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Caring as a Facilitator of Sensitive Research Studies with Immigrant Latino Families

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Abstract

Although caring is a fundamental concept in nursing, it is underutilized in our research with underserved populations and communities. Disch's definition of patient-centered care was adapted to define the elements of caring in research work with underserved communities. The study's purpose was to demonstrate how to conceptualize and operationalize caring in the research process. Demonstrating caring in our attitudes and actions is essential to the success of our research work. The proposed research process aids in applying caring into our engagement with community stakeholders and recruitment of minority participants, whether we conduct community-based participatory research or clinical trials.

Keywords

caring; Latinos; participant recruitment; health disparities; patient-centered care; community-research partnerships

The concept of patient-centered care was first introduced into health care over 25 years ago (Gerteis, Edgman-Levitan, Daley, & Delbanco, 1993). A decade after its first use, the Institute of Medicine included patient-centered care in its landmark report *Crossing the Quality Chasm* (2001) as a fundamental approach to improving the quality of U.S. health care. Since then, patient-centered care has been widely taught and applied to health-care practices including nursing. Furthermore, in a *Nursing Outlook* editorial, renowned nurse scientist Joanne Disch defined patient-centered care as "caring for patients and their families in a holistic, personalized, relationship-based way that honors their preferences, needs, and

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values” (2012, p. 237). Relationships built upon trust between health-care providers and patients make patient-centered care possible. The concept of patient-centered care is especially important in conducting research with underserved communities, in light of a history of vulnerable communities being exploited (Wertheimer, 2008). We believe that Disch’s definition of patient-centered care establishes the elements of caring that can be transferred to the ways in which research is conducted.

The purpose of this study is to demonstrate how to conceptualize and operationalize caring in the research process. Such operationalization of caring informs the formation of research teams, recruitment and retention, and maintenance of partnerships with communities. As the first step, Disch’s definition of patient-centered care is modified to best conceptualize and operationalize caring into the research process; then we illustrate principles of caring as part of conducting research with underserved communities by using examples from three studies. This is the first study to expand the literature on caring within the research-process literature (e.g., Kavanaugh, Moro, Savage, & Mehendale, 2006; Swanson, 1993) and apply it to research with underserved communities. The operationalization of caring into the research process is particularly critical for health-disparities research, because researchers may be unfamiliar with or different from the communities with whom they work. Unfamiliarity can be due to differences in racial, ethnic, or cultural backgrounds as well as socioeconomic status. Oftentimes vulnerable communities experience health disparities due to socioeconomic status, racial or ethnic minority status, language proficiency, sexual orientation, or limited resources to prevent disease and maintain health. When integrating caring into the research process, the concept of insider and outsider helps to elucidate the meaning of similarities and differences in values and characteristics between research teams, and the community or participants in the research study.

The concept of insider (i.e., member of an oppressed group) and outsider (i.e., not a member of an oppressed group) was introduced by Narayan (1988). That article highlighted the feminist notion of the epistemic privileges of insiders. Some experiences are unique to insiders; however, with a willingness to learn, outsiders may offer a perspective on the broader context of the insiders’ situation. Moreover, oftentimes one can be an insider in one sense (e.g., a member of a racial or ethnic minority) while being an outsider in a different sense or from another oppressed group (e.g., a woman). Given that every person consists of multiple characteristics, any one person will be an insider and an outsider at the same time. Learning about the insider–outsider construct allows researchers to reflect on who we are and to better integrate caring into the research process.

Method

This was a secondary analysis of data from three studies. Data used for this study consist of research-study recruitment field notes, focus-group summaries from before data collection, and other relevant documents of three studies that focused on Latina health care (Beeber et al., 2010, 2014; Matsuda et al., 2014). Qualitative descriptive analysis was conducted (Hsieh & Shannon, 2005). The intervention is an adaptation of Beeber and colleagues’ previously developed interpersonal psychotherapy with parent enhancement (WINGS study; Beeber, Holditch-Davis, et al., 2010; Beeber et al., 2013). All participants in the study were mothers

of Latina ethnicity with limited English proficiency who had young children ($n=20$). The second study (EI study) examined the mental health of mothers with young children with a developmental delay or disability who received early-intervention (EI) service to aid child development (Beeber et al., 2014). The sample included both Spanish- and English-speaking mothers ($n=106$). The third study (Latino-couples study) examined sexual-relationship power and family-planning attitudes of immigrant Latino couples (Matsuda et al., 2014). Inclusion was limited to pregnant women and their partners ($n=80$). All of the studies were conducted in the southeastern United States. Recruitment rates for the three studies were as follows: For the Latino-couples study, 130 were approached, 46 were ineligible, and 40 women and their partners were recruited and completed the study in approximately 3 months; for the EI study, out of 127 mothers who expressed interest, 106 were recruited and completed the study (recruitment rate: 83%) in 11 months; and in the WINGS study, 56 mothers were contacted and 20 were eligible and recruited into the study over the course of 13 months (recruitment rate: 36%). Retention for all three studies was at least 95% (95% retention rate for the WINGS study [19 out of 20 participants completed all stages of data collection], 100% for the other two studies).

We used the directed content-analysis (theory-based) approach as a basis of the current study's data analysis. Directed content analysis is an approach guided by an existing theory or research, and categories are predetermined. This approach is most suitable in validating or extending existing theoretical frameworks or research (Hsieh & Shannon, 2005). For the current study, Disch's definition of patient-centered care was adapted and operationalized to fit the application of caring to the research process. We reviewed focus-group notes, field notes, and documents from three research studies, and extracted examples that demonstrate caring in the research process. Then we used the adapted and operationalized definition of patient-centered care to sort the data into three dimensions of caring in the research process.

The adapted definition of caring for the research process has an underlying philosophical position that community well-being is as important as the science. From this philosophical position, we propose the following three operational definitions for applying caring into research process.

Recognize Mutual Expertise of Both Community and Researchers

Trust building is the foundation of working respectfully as partners, and continuous dialogue between two parties is essential in gaining each other's trust, knowing about each other's expertise, and understanding the context of each other's challenges and weaknesses. Actions matter in building trusting relationships. Sincerity, honesty, and consistency in actions are crucial. For example, as partners, our actions and words should match at all times, and we should carry through on the promises made. Through such ongoing partnership between the community and researchers, both parties can critically examine the research protocol from both perspectives, come to agreement on changes, and improve on it by taking advantage of each partner's expertise. This process may take time up front; however, when thinking about the overall success of the research, taking time to reflect and dialogue with the community partner is a necessary time investment. In addition, researchers need to ensure that the revision of the protocol and agreement made with the community are consistent with what

was submitted to the institutional review board as well as the original grant proposal. Depending on the types of changes, researchers may need amendment from the institutional review board or discussion with the program officer of the funded grant.

Expand Research Elements by Adding Factors Critical to Maintaining the Partnership Between the Community and Researchers

These factors are considered important because the health and welfare of the overall community are important to researchers and are necessary to sustain a trusting relationship and partnership. Although not included in the original plan or a part of the research plan, identifying and responding to the needs of the community partners fosters the two parties' relationship, and thus contributes to successful execution of the research. In addition, researchers' interaction with community-agency workers can be helpful in learning about the partner's organization. Research recruitment may be done without the face of researchers; however, showing our faces in the agency and responding to the community agency's needs enables researchers to demonstrate caring.

Take Actions to Change the Research Protocols and Processes to Fit the Community's Needs

This is an ongoing process to continuously reflect and improve research protocols through the reflection of the research team and community while maintaining the scientific rigor of the study. What distinguishes this point from the first point is the source of change. In this point, change comes from field staff's interactions with participants on daily basis, rather than discussion on the level of the community agency. Research teams need to understand the life context of participants and flexibly consider and accommodate their needs while collecting necessary data at each time point.

Results

Data were organized under three major dimensions of caring: recognize mutual expertise of both community and researchers, expand research elements by adding factors critical to maintaining the partnership between the community and researchers, and take actions to change the research protocol and processes to fit the community's needs.

Recognize Mutual Expertise of Both Community and Researchers

All the studies closely worked with community partners, but the way of operation differed per study. For the WINGS and Latino-couples studies, the academic research team determined the project structure and the community partners served as expert consultants. The researchers from both studies cultivated relationships with the community partners prior to the projects. The research leader of the WINGS study built trust with the community partner through a prior research collaboration. The academic research team recognized the expertise of the community partner and sought consultation on the study implementation. The team ensured mutual consensus in the study implementation before the study execution. The research leader of the Latino-couples study provided care at the clinic and built working relationships with the clinic's health-care team. The research leader clearly recognized the expertise of the health-care team for their years of experience in providing care to pregnant

women and their families, and consulted about the study execution. For example, she consulted with the clinic staff about study recruitment so that recruitment was done with minimum interruption to the clinic flow.

For the EI study, on the other hand, the EI agency director (the community partner) was a functioning research-team member throughout the study, and thus project structure was jointly determined by academic and clinical teams. The project idea developed because the EI agency director sought help from one of the research-team members due to high prevalence of depressive symptoms among mothers of children receiving EI. EI services focus on children's developmental needs; however the mothers' involvement in routine-based care is critical for children to receive maximum benefit from EI services. The director of the EI service for the county was an insider and knew the community from the mothers' perspectives, EI providers' perspectives (e.g., speech therapists, physical therapists), and case coordinators' perspectives. The EI agency director's inspiration to meet the needs of the community through research enabled the team to launch the academic-community partnership, shaping the form of the research-study structure. The mutual expertise was recognized from the beginning, and trust was built through working together in developing a grant proposal followed by regular research-team meetings.

The composition of the team was also critical in bringing experts into the research who knew the culture of potential participants. For the WINGS and Latino-couples studies, the research-team leaders made an effort to systematically recruit decision-making members to the research team (e.g., scientists, clinicians, and field staff) with cultural and linguistic similarities to the target community. For example, the research leader of the WINGS study learned about differences among Latinas that impeded field-staff engagement with participants from their previous studies. Although they were language and cultural insiders in many respects, some field staff did not engage as well as anticipated with Latina participants due to differences in socioeconomic status and cultural backgrounds (e.g., country of origin, rural vs. urban living, class). Therefore, the research leader carefully took into consideration the heterogeneity among Latinas for the systematic recruitment of research-team members for the WINGS and EI studies. For the Latino-couples study, the team member was chosen based on the systematic need to recruit and collect data from men about sexual matters. As the research-team leader physically appears non-Latina (outsider) to potential participants, she determined that her research-team member should possess similar backgrounds and appearance to potential participants (insider).

Study measures were reviewed with community partners and research teams prior to the pilot testing for all three studies. Based on feedback, study teams made appropriate changes to the study measures. For example, for the EI study, one of the research-team members expressed concern about the readability of a maternal self-efficacy measure specific to EI. The team accommodated this concern by adding a general maternal self-efficacy measure that had been used in prior studies. This self-efficacy measure is not specific to EI, but validity and reliability have been established with both English and Spanish measures. For the Latino-couples study, the research-team member who has similar demographic characteristics as potential participants completed the survey and pointed out that the length of survey was too great. Potential participants were not accustomed to taking long surveys.

Therefore, the research team decided to reduce the number of questions and offer participants a break at each study visit along with refreshments. The WINGS study presented potential mood measures to stakeholders and selected final measures based on their guidance. For example, when reviewing mood measures, community partners identified the impracticality of one because of its length and a preference for another because of its format.

Expand Research Elements by Adding Factors Critical to Maintaining the Partnership Between the Community and Researchers

The lead researchers of all three studies understood that assessing the needs of community partners and responding to them was an essential element of maintaining collaborative relationships with their community partners. All three studies contributed to the community in a meaningful manner by helping to meet their needs within their time frame, although the researchers' responses, in terms of both needs and timing, differed based on the contexts and settings of the partnerships.

For the Latino-couples study, the lead researcher observed the flow of patients through the clinic and conducted a pilot study prior to the data collection of the main study. During her observation, she learned that the clinic had only one Spanish–English interpreter, even though almost 40% of the entire clinic population spoke only Spanish. The clinic had some Spanish-speaking registered nurses, but these nurses had their own patients to whom they had to attend to assure smooth flow in the clinic. Therefore, they were often unavailable to function as interpreters for physicians and nurse practitioners. The lead researcher did not intend to act as an interpreter at the clinics; however, she did so because the need was obvious. If the clinic did not run smoothly, it would be difficult to explain the research study to the potential participants. The lead researcher was trained as a medical interpreter in Spanish and therefore was qualified to serve and properly registered as a volunteer for the clinic.

For the WINGS study, the lead researcher met the cultural insider through a community event, and the cultural insider asked the investigator to help lead a therapy group to alleviate depressive symptoms for victims of domestic violence. The researcher led the group for 4 years, nurtured relationships with the agency, and conceptualized the study during that time. Therefore, the investigator responded to the needs of the community even before the research study began. The investigator showed caring for the community's well-being through timely responses to their needs.

For the EI study, as the research team developed relationships with the EI agency, they learned that the agency staff wanted further education on maternal depressive symptoms. This need was expressed by the EI agency director, a research-team member. One of the lead researchers conducted educational sessions about maternal depressive symptoms for the agency staff. Her expertise includes intervening to alleviate maternal depressive symptoms for underserved mothers with young children. During her visits to the agency, the lead researcher also conducted interviews with the EI agency staff about their perceptions of maternal depressive symptoms and sought ideas to realistically incorporate screening and educational measures into their interaction with mothers. As the agency staff understood

more about the study, they contributed to the recruitment of mothers into the study. This example shows the potential mutually beneficial impact of providing what the community needs.

Through responding to the communities' needs, the investigators of all three studies were visible to their respective community: to both staff and patients/clients at the clinic (Latino-couples study), at the therapy groups (WINGS study), and at the EI agency (EI study). The EI study is unique in that the staff–client interactions occur at clients' homes or through phone conversations. However, increasing the research team's visibility among the EI staff has had positive impacts on continuing to build the relationships and on the recruitment effort. When the researchers had direct contact with staff, patients, and clients, they took advantage of the opportunities to demonstrate caring through their verbal and nonverbal interactions.

Take Actions to Adapt the Research Protocols and Processes to Fit the Community's Needs

The research teams operated under the notion that the recruitment and research data-collection protocols and processes would be adapted on an ongoing basis to accommodate the community's needs without sacrificing the rigor of the studies. This process starts even before the data-collection phase with pilot testing of the instruments and solicitation of input from individuals who are similar to potential participants. For the EI study, the research team conducted focus groups and gained perspectives from mothers about their processes of accepting their child's need for EI and their child's diagnosis (if applicable), as well as the lack of support relating to their depressive symptoms (mothers did not recognize their symptoms because their focus was on their child; therefore they did not have support targeting their symptoms). Mothers also expressed fear and stigma associated with developmental delay and disability following their child's preschool period. The researchers planned to administer the Mullen Scales of Early Learning (a developmental assessment tool for young children spanning cognitive, language, and motor abilities) but chose not to because mothers thought burdensome to do so while also providing data to the researchers and monitoring their children during the assessment. Instead, data were obtained from the community partners' assessment-record data after permission was obtained from mothers.

For the WINGS study, feedback from focus groups and individual participants throughout the data-collection period provided information about study instruments, recruitment strategies, incentives, and other pertinent issues. For example, soon after the study began it was noted that participants mentioned anxiety symptoms often. Measures were added to the data collection based on this initial observation. Participants and stakeholders provided feedback to select the right balance of adding to the interview without overburdening participants. For the Latino-couples study, there was no formal focus group. However, the lead researcher spoke with some individuals similar to potential participants and pilot tested the questionnaires prior to data collection to test for feasibility and to make sure that the lengths of the questionnaires were manageable. All three studies sought guidance to improve and adjust recruitment. For example, the WINGS study sought feedback from insiders with similar backgrounds as participants to select incentives for participants. In the EI study,

incentives were adjusted (increased) and resulted in an increase in the rate of study recruitment. Recruitment notes were also carefully evaluated in all three studies to adjust recruitment for the unique samples. For example, the EI study adjusted the recruitment protocol to meet the community's needs. EI case coordinators facilitated recruitment by sharing the study with potential participants and offering a permission-to-contact letter they could use to mail, fax, or call the researchers to learn more about study participation. These letters were provided in English and Spanish along with prepaid envelopes. This facilitated the process for EI case coordinators, providing options that could be adapted for the particular families' needs.

All three studies had a mechanism in place by which the research team (both researchers and field staff) debriefed regularly throughout the data-collection period. During the EI study, field staff went to the mothers' houses for data collection, saw a snapshot of how they lived, and heard their stories, which included difficult times they faced and depressive symptoms they experienced. Many of the mothers had multiple children with developmental delays and disabilities on top of serious financial crises. Hearing the mothers' emotions regarding dealing with all the stresses affected field staff. In extreme cases where field staff needed to debrief urgently, ad hoc meetings would be held. Otherwise, regular team meetings served as a way for field staff to express their reactions from the data-collection visits and learn from each other. Most of the field staff had a background in either psychology or nursing. As individuals who cared about these mothers and families, they provided resources the mothers could seek in support for their situations. However, they went to the mothers' houses as researchers, not caregivers or clinicians. Such role distinction was part of the discussion during debriefing meetings.

For the Latino-couples study, the research team consisted of two individuals, and they always went to collect data together; the lead researcher collected data from the female participants, and the male research assistant collected data from the male participants. Because they rode together to the data-collection visits, their driving time was spent debriefing. Being able to debrief each time and right after the data-collection visits allowed timely debriefing. In addition, hearing about male data collection was very informative to the lead researcher. She met with her dissertation chair regularly to debrief. When bigger protocol changes were needed, they could discuss them, and the dissertation chair guided and supported the researcher's decisions.

The matching technique was used with caution. Matching means systematically pairing like characteristics between the research team and participants. Race or ethnicity is the most common matching characteristic (Ashing-Giwa, Padilla, Tejero, & Kim, 2004; Cook, Godiwalla, Brooks, Powers, & John, 2010; Heiney et al., 2006; Yancey, Ortega, & Kumanyika, 2006). However, the effectiveness of matching with race or ethnicity as well as other characteristics has not been vigorously tested. Moreover, individuals possess many characteristics (e.g., race, ethnicity, language proficiency, gender, socioeconomic status, education completed); therefore, researchers need to carefully decide which to match with researchers and participants. For all the studies, gender and language proficiency were matched. However, the EI and WINGS studies used the same matching characteristics, in comparison to the one used by the Latino-couples study. The EI and WINGS studies were

structured so that field staff visited mothers' houses during the day to collect data. Many times, a field-staff member and a mother would be the only adults in the home. Therefore, hiring female field staff was critical. The potential study participants included both Spanish- and English-speaking mothers; therefore, when possible, the study team preferred bilingual field staff. When they were hiring field staff, the lead researcher and the team ensured cultural knowledge and Spanish proficiency of interview candidates because conversational skills alone did not indicate that they were able to collect data in Spanish (they needed technical skills in managing language and comfort in asking about emotional topics in community settings). The interview process included Spanish conversation with one of the research-team members. At the same time, English proficiency of the field staff was important. For bilingual individuals for whom Spanish was their first language, English proficiency was assessed. For the Latino-couples study, gender and language proficiency were matched; however, the way this study matched gender and language proficiency was different from that of the EI and WINGS studies. The Latino-couples study needed one female and one male field-staff member because the study was about exploring participants' perceptions of family planning, communication about sex, and power dynamics with partners. Matching the gender of the interviewer and the participant put participants at ease to answer sensitive questions. Both field-staff members in this study were bilingual in Spanish and English. The race and ethnicity of the female field-staff member (lead researcher) were not matched. She is Asian, but because other characteristics were matched (gender and language proficiency), her appearance did not seem to negatively affect data collection. Rather, it may have had a positive impact on recruitment, because potential participants were curious to talk to an Asian person who spoke Spanish fluently.

Recruitment strategies were formed and appropriately adapted considering the priorities of the participants. Field staff of all three studies understood that participants were juggling many life priorities (e.g., home, work, children, health, and family matters in their country of origin); in particular, families may be operating with very limited resources due to poverty. This may mean that families rely on others to meet their daily needs (e.g., getting ride to go to a grocery store, waiting for husband's arrival from work to run errands). Therefore, research studies ought not to interfere with participants' meeting their life priorities, but should instead work around them. Specific strategies used include calling at a different time of the day, asking the participants about the best time to call, calling from different phone numbers (using research staff's cell-phone number, which may be a long-distance number, then in case of no response, calling from the local research-office number; some participants seemed to think that debt collectors were calling when they received calls from long-distance numbers, and were therefore more likely to answer calls from a local number), giving participants both the field staff's and office's phone number to contact if something came up that required rescheduling, and having participants choose the study-visit location. In the WINGS study, participants often had inconsistent telephone service or ability to navigate cell-phone voice-mail systems. We asked about participants' preferences and listened to those who suggested calling in the evening (to not add to their limited minutes), asked to contact them through a neighbor or family member, and showed concerns about their not being able to check their voice-mail messages by calling them more often. For the Latino-couples study, most of the data collection occurred at night or on weekends at

participants' homes. For the WINGS and EI studies, study visits were also conducted at participants' homes. The recruitment-protocol modifications should be considered to best support data collection while maintaining the scientific integrity of the data. For example, in the EI study, although field staff usually collected data alone, the research team incorporated a procedure to assess and offer child care during data collection. This support helped mothers to focus on answering questions and talking rather than multitasking (providing data and attending to children's needs at the same time).

Finally, giving appropriate incentives and establishing a population-appropriate procedure were important parts of adapting the recruitment procedure. For the EI study, following consultation with the team and the EI agency director, the study incentives were increased from \$30 to \$50 in the middle of the data-collection phase. This decision required consultation with the EI agency director to avoid violating an agency policy and to provide reasonable incentives to participating mothers. This increase in incentive increased the number of phone calls to the office (a 500% month-over-month increase in the number of phone calls the month following the increase) and directly led to an increase in the number of study visits (steadily completing seven or eight visits per month, as opposed to sporadic increases in study-visit completion during previous months). For the Latino-couples study, an issue arose from the university procedure of giving incentives. The university required participants' Social Security numbers upon the receipt of the study incentive. Many if not all of the study participants were undocumented, and thus did not have Social Security numbers. Therefore, asking for one was insensitive. The lead researcher worked with the research office and found a way to give incentives without asking for a Social Security number (i.e., give gift certificates rather than university-issued checks). The collection of personal information (e.g., names of family members, addresses, Social Security numbers) was carefully thought through in all studies with the help of feedback from team members and prior experiences, as well as consultation with research offices. Although these seem like demographic information that is common in research studies, they are especially sensitive data for families from immigrant or mixed-status households.

Discussion

This study was the first to demonstrate how caring can be applied in the research process as part of the successful execution of community-based research with underserved communities. Caring was conceptualized and operationalized into three research processes: recognizing mutual expertise of both community and researchers, expanding research elements by adding factors critical to maintaining the partnership between the community and researchers, and taking actions to change the research protocols and processes to fit the community's needs. The first process focuses on the level of the community agency or stakeholders, whereas the third focuses on field staff's interactions with participants on a daily basis. The focus of the latter is to better understand the life context of participants and flexibly accommodate their needs while maintaining research rigor, yielding a better quality of research.

Kavanaugh et al. (2006) also employed caring in the research process by applying Swanson's (1993) middle-range theory of caring in recruitment and retention processes in

their research on perinatal loss and decision making regarding premature infants' life support. However, the application was limited to their interactions with research participants. Only our study addresses the critical nature of collaborative relationships with community agencies when conducting research in community settings. Kavanaugh et al. paralleled the third process of caring in our study in the sense that they focused their effort solely on a participant level. Moreover, elements of Swanson's theory overlap with concepts of the research process in this study. For example, maintaining belief is one of the elements in Swanson's theory—believing in participants' capacity. Our study's first caring process has an underlying assumption that researchers view community agencies as partners offering a unique contribution. "Being with" is another element of Swanson's theory, which refers to being with participants (e.g., at the time of grief and loss in the research study by Kavanaugh et al., even though that requires extra time for research staff) and providing support as research staff (not clinicians or therapists). Our study's second caring process emphasizes attending to what a community values and supports. Knowing and enabling are other elements of caring in Swanson's theory that Kavanaugh et al. applied in their research. Knowing is not making assumptions, and understanding the life context of participants; enabling is giving participants autonomy and choices whenever possible. These elements mirror the third of our caring processes. Therefore, while similarities exist, our study addresses research processes that integrate caring for community-based studies with underserved populations.

The application of the third process led to efficient recruitment and retention. Such efficiency results in cost savings, because research is conducted at a quicker rate and can lead to faster development of knowledge and interventions that are generalizable to broader communities than those historically included in research. For example, from recognizing the mutual expertise of communities and researchers, effective strategies were identified that hastened study recruitment and retention. Not many published studies report their recruitment rates, particularly rates of participants who are members of racial or ethnic minorities (Yancey et al., 2006). However, when compared to those who do report (Agency for Healthcare Research and Quality), our retention rates were much higher (i.e., upward of 95%). On the other hand, both the WINGS and Latino-couples studies had lower recruitment rates than the EI study, because of the recruitment and data-collection approach. In the WINGS study, data collection and enrollment were continuous over the course of a year, with an extensive screening process. Although the recruitment rate appears low, the retention rate was 95%. Intervening for mothers with multiple social challenges and achieving a 100% retention rate is impressive. In the Latino-couples study, the research team approached potential participants in the waiting room, whereas in the EI study, potential and interested participants took the initiative to participate by contacting the researchers. Simple modifications to typical approaches (e.g., calling potential participants several times after not being able to get through or after leaving a voice-mail message) were effective because they were tailored to the lives and needs of study participants. Specific approaches that were effective may apply to other communities with similar backgrounds, but should be assessed with input from the community of interest.

The effort to partner with communities can also lead to studies that are more likely to be effective. Implementation in real-world settings requires measures, procedures, and

interventions that are feasible and practical in the community. Therefore, taking a flexible approach and incorporating changes based on community needs is more likely to create uptake and sticking power, as well as higher implementation beyond the initial research phase. The balance between tailoring and research rigor can be maintained with thoughtful selection of research-team members and processes to ensure caring for the target community.

Partnership with communities benefited the communities as well as researchers, as it led to development of insider knowledge and more insightful research questions and interventions. Researchers start as outsiders to the partnering community agency. However, as they closely work together and obtain research data and learn about participants' experiences, they gain the perspectives of insiders and are no longer complete outsiders (Corbin Dwyer & Buckle, 2009). This is a unique acculturation process that researchers may experience during the research process. However, at the same time, community agencies may not perceive researchers as the insiders that researchers perceive themselves to be. Therefore, researchers must carefully attend to where they position themselves on the insider–outsider continuum and be aware of how community agencies perceive their status.

In this study, we illustrated how principles related to caring can be applied in the research process when working primarily with immigrant Latino communities. These caring principles can be applied beyond the context of the presented work. The research process can seamlessly fit with community-based participatory research, a collaborative research approach in which community partners are integrated throughout the research process (Minkler & Wallerstein, 2008). At the same time, the caring principle can be applied during clinical trials, where researchers may be recruiting participants through specific community agencies and organizations, units in hospitals, or combinations. Wherever researchers are perceived as outsiders during the research process, we can apply the caring principles in our research process. Whomever we work with, we must sustain our efforts and maintain our attitudes and corresponding actions to demonstrate caring during the research process.

Conclusion

Demonstrating caring in our attitudes and actions is essential to the success of our research. We conceptualized and operationalized caring into three research processes: recognizing mutual expertise of both community and researchers, expanding research elements by adding factors critical to maintaining the partnership between the community and researchers, and taking actions to change the research protocols and processes to fit the community's needs. The proposed research process aids in applying caring in our engagement with community stakeholders and recruitment of minority participants. This principle is applicable whether we conduct community-based participatory research or clinical trials.

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