individual member checking, in turn, increasing the credibility of our study by adding nuance to our analysis.

## Working With the Brokers and Recommendations to Overcome Barriers

#### Positive Outcomes of Working With the Brokers

Our experience working with the brokers garnered many of the same positive outcomes described in other CBPR literature (see Table 1). These outcomes included relevant research development and effective participant recruitment (Halkoaho et al., 2016; Liamputtong, 2008; Spector, 2012; Wallin & Ahlström, 2006), advocacy of the research on the value of the project to the broader community (Lee, Sulaiman-Hill, & Thompson, 2014; Spector, 2012), and guidance with language and cultural sensitivities (Berman & Tyyskä, 2011; Lantz, Viruell-Fuentes, Israel, Softley, & Guzman, 2001; Lee, Sulaiman-Hill, & Thompson, 2014). Of specific importance to our project, the brokers already knew each participant through their service provider–client relationships. Therefore, they offered important input into considerations for the individual life situations of the research participants. This was important for scheduling interviews with mothers in specific locations and times, reducing barriers to research participation.

Even though the brokers had to resign from attending interviews later on in the research, they reviewed and approved the interpretation of data and findings. Many articles have hailed the benefits of broker input into data oversight and interpretation (Flicker, 2006; Krieger et al., 2002; McAllister, Green, Terry, Herman, Mulvey, 2003; Navarro, Rock, McNicholas, Senn, & Moreno, 2000; Parker et al., 2005). In our case, the brokers' feedback on our interpretation was necessary, given the limited feedback we received through member-checking exercises. The knowledge of the brokers as both service providers and immigrant community members helped to validate that our interpretations were accurate and further contributed knowledge about immigrant experiences with settlement and the degree to which they depend on community health information sources to learn about available health services, such as immunization. This additional knowledge was essential for us to develop relevant communication recommendations for future immunization campaigns.

## Challenges in Research Design and Organization

Many of the challenges we faced in our collaboration are similar to those documented in descriptions of other CBPR projects. The brokers had to drastically reduce their intended participation in interviews because the demands on their time were too heavy to add research responsibilities to their day-to-day employment duties. Drahota et al.'s (2016) systematic review of CBPR in general showed that the time requirements to conduct CBPR are the most common barrier for collaborators. Spector's review (2012) for CBPR specifically with service providers also had the same findings. However, our experience is at odds with Spector's perspective that allowing service providers to complete research responsibilities during regular work hours helps overcome time limitations.

In our collaboration with MCHB, we organized all meetings within work hours or in coordination with existing evening meetings to eliminate extra burden in terms of time requirements. Nonetheless, it became clear midway through the research that scheduling had less to do with time constraints than did preexisting employment demands. While brokers had permission to attend meetings and interviews during work hours, they still had the full-time responsibilities of their jobs as established before the research partnership began. Expanding on Spector's recommendation to allow service providers to collaborate during regular work hours, we also suggest establishing research agreements that account for current job demands. How these agreements look will differ depending on the project. Building extra funding into grants for salaries, stipends, or internships of temporary employees or graduate students to cover employment duties may help reduce time burdens of service provider collaborators and allow them to better participate in research activities.

## Challenges for Data Collection and Analysis

Particularly for interview guide design and conduct, our experience offered important insights into mitigating limiting factors of CDPR. The involvement of different researchers and partners had a notable impact on many of the data collection procedures and protocols. Our field notes and reflexive journals helped to highlight and explain the differences in interview conversation topics and resulting themes that took place dependent on who was present at interviews. We learned the nature of the interviewer had a decided effect on what perspectives the participants decided to share. This is consistent with the understanding that knowledge is cocreated and influenced by the characteristics of those involved in the knowledge creation and analysis (Adamson & Donovan, 2002; Finlay, 2002).

We observed two things: first, the influence our interviewers' personal characteristics had on the topics discussed in interviews, and second, the breadth of topics covered due to our use of multiple interviewers. Participants discussed topics related to commonalities shared with the interviewer. For example, the hired postdoctoral translator fit all the inclusion criteria of this research. She was able to relate to the participants as a foreign-born mother with small children. In these interviews, the participants most frequently discussed vaccination and illness prevention in relation to being mothers and how to maneuver the health-care system with small children. The hired South Asian translator did not have children but was an Indian-born woman who had just completed the Canadian citizenship process. With this translator, the women discussed their experiences as immigrants with very rich comparisons of the Canadian, Pakistani, and Indian health-care systems. Our academic representative was a Canadian-born, childless woman in her late 20s. With her, conversations of immunization clinic experiences dominated the interviews. Also, participants asked her more questions about technical and regulatory aspects of vaccination than they did with the other interviewers. The participants often confused her position as a medical student or professional who worked in a hospital, which might explain why they asked these types of questions. With all of these representatives, the mothers shared individual experiences of immunization uptake barriers such as language, transportation, or other issues specific to their new immigrant status. In discussing these experiences, participants would share emotions such as frustration, confusion, appreciation, or other feelings that came with stories of finding doctors' offices and adequate services. Finally, broker-led conversations were the most process oriented of all the interviews. In these sessions, women described experiences in terms of the vaccination process but did not share questions they had or emotions they felt during these processes.

The breadth of interview topics showed a range of issues involved in vaccination decision-making by immigrant mothers. Any interview-based CBPR research requiring language interpretation will require multiple interviewers. Our experience using various interviewers in CBPR supports other arguments that knowledge cocreation provides a more holistic understanding of client attitudes, experiences, and needs in terms of health service use (McNall, Reed, Brown, & Allen, 2009). However, involving multiple interviewers in research creates methodological implications.

For example, some authors will value being able to reflect and understand interviewer influence on the knowledge cocreation processes. For these projects, researchers can thoughtfully hire interviewers based on the project's research question. Matching interviewer characteristics with the participants' based on the focus of research, and making explicit statements of personal characteristics at the beginning of the interview, can help focus interview conversations, if that is what the investigator desires. Conversely, if researchers aim to give participants full range of expression, they might want to limit divulgence of personal characteristics during interviews. However, this might in turn inhibit trust between participants and interviewers, which will also influence the type and level of information disclosed. Thus, CBPR researchers would benefit from future studies that explicitly evaluate the type and quality of knowledge created depending on what types of personal information is offered before interviews begin. Regardless, the choice must be a mindful decision based on an understanding of the potential impact.

In relation to analytical rigor, our research experience shows that using multiple interviewers creates concerns about the ability to achieve or assess saturation. Even though our need to employ multiple interviewers gave us a more complete understanding of the various needs of the participants, the increased number and breadth of discussion topics reduced our ability to achieve saturation in our small and predetermined sample size. The brokers dictated the sample size at the beginning of the project based on participant availability; thus, saturation was not the determining factor for the final number of participants included in the project. Researchers aiming to achieve saturation despite small sample sizes should consider employing the convergent interview method (Driedger, Gallois, Sanders, & Santesso, 2006), which relies on ongoing conversations between interviewers after each interview. Interviewers discuss and include concepts raised in interviews in subsequent interviews to test validity. This method of preliminary analysis is similar to the constant comparison method (Charmaz, 2006), as it informs interview procedures and question guide revisions over time using multiple perspectives to interpret interview data.

Regardless of analytical approaches to interview data, hiring interviewers based on language interpretation needs poses practical challenges for CBPR research. CBPR is often conducted with limited funding (Chen, Diaz, Lucas, & Rosenthal, 2010; Spector, 2012). Especially for cross-cultural research requiring language interpretation, researchers must find ways to optimize research funds to pay for translation without forfeiting qualitative rigor. There are four options for language interpretation in CBPR with immigrant and refugee populations: (a) professional interpreters, (b) cultural brokers with language capacity, (c) bicultural/bilingual students, and (d) overseas trained professionals (Lee, Sulaiman-Hill, & Thompson, 2014). All these options have advantages and disadvantages for CBPR.

At the beginning of our project, having brokers from MCHB conduct the interpretation was the obvious choice. They offered all of their services in kind, were able to recruit participants through their service network, understood community boundaries and language nuances, and had prior experience in interview-based research. While they offered all the benefits that have been documented in similar research (Lee, Sulaiman-Hill, & Thompson, 2014), their time constraints and potential social desirability biases from prior connections with interview participants were a potential detriment, as documented in other CBPR projects (Drahota et al., 2016). The brokers stepping away from their interview responsibilities forced us to explore other interpreter options, giving us insight into benefits that other hiring practices offer.

Professional interpreters are organized, have verified language proficiencies, and have the advantage of relative objectivity; however, they are very expensive, cannot aid with recruitment, and may struggle to interpret answers to interview questions in the correct cultural context (Lee, Sulaiman-Hill, & Thompson, 2014). When the brokers reduced their role in the research, the recruitment was already complete, but we did not have the budget to afford professional interpreters. The PhD student and postdoctoral fellow we hired were a blend between a bilingual/bicultural student and overseas-trained professional. A pitfall of hiring students and overseas trained workers is that they can require intense supervision depending on their level of training and do not have accredited language skills (Lee, Sulaiman-Hill, & Thompson, 2014). Our PhD and postdoctoral interpreters gained practical experience by being in our project but also had prior training in interview or qualitative methods. They had prior research training in their origin countries (China and India) but also had training from their graduate studies in the United States and Canada. The graduate interpreters had knowledge of research protocol and ethics training, could understand and interpret cultural subtleties in participant responses to interview questions, and required less supervision than an undergraduate or master's level student would have required. If researchers find they need interpreters with interview skills but have a tight budget, we recommend hiring a graduate student at the PhD level or higher with prior experience in qualitative or interview methods. We also recommend getting an outside bilingual worker or student to verify interview transcripts with recordings to ensure that interpretation or translation is accurate.

#### Challenges for Informed Consent

Having two people at each interview helped document interview interactions and provided multiple perspectives during preliminary analysis but conversely raised concerns about the influence of the interviewer on the informed consent process. Participant actions during the consent process varied depending on who conducted the interview. Participants never questioned consent or the research process during broker-conducted interviews. Conversely, during the South Asian interviews not led by brokers, participants frequently asked questions about confidentiality and privacy. They wanted to know who would see their signatures, why they had to sign for their honorarium, or what all was involved with the confidentiality processes. No one in the Chinese community questioned the process, even though there was never a broker present.

Researchers, the brokers, and interview participants exhibited various relationship dynamics during the consent process of the qualitative interviews. Perceived power imbalances might have existed causing social desirability biases and restricting participant voluntariness. The literature shows these challenges to be common in CBPR (Liamputtong, 2008; Mistry et al., 2015). Power imbalances were not obvious from the conversations between brokers and participants. However, power imbalances could have been present, as trusting and following the guidance of how to behave is the basis of the relationships between brokers and the women recruited to participate in this research.

Power relationships may explain the participants' lack of practicing autonomy in consent when brokers were present for two reasons. First, participants might have been in a vulnerable position because of historical lack of autonomy given their positions in ethnic minority groups (Aita & Richer, 2005). Second, the mothers might have experienced heightened sensitivity to the context of the interview because of the role the brokers played in the women's personal and family health (Lee & Renzetti, 1990). There is an ongoing conversation among participatory researchers around the issue of power imbalances causing a sense of coercion; however, the evidence from our research does not clarify whether this was an issue.

Conversely, it is important to note that participants might have willingly consented because of the degree of trust the mothers placed in the brokers, leading to fewer questions about research purposes and processes. Regardless, the influence of service providers on the informed consent process has the potential to be problematic because human health research places the utmost value on fully informed and independent consent (Hewitt, 2007).

If researchers conduct the informed consent phase of interviews without a trusted community member present, they might cause more anxiety for the participant, ultimately causing refusal to participate; however, consent without trusted members might create more questions and in turn increased participant understanding of the research and their rights within that research. The fact that mothers asked us questions about the information and consent forms during interviews where brokers were not present is encouraging in that it shows they were becoming informed in the manner intended by the consent process.

#### Table I. Summary of Insights.

What We Knew Before	What This Article Adds
Cultural brokers can have a positive effect on recruitment	If using brokers limits sample size, use multiple interviewers and convergent interview techniques to strengthen validity and the likelihood of saturation
Cultural brokers can offer assistance with language interpretation and guidance on cultural sensitivities	If brokers are unavailable to help translate, foreign-born graduate students or postdoctoral fellows can offer cultural insights, language skills, and have additional benefits of having formal research training. They are also more affordable than professional translation or interpretation services
Service provider research partners often have very limited time and resources available to dedicate to research participation/support	Researchers need to help service providers allocate time to research, rather than add research responsibilities to already full workdays. Grant applications should include a budget item for hiring support staff, giving community partners allocated time for research activities
Interviewer biases and characteristics can influence the direction of conversations in interviews	Choosing interviewers with characteristics related to the research question (e.g., being a mother) can help focus the conversation on topics of the most interest
Power dynamics affect the success of informed consent processes	Using unfamiliar faces, instead of services providers or cultural brokers with previous relationships to interviewees, makes research participants more willing to ask questions before signing consent forms

#### Limitations

It is important to note that we recruited all the participants through a prominent immigrant health service provider in Edmonton. In this article, we emphasized the importance of groups like MCHB to teach new immigrant women to access and maneuver the Canadian health-care system (MCHB, 2003). Having members of the research team who are of the same ethnic group as the participating families can have a positive effect on recruitment (Mistry et al., 2015; Shimpuku & Norr, 2012). However, in our research, our CDPR approach resulted in sampling a population exclusively based on their connections with the brokers, which was not representative of the overall population of women in these three immigrant communities. By working with an important connection between health services and the population of interest, our sample population was living in a best-case scenario. Consequently, we did not adequately represent the range of immigration experiences, especially those of social isolation.

Given their connections with the brokers, the women in this research were not the most vulnerable within an already vulnerable population. Although isolated families might be the most important in terms of potential benefits from improved communication, our particular CDPR approach could not help build connections with these isolated families. Given the needs identified in the best-case scenarios, the immunization promotion recommendations from the study (found in the Canadian Journal of Public Health, Kowal, Jardine & Bubela, 2015) would likely be amplified in isolated communities.

Additionally, in using the brokers to recruit participants, we could only recruit a small and fixed sample. Consequently, we limited our ability to reach saturation and to achieve transferability as criterion for qualitative rigor. Nevertheless, transferability was not the goal of this research. We encouraged a sample that would "create information rich data applicable" to immigrant women in Edmonton (Higginbottom, Pillay, & Boadu, 2013, p. 4).

## Conclusion

By using CDPR, we created knowledge that is relevant and meaningful for the research partners, as well as being useful to health agencies because of the means in which it was developed and validated. This research would not have been feasible without the input and participation of the brokers, especially in the early stages of the research. Unfortunately, existing employment demands caused the brokers to reduce their roles within the research collaboration. Finding ways to help service provider partners fulfill their job demands and conduct research during work hours may require future researchers to build intern staff salaries or other funding budgets and research protocols.

Regardless of stress resulting from the brokers reducing their roles, the input they offered was essential for the success of the project. Accommodating these changing requirements (a necessary part of participatory research) caused us to have multiple people attend and conduct interviews, creating methodological challenges for our research. Personal characteristics of the interviewer, such as being a mother of young children, influenced what information and experiences the mothers shared. Participants tended to share stories based on topics to which both the participant and interviewer could relate. These observations suggest that researchers can target the breadth and depth of the topics covered in interviews by choosing interviewers with particular personal characteristics mirroring the type of knowledge they are trying to create. However, it also means this potential influence on results needs to be accounted for in the analysis and interpretation of findings. Researchers need to make deliberate and informed decisions on whether interviewers should fully disclose their personal characteristics or limit this information. Hiring bilingual/bicultural graduate

students with prior formal research training can help ensure the interviewers have (a) the reflexive capacity to recognize their influences and (b) the research capacity to conduct interviews effectively and ethically.

Our project also shows the impact that interviewer familiarity with the participant has on informed consent processes. Participants engaged less when someone they knew personally or professionally conducted the informed consent process. To increase the likelihood that participants are truly engaging in an informed consent process, researchers should consider designing research protocols that have an unfamiliar individual conduct informed consent regardless of who is involved with subsequent data collection activities.

By documenting our collaboration, we were able to create insight into the types of influences we had on the knowledge created. This influence does not discredit the value of participatory approaches in health research; rather the findings demonstrate the importance of documenting such nuances to understand the context of the results and to inform the design of future participatory research projects.

#### Acknowledgments

We thank the Multicultural Health Brokers Cooperative, Dr. Amrita Mishra and Jian Wang without whom this research would not be possible.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and or publication of this article: Women and Children's Health Research Institute, Canadian Institutes for Health Research, Academic Women's Association (University of Alberta Chapter), and Health Quality Council of Alberta.

#### References

- Adamson, J., & Donovan, J. L. (2002). Research in black and white. *Qualitative Health Research*, 12, 816–825.
- Agency for Healthcare Regional Quality. (2007). Literacy and Health Outcomes: summary of AHRQ evidence report (Report No. 87) [Evidence report/technology assessment]. Retrieved from Agency for Healthcare Regional Quality: www.ahrq.gov/clinic/epcsums/ litsum.htm
- Aita, M., & Richer, M. C. (2005). Essentials of research for healthcare professionals. *Nursing and Health Sciences*, 7, 119–125.
- Bellamy, J. L., Bledsoe, S. E., Mullen, E. J., Fang, L., & Manuel, J. I. (2008). Agency–university partnership for evidence-based practice in social work. *Journal of Social Work Education*, 44, 55–76.
- Berman, R. C., & Tyyskä, V. (2011). A critical reflection on the use of translators/interpreters in a qualitative cross-language research project. *International Journal of Qualitative Methods*, 10, 178–190.

- Cabana, M. D., Lara, M., & Shannon, J. (2007). Racial and ethnic disparities in the quality of asthma care. *Chest*, 132, 810S–817S.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Pine Forge Press.
- Chen, P. G., Diaz, N., Lucas, G., & Rosenthal, M. S. (2010). Dissemination of results in community-based participatory research. *American Journal of Preventive Medicine*, 39, 372–378.
- Crist, J. D., & Escandón-Dominguez, S. (2003). Identifying and recruiting Mexican American partners and sustaining community partnerships. *Journal of Transcultural Nursing*, 14, 266–271.
- Drahota, A., Meza, R. D., Brikho, B., Naaf, M., Estabillo, J. A., Gomez, E. D., ... Aarons, G. A. (2016). Community-academic partnerships: A systematic review of the state of the literature and recommendations for future research. *The Milbank Quarterly*, 94, 163–214.
- Driedger, S. M., Gallois, C., Sanders, C. B., & Santesso, N. (2006). Finding common ground in team-based qualitative research using the convergent interviewing method. *Qualitative Health Research*, 16, 1145–1157.
- Eide, P., & Allen, C. B. (2005). Recruiting transcultural qualitative research participants: A conceptual model. *International Journal* of *Qualitative Methods*, 4, 44–56.
- Finlay, L. (2002). "Outing" the researcher: The provenance, process, and practice of reflexivity. *Qualitative Health Research*, 12, 531–545.
- FitzGerald, J. M., Boulet, L. P., McIvor, R. A., Zimmerman, S., & Chapman, K. R. (2006). Asthma control in Canada remains suboptimal: The Reality of Asthma Control (TRAC) study. *Canadian Respiratory Journal*, 13, 253.
- Flicker, S. (2006). Who benefits from community-based participatory research? A case study of the Positive Youth Project. *Health Education & Behavior*, 35, 70–86.
- Halkoaho, A., Pietilä, A. M., Ebbesen, M., Karki, S., & Kangasniemi, M. (2016). Cultural aspects related to informed consent in health research: A systematic review. *Nursing Ethics*, 23, 698–712.
- Hewitt, J. (2007). Ethical components of researcher-researched relationships in qualitative interviewing. *Qualitative Health Research*, 17, 1149–1159.
- Higginbottom, G., Pillay, J. J., & Boadu, N. Y. (2013). Guidance on performing focused ethnographies with an emphasis on healthcare research. *The Qualitative Report*, 18, 1–6.
- Kowal, S. P., Bubela, T., & Jardine, C. (2015) "If they tell me to get it, I'll get it. If they don't....": Immunization Decision-Making Processes of Immigrant Mothers. *Canadian Journal of Public Health*, 106, e230–e235.
- Krieger, J., Allen, C., Cheadle, A., Ciske, S., Schier, J. K., Senturia, K., & Sullivan, M. (2002). Using community-based participatory research to address social determinants of health: Lessons learned from Seattle Partners for Healthy Communities. *Health Education & Behavior*, 29, 361–382.
- Lantz, P. M., Viruell-Fuentes, E., Israel, B. A., Softley, D., & Guzman, R. (2001). Can communities and academia work together on public health research? Evaluation results from a community based participatory research partnership in Detroit. *Journal of Urban Health*, 78, 495–507.

- Lee, R. M., & Renzetti, C. M. (1990). The problems of researching sensitive topics: An overview and introduction. *American Beha*vioral Scientist, 33, 510–528.
- Lee, S. K., Sulaiman-Hill, C. R., & Thompson, S. C. (2014). Overcoming language barriers in community-based research with refugee and migrant populations: Options for using bilingual workers. BMC International Health and Human Rights, 14, 1.
- Liamputtong, P. (2008). Doing research in a cross-cultural context: Methodological and ethical challenges. In P. Liamputtong (Ed.), *Doing cross-cultural research* (pp. 3–20). Dordrecht, the Netherlands: Springer.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Litonjua, A. A., Carey, V. J., Weiss, S. T., & Gold, D. R. (1999). Race, socioeconomic factors, and area of residence are associated with asthma prevalence. *Pediatric Pulmonology*, 28, 394–401.
- McAllister, C. L., Green, B. L., Terry, M. A., Herman, V., & Mulvey, L. (2003). Parents, practitioners, and researchers: Communitybased participatory research with Early Head Start. *American Journal of Public Health*, 93, 1672–1679.
- Multicultural Health Brokers Co-Operative (2003). *The Multicultural Health Brokers Co-op: Bridging cultures to achieve equity of access to health*. Edmonton, AB: MCHB.
- McNall, M., Reed, C. S., Brown, R., & Allen, A. (2009). Brokering community–university engagement. *Innovative Higher Education*, 33, 317–331.
- Meza, R., Drahota, A., & Spurgeon, E. (2015). Community–academic partnership participation. *Community Mental Health Journal*, 52, 793–798.
- Mistry, J., Berardi, A., Bignante, E., & Tschirhart, C. (2015). Between a rock and a hard place: Ethical dilemmas of local community facilitators doing participatory research projects. *Geoforum*, *61*, 27–35.
- Navarro, A. M., Rock, C. L., McNicholas, L. J., Senn, K. L., & Moreno, C. (2000). Community-based education in nutrition and cancer: The por la Vida Cuidándome curriculum. *Journal of Cancer Education*, 15, 168–172.
- Oxman-Martinez, J., & Hanley, J. (2005). Health and social services for Canada's multicultural population: Challenges for equity. Ottawa: Heritage Canada.
- Parker, E. A., Robins, T. G., Israel, B. A., Brakefield-Caldwell, W., Edgren, K. K., & Wilkins, D. J. (2005). Developing and implementing guidelines for dissemination: The experience of the Community Action Against Asthma Project. In B. A. Israel, E. Eng, A. J. Schulz, & E. A. Parker (Eds.), *Methods in community-based participatory research for health* (pp. 285–306). San Francisco, CA: John Wiley.

- Replanski, D. (2006). Promoting Healthy Living in BC's Multicultural Communities (Report No. 24.1) Retrieved from Affiliation of Multicultural Societies and Service Agencies of BC website: http://lin. ca/resource-details/5757
- Schulz, A. J., Israel, B. A., & Lantz, P. (2003). Instrument for evaluating dimensions of group dynamics within community-based participatory research partnerships. *Evaluation and Program Planning*, 26, 249–262.
- Shimpuku, Y., & Norr, K. F. (2012). Working with interpreters in cross-cultural qualitative research in the context of a developing country: Systematic literature review. *Journal of Advanced Nur*sing, 68, 1692–1706.
- Spector, A. Y. (2012). CBPR with service providers arguing a case for engaging practitioners in all phases of research. *Health Promotion Practice*, 13, 252–258.
- Wallin, A. M., & Ahlström, G. (2006). Cross-cultural interview studies using interpreters: Systematic literature review. *Journal of Advanced Nursing*, 55, 723–735.
- Zanchetta, M. S., & Poureslami, I. M. (2006). Health literacy within the reality of immigrants' culture and language. *Canadian Journal* of *Public Health*, 97, S26–S30.

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