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COLLABORATIVE INQUIRY WITH LOW-INCOME LATINA WOMEN

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Abstract: Collaborative inquiry is a form of research in which researchers and participants work collaboratively as partners. The purpose of this paper is to demonstrate the process of collaborative inquiry through an example of a longitudinal, community-based study conducted over a six-year period. The research program focused on HIV education, counseling, and antibody testing with low-income Latina women attending a nutrition program for women, infants, and children (WIC) in Los Angeles. Collaborative, community-based inquiry emerges from the community and uses members of the targeted group to design the program, convey the message, act as advocates, evaluate the outcomes of the program, and disseminate research findings. The goal is empowerment and emancipation of both participants and researchers. Five areas in the conduct of community-based collaborative inquiry are demonstrated here: program design, implementation, evaluation, dissemination of the results of the program, and empowerment and emancipation.

Key words: Collaborative inquiry, community-based research, low-income Latina women, HIV prevention.

Collaborative or participatory inquiry is a form of research that is conducted with and for the participants as collaborators.¹ It is an approach to conducting research in which both researchers and participants contribute to the creative thinking and planning that goes into the research project and to the intervention that is the object of the project and share in the products of the process. Participants and researchers work together as equals with respect for each other's expertise and contributions. There are several forms of collaborative inquiry that have emerged from a philosophy of holistic human inquiry, feminist principles, critical social theory, applied anthropology, and action research.¹⁴ Methods used in collaborative inquiry can be qualitative and/or

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quantitative or market strategies and/or public health approaches.⁹ The commonality among these forms of inquiry is that in all approaches, the researchers are working openly, directly, and collaboratively with the participants as partners, and the object of the research is to put knowledge into action. There is an emphasis on a continuum of activity that consistently involves the participants in the process with the goal of emancipation through the acquisition of knowledge, skills, and power. Recently, these elements have become defining characteristics of what has been called community-based research.⁹⁻¹²

The purpose of this paper is to demonstrate the collaborative inquiry process through an example of a longitudinal study with a socially marginalized group. The form of collaborative inquiry demonstrated here is very similar to what has become known as community-based research.¹⁰ The research was conducted with low-income Latina women attending a nutrition program for women, infants, and children (WIC) in Los Angeles.¹³⁻²⁰ The characteristics of community-based research are that it emerges from the community and uses members of the targeted group to design the program, convey the message, act as advocates, and evaluate the outcomes of the program.^{9,11,12,21,22} Successful community-based research programs collaborate with other community programs to share resources and information. Successful programs also foster group pride and empower the community to respond constructively to its problems. This research with low-income women demonstrates each of these collaborative inquiry and community-based research characteristics.

This research with low-income women in addition has elements of the interactive, iterative approach described by Cunningham.²³ Interactive research uses components of action learning and self-development, and there is constant interaction between research workers and participants that may call for change in the focus of the research as it progresses. Nevertheless, the problems to be addressed and the participants remain central to the research activity.

Method

The principles behind collaborative inquiry embrace an integrated humanlearning process and, as noted, represent several different fields of endeavor. Collaborative inquiry is based first on a recognition of the cultural and political context of the research situation and participants.^{3,7,8,24} Collaborative inquiry recognizes and attempts to provide a solution to the power imbalances that exist between community members and academicians/researchers in the traditional research situation. Second, collaborative research can be particularly responsive to populations that are marginalized and more vulnerable to increased health problems, premature death, and diminished quality of life.²⁵ Another principle of collaborative inquiry is that the "subjects" are equal partners and participants in the entire research process and share in the product or outcomes of the research. Collaborative inquiry also provides a range of alternative interventions that acknowledge the different ways of meeting participants' needs. Therefore, evaluation of the outcomes of collaborative research is done from the perspective of the participants; that is, do they believe the research program made a difference in their lives? Finally, collaborative inquiry results in the acquisition of power by the participants and community through the use of the knowledge and skills they have generated throughout the process.²⁶ Reason has summarized the objectives of collaborative inquiry: (1) to produce knowledge and action directly useful to the community to be served (the participants) and (2) to empower people (the participants) through the process of constructing and using their own knowledge.⁷ Emancipation of participants and the community through empowerment is an expected result.

Clearly, the collaborative inquiry approach to research reflects a paradigm shift from the traditional research process. The traditional research process reflects the scientific method, which is an exercise in seeing the world selectively from a detached, objective, clinical, and "pure" perspective (see Figure 1). To carry out research according to the scientific method, a prescribed set of steps are followed by persons trained and designated to carry out these steps. Every effort is made to become and remain value free throughout the process. In the traditional research framework, the researcher and research team design the study, recruit subjects, collect and analyze data, and publish and present data in research and clinical forums. The research develops science and generates additional questions, improved methods and analysis, and improved clinical practice. The traditional research process often also reflects power imbalances that invalidate or silence the expertise of community members and leaves them with little to show for their involvement in research. At the same time, "outsider" academicians and researchers conducting the research have been well rewarded both in status and finances.

In contrast to the traditional research process, collaborative inquiry involves an assessment and evaluation that depends on the participants (subjects). In the collaborative inquiry model, the questions to be studied are developed collaboratively by the researcher and the participants (see Figure 2). Participants are those persons involved in the natural setting or the "community" to be served. Collaborative inquiry emphasizes the participation of the community to be served in designing, evaluating, and using the products of the research. Community members are the sources of data, data collectors, and advocates for the project. Data are analyzed with a view to their utility in the community. Results are evaluated by community members in terms of their effect on improved community health, increased knowledge, and acquired power over health and resources. These are inescapably value-laden issues. The "products" of the research belong to the participants and are shared resources between community members, organizations, and research workers. Results are disseminated in public forums as well as clinical and research forums. Collaborative inquiry generates and identifies additional questions and improved methods. It also generates community power and

	PROCESS						OUTCOME			
	De <u>sian</u>		im	implementation		Evaluation		Dissemination Empo		
Process and outcomes	Determina- tion of the problem	Cuestion- selection	►Method= specifi cation	Data	Data 🛁 🍽 analysis	Interpre tation of results	►Product—8 dissemin- ation	►Product= utilization	►Research rewards	
Persons involved	Research team	Research team	Research team	Research team (subjects)	Statistician	Research team	Research team	Other researchers, clinicians	Scientists, researchers, clinicians	

FIGURE 1 TRADITIONAL RESEARCH MODEL AND PERSONS INVOLVED

emancipation and improved health and clinical care. In contrast to the traditional approach, collaborative inquiry with socially marginalized groups involves giving up or sharing intellectual and financial power with the participants.

AIDS education with Latinas. To demonstrate the collaborative inquiry process, a longitudinal research program conducted over a six-year period is described. The research program focused on HIV education, counseling, and antibody testing with low-income Latina women attending a WIC program in Los Angeles. Overcoming the hurdles to collaborative inquiry is addressed first. Following this, five areas in the process of conducting the collaborative approach to research are demonstrated: program design, implementation, evaluation, dissemination, and empowerment and emancipation.

The hurdles. There is a history of power imbalances that precedes any researcher's work with disenfranchised communities that must be recognized, acknowledged, and planned. Overcoming the traditional hierarchy of social status may present difficulties to academicians and researchers when they face the "unnatural" situation of sharing power with socially marginalized groups. Several "advantages" were experienced in the study described here. First, the researchers and participants were all women (except for three Advisory Board members), and the research was conducted in a community agency run and frequented by women. Women share to some extent second-class status and marginalization in society, regardless of ethnicity or income. Second, the researchers were nurses. Nurses experience a low-status position in the health care and university hierarchies and are quite familiar with power differentials and dismissive practices in these settings. Additionally, the nursing profession has traditionally been an avenue of social mobility for women in poor and working-class families. The researchers share these lower class origins, as well as immigrant and farm-laborer experiences. These characteristics lessened the power and social status differentials between researchers and participants. Finally, nurses are often afforded trust

		PROCESS						OUTCOMES			
	Design		le le	Implementation		Evaluation		Dissemination Empo			
Process and outcomes	Ansees	Cuestion	Method	≻Data <+* collection	-Data -4-1 analysis A	►Evaluation ← of results	Product	Product	►Reservh rewards		
Participants	Research tearn, "community" of persons to be served, advisory board	T Research term, community members, advisory board	T Research team community members, advisory board	Flasserch team consisting of researchers and community	Statistician, research team, community members	Community members, research team, advisory board	Research team, community members, advisory board	Community to be served, ofter researchers, clinicians	Participants, community, researchers, clinicians, ecleritists		

FIGURE 2 COLLABORATIVE INQUIRY MODEL AND PARTICIPANTS

and acceptance in communities, perhaps because of their public health history, gender, and lower social status.

Shared gender identities and social-status experiences may help overcome some of the problems inherent in collaborative inquiry; however, the lack of material resources of participants is possibly an even larger problem. In the project described here, lack of resources was addressed by reimbursing participants, providing child care and snacks, and conducting the program in an available and trusted community setting. Several problems in collaborative inquiry could not be foreseen, and they are discussed in the following sections according to the stage of the process in which they occurred.

Program design. Over a three-month period, focus groups of Latina women met to discuss their beliefs about the causes of AIDS, methods of prevention, and treatment. Focus groups were conducted in Spanish by Mexican American women trained in group leadership and the researchers.¹³ Seventeen groups of three to five members each (N = 59) focused on how people get sick, how people get AIDS, remedies or treatments for illness, and remedies or treatments for AIDS. An Advisory Board consisting of community leaders, community members, and researchers and clinicians expert in culture, HIV, and health care met three times during this period to discuss focus group findings. A simple strategy was developed to demonstrate collaboration during this phase, and it was continued throughout the project. In meetings and in focus group interviews, both researchers and participants took field notes of the proceedings. Advisory Board members did not want to share note taking, and in these meetings community workers and researchers took notes. Several essentials emerged from the focus group sessions and Advisory Board meetings: (1) the identification of the questions to be addressed in the research program, (2) a conceptual framework for AIDS education, and (3) the realities and constraints of a community-based project within a WIC program and setting.

Identification of questions. The women's knowledge of AIDS included accurate, inaccurate, and incomplete information. In addition to knowledge of sexual, injection, and perinatal transmission, there were strong beliefs in casual transmission, such as from mosquitoes, toilet seats, swimming pools, furniture, dishes and eating utensils, and through coughing or sneezing. There was also a belief in antibiotics as a prophylactic and/or treatment for AIDS. The participants believed AIDS could be avoided or prevented by immunizations, vaccinations, purgatives, washing after sex, and not having sex with a thin person. There was little recognition of the disproportionate occurrence of AIDS in the Latino community. As a result of these findings, AIDS education became the first specific aim of the research program. It was decided that AIDS education would incorporate information on risks and transmission, as well as information on AIDS in the Latino community. This latter focus was incorporated as a strategy to politicize the epidemic for purposes of community action.

There was a considerable fear of AIDS among the women as well. Some of this fear came from their inaccurate beliefs in casual transmission. It seemed to the participants that they were in danger from multiple, common vectors of infection. Another source of fear was their recognition and worry about sexual promiscuity in their male partners. To help allay these fears, an HIV-antibody testing and counseling objective was added to the research program. In addition, a goal of correct condom use was included, as well as practice in negotiating with a partner about sexual behaviors and condom use and knowledge about sources of condom availability. There was no evidence from the focus groups that drug use was a problem, but on the advice of the Advisory Board, a final specific aim was added to include the use of bleach to clean needles, syringes, and works.

Conceptual framework. A conceptual framework emerged from the focus groups that was based on cultural responsiveness, women as traditional caregivers and health educators in their families, and the Public Health Service, Centers for Disease Control's (CDC) categorization of the major transmission routes (sexual, perinatal, injection).¹⁰ Cultural responsiveness guided the development of the intervention protocol and the selection of community health workers. AIDS education was embedded in a comprehensive view of the health and care of the family. The standard public health approach of the provision of resources in an atmosphere of nondiscrimination completed the conceptual framework.

Realities of the setting. Finally, the focus group experience made clear the realities and constraints of conducting the research program. For the women to be able to participate in the program, child care, snacks, and toys had to be provided. Language and low literacy levels had to be taken into consideration for all educational materials. Fears of deportation were widespread. The women believed that if they were discovered to be infected with HIV, they

would be deported. Trust and confidentiality, therefore, became of utmost importance in the project. The women were also poor, below the poverty level to be eligible for WIC, and reimbursement for participation was essential. Constraints of space and the women's hesitancy about having their blood drawn resulted in a decision to use finger-stick HIV-antibody tests for the initial screening. Participants in the focus groups were directly responsible for assessing the problems, selecting the questions, and specifying the methods to be used by the research team.

Program implementation. Members of the community who interviewed participants and provided the intervention shared the ethnicity, language, and culture and were peers of the other participants in the study. Community workers were trained and initially monitored by the investigators but eventually monitored one another. Furthermore, they received additional formal training in the research process and yearly updates in HIV education and serostatus testing for ethnic women of color from the California Nurses' Association AIDS Education and Training Program, Women at Risk, AIDS/HIV Training for Care Providers. Community workers were paid as assistant community health representatives at the rate of \$10.48/hour. The research project was conducted in an accepted and trusted community setting: the WIC program. Written educational materials were produced in comic-book style, and videos in telenovela style were used. In keeping with the principles of collaborative inquiry, the intervention included multiple strategies to initiate and sustain change. The intervention protocol consisted of HIV-antibody test counseling before and after HIV-antibody serotesting; counseling in risk reduction, lifestyle practices, and health promotion; skill development in cleaning needles; free bleach; pregnancy counseling; free condoms as often as desired; referral and advocacy for medical, psychological, financial, legal, and social services and for partner testing; and repeated access to the intervention. The intervention made use of one-on-one peer counseling, group discussion, videotapes and comics in Spanish, role-playing, demonstration and return demonstration, information and resource counseling, printed materials, and reimbursement. As noted earlier, child care, toys, and snacks were provided. A total of 508 women participated in the project for at least two sessions; more than 80 percent visited the project on a monthly basis for free condoms and educational materials and/or socializing. After one year, 191 women (38 percent) returned for follow-up interviews and HIV-antibody retesting.¹⁷ The Advisory Board met quarterly to review progress and provide input.

Ongoing change: needle use. The research program used an interactive, iterative approach that made it possible to accommodate change as the project progressed. Initially, the project included demonstration, return demonstration, needle and syringe cleaning with bleach, and free bleach was given to participants as needed. This aspect of the program was deemed unnecessary at one year into the project and was about to be dropped because the women

were not using needles to inject illegal drugs. However, anecdotal evidence alerted the team to the possibility that the women were injecting home medications and possibly sharing needles and syringes in the home. A study was then instituted on this phenomenon with 216 women who were also involved in the larger project.¹⁶ It was discovered that 94 households (43.5 percent) were involved in using injectable medications purchased over the counter in Mexico, the majority of which were antibiotics. In 45 households (20.8 percent), families were reusing the needles and syringes, and in 34 households (15.7 percent), they were sharing. Methods of cleaning were inadequate and did not in any way follow the protocol taught in the larger study of flushing equipment with bleach. Participants were cleaning needles with water and/or with alcohol.

This discovery engendered a great deal of camaraderie and respect among participants, community workers, and researchers. It was obvious that the community workers and participants experienced meaningful satisfaction and pleasure in educating the researchers about the use of injectable medications and health-promotion practices. Participants were invited to provide in-depth information about the use of injectable medications in the home through focus group interviews (N = 55). From the focus groups, it was learned that medications were purchased in Mexico because they were cheaper and no prescription was needed. Usually, only one disposable needle and syringe was purchased. Because it was illegal to bring needles and syringes across the border without a prescription, a single setup was easier to conceal when crossing the border. Family members reused and shared needles and syringes within the household. Usually, a family member knew how to give injections. If not, in most neighborhoods, a friend or person known as an "injection woman" would give the injection(s). Focus group members related with particular pleasure that prescription medications and needles/syringes could also be purchased at swap meets in Los Angeles if the vendor was given one or two weeks' notice. Vendors would travel to Mexico and purchase medications and resell them at a profit in Los Angeles.

Focus group members were queried about cleaning needles and syringes in view of the project's demonstration of the use of bleach and the distribution of bleach to participants. Members explained that they were not using bleach because they thought that the use of bleach applied specifically and only to illegal drugs. In fact, the educational portion of the project that dealt with cleaning needles and syringes was taught in the context of the use of illegal drugs and sharing works. As participants shared their expertise and understanding in this area, it became clear to the researchers and community workers that education and demonstration in the area of needle cleaning had to be adapted to encompass a more comprehensive view of injection practices.

Ongoing change: condom use. A demonstration and return demonstration of the use of condoms with anatomical models was part of the intervention protocol. Accompanying this demonstration was role-playing in negotiating with a sexual partner for the use of condoms. Care was taken to balance negotiation skills with concern about partner violence that might result from the women's assertiveness in condom negotiation.²⁷ The participants were given a package of six free condoms and encouraged to return for more. Because of an understanding of cultural constraints on the use of condoms by Latinos (e.g., religious prohibitions against birth control, value of children, the association of condoms with sex workers or secondary partners), it was taken into consideration that it might be difficult for the women to persuade a partner to use condoms. To partially counteract this problem, colored condoms were given out with the hope that they would be considered more attractive. However, more than one-third of the women asked for additional condoms at each of their monthly WIC visits, and some came more often. The use of condoms was so great that the person purchasing supplies switched to white condoms to reduce cost. Again, focus group interviews (N = 49) were conducted with participants who returned frequently for condoms to further an understanding of this phenomenon.¹⁹ The main reason participants gave for increased condom use was to prevent pregnancy (n = 40). Other reasons given by a few focus group members were that their partners changed their minds about condoms (n = 3), the intervention taught them to use condoms (n = 2), the condoms were free (n = 2), and to prevent AIDS (n = 2). Condom users were younger, unmarried, and more assimilated to U.S. culture than non-condom users.

The main reason for including condom use in the intervention protocol was not to prevent pregnancy but to prevent AIDS. The women's knowledge of this was excellent as demonstrated in pretest, two-week posttest, and one-year retest changes. However, their knowledge and practices were not related to each other. At this time, the decision was made by the community workers and the researchers to strengthen the condom use protocol by repeating it at each monthly WIC visit. The community workers believed that the message on condom use should be repeated monthly, but they also believed that it probably would not change behavior very much. The use of condoms did increase significantly over the course of the project; however, the change remained among young, unmarried, and acculturated women. Married women and less acculturated women did not believe they were at risk for HIV, and many believed they had no reason to avoid pregnancy.

Ongoing change: finger-stick procedure. A final change in the implementation of the program came about because of published reports of contamination of finger-stick devices.^{28,29} In these reports, contamination and transmission of hepatitis B occurred because of incorrect use of the finger-stick devices. A standard practice of the program was monthly scheduled meetings between researchers and community participants to discuss and resolve problems. In view of the reports of contamination, the researchers wanted to reemphasize correct technique. An in-service education with demonstration and return demonstration on the correct use of the devices was added to the next

monthly meeting, and unannounced random checks on actual use of the finger-stick device were made. Community workers felt criticized and distrusted by this approach and voiced their dissatisfaction with the way the decision had been made. This situation represented a prime example of power not being shared and relationships not being smooth or respectful between researchers and participants. Two meetings were required to resolve this situation. The researchers defended their decision based on safety issues. The community workers also supported safe practices but argued for trust and respect. In the end, the team decided that community workers would monitor each other's technique on an unannounced schedule.

The use of an interactive, iterative approach throughout the project made it possible to institute changes in any aspect of the intervention protocol while the program was in progress. At each of these junctures, the Advisory Board provided guidance for revising the intervention. These changes were considered to be essential to the program's success and to its sensitivity and usefulness to community participants. The changes were considered to further the purposes of the research: putting knowledge into action. These changes were not constrained by the controls on traditional research to maintain the original protocol for the sake of science.

Program evaluation. Results of the program were evaluated in two ways. Researchers reviewed the results of statistical analyses through which they looked for changes over time, increased knowledge, and safer practices of the participants. Results were also evaluated by the researchers in terms of their contributions to the science of health care, an understanding of culture and cultural practices, and an improvement in clinical care.¹⁷ Results were shared with the Advisory Board, and discussions were held about the success of the program.

Evaluation of intervention model: researchers. As noted above, in the implementation phase of the project, two practices were discovered that necessitated change in the intervention protocol. One practice involved injecting home medications, and the other involved the use of condoms. Conceptually, the intervention protocol was based on the transmission categories established by the CDC: sexual transmission, injection transmission, and perinatal transmission. Several of the quantitative findings raised important questions about teaching HIV from the perspective of these behavioral categories. The avoidance of pregnancy seemed to have a stronger influence on condom use than did its effectiveness in preventing HIV transmission.^{19,27} Self-reported condom use improved significantly from pretest to posttest and was retained on retest; reasons for not using condoms decreased significantly. Respondents also demonstrated skill development in the use of condoms. However, the main reason for the change in condom use was to avoid pregnancy.

Similarly, knowledge of sharing needles and the use of bleach to prevent HIV transmission did not influence sharing and cleaning needles to inject home medication and vitamins.^{16,27} There were significant pretest-posttest changes in knowledge of the use of bleach to clean needles and prevent HIV transmission. Participants also demonstrated skill development in the use of bleach to clean needles and syringes. However, the participants continued to reuse and share needles for home medication injection and to clean them with water and alcohol.

Information provided by the participants and an evaluation of the CDC transmission categories led to a judgment that teaching from discrete behavioral categories (sexual transmission, injection transmission, perinatal transmission) did not facilitate a transfer of knowledge from one situation to another. It was noted that teaching from the CDC categories presented information in a fragmented way that might interfere with generalizing the information to other life situations. Instead, teaching a conceptually coherent causal mechanism (i.e., transmission through blood/other body fluid exchange) might better permit knowledge of risk to be generalized to other situations.^{30,31}

Participant evaluation. A second method of evaluation involved the participants in a summative assessment of the intervention protocol and its outcomes. Once again, focus group interviews (N = 51) were conducted to evaluate (1) the cultural competence of the community health workers and the protocol, (2) the conceptualization of women as health educators and health providers in Latino families, and (3) the usefulness of program outcomes to the health of the community.

Cultural competence. The cultural competence of the program was based on an ethnic, language, gender, and social class match of community health workers and other participants and on an earlier qualitative study of Latino beliefs about health, illness, and AIDS. In this early phase of the project, either researchers were not listening to community members or members did not feel comfortable informing or disagreeing with researchers. After the completion of the project, this dynamic was not in existence as evidenced in their evaluation of program effectiveness. Focus group members made several evaluative suggestions for effective HIV education for Latinos. They agreed that to be most effective, HIV education for Latinos should be provided by persons sharing the culture, ethnicity, language, and life experience of the participants. However, their suggestions concerning gender differed from the approach taken in this study, except in the case of educating young children (less than 13 years). Their suggestions included gender-segregated health education in schools for young children with same-sex health educators. Importantly, beginning at the teenage years and continuing through adulthood, they recommended gender-integrated HIV education for teenagers in groups in schools and for adult couples in groups in community centers and agencies, churches, and health centers. They recommended that health educators should include both males and females in gender-integrated groups. Their reasoning was that men and women had to hear the same message at the same time to prevent misperceptions about transmission and/or frank distortions of information. Focus group members said that misperceptions and distortions were used often by adolescents and male partners to minimize the risks of sexual transmission.

Conceptual framework. A critical conceptualization behind the intervention program was that women were the traditional health educators in the family and that HIV education and prevention programs would have a ripple effect on their families. Focus group members said that this presumption might not be accurate because of the role of women in Latino society. According to participants, teenage sons and daughters "will not listen to their mothers"; they will not accept health education from mothers because mothers are considered "old fashioned and dumb," conservative, and not as knowledgeable as teenagers. Similarly, husbands or partners will not accept health education and advice from their wives/partners because of women's lesser status and expected submissive role. Giving advice and education assumes an equal status and an assertive role. Again, the women recommended HIV education in gender-integrated groups, especially couples' groups. They reasoned that receiving HIV education in couples' groups would give the women the chance later to bring it up and talk about it to their male partners. Neither the original focus groups nor the Advisory Board foresaw this potential problem in the intervention protocol, or perhaps they did not feel sufficiently comfortable with the researchers to bring it up at the time.

Program usefulness. Finally, focus group participants evaluated the usefulness of the program and program materials to the community. The program was most useful to the participants in clearing up misperceptions about the prevalence, transmission, and treatment of AIDS. Prior to the program, participants were not aware of the proportionately high prevalence of AIDS in the Latino community. They also held many misperceptions about casual transmission, which made them fear contact with people with HIV disease and especially white gay males and places they patronized. The women said that there were common misperceptions also about the treatment of HIV. They said that many Latinos believed that HIV was successfully treatable with "penicillin, snake powder capsules, teas, herbs, and garlic." They recommended that any HIV-prevention program should stress that there is yet no cure for HIV and that AIDS is a major problem in the Latino community.

The participants had positive comments about the educational materials and the setting and environment of the program. They especially liked comic-book forms of written materials, telenovela video materials, child care and the reimbursement, and the familiarity and comfort of the WIC setting. They were very appreciative of the free HIV-antibody testing and the sensitive counseling that accompanied it. They gave special praise and were especially proud of the community health workers who provided the intervention. The participants suggested that the program in total be shared with the larger Latino community and their suggestions for changes in the program be shared and recommended for implementation to other community agencies. Their evaluative comments and suggestions were shared also with the Advisory Board.

The community-based approach used in this study included an evaluation of the program by both researchers and participants. This approach enhanced collaboration and contributed both to the development of science and improved practice and to increased effectiveness and utility in meeting community health problems.

Program dissemination. The results of the program were disseminated in two ways: the traditional approach of publication and scientific presentations and a community-based approach of sharing the results with other community agencies and community members. The results of the program were published in clinical and interdisciplinary research journals¹³⁻²⁰ and presented at local, national, and international meetings; clinical forums; and community conferences and workshops. In these forums, both positive and negative results were reported and recommendations made to advance science, theory development, research methods, prevention efforts, and an understanding of culture.

The community-based approach of sharing the results with the community involved a yearlong effort of disseminating the program in the Latino community. Advisory Board members suggested community agencies that should be contacted for dissemination. Community health workers contacted 41 Latino community agencies and/or services and described the program's available resources, services, and materials. Of these, 30 agencies (75 percent) requested a visit, an educational workshop, and all program services and materials. The remaining 11 agencies requested that materials be mailed or delivered to them. Agencies that were visited included those that provided services for child abuse, domestic abuse, teenage pregnancy, parent education, day care, legal aid, family counseling, substance abuse, immigration and citizenship, runaways, rape counseling, self-defense for women, literacy and English classes, vocational training, and sheltered living. In addition, the community health workers visited churches, primary and secondary schools, and community colleges. In all of these settings, the program's education and materials were shared with staff members of the agency/organization and with clients, parishioners, or students of the service organization. Visits were a minimum of one full day and often one and a half or two days. Agencies could choose how much of the research program's resources and materials they wished to share based on agency purposes, goals, and staff time and expertise. All materials and training were provided free and were planned for and budgeted in the original grant proposal and funded.

Dissemination procedure. The full research program dissemination is described here. Community health workers presented an AIDS education and prevention program and gave the agency copies of all written and video materials used in the research program. In addition, they taught and role-played the use of condoms and bleach for cleaning needles. Service organizations were provided with names of contact persons in each of the medical, legal, financial, and social service agencies used as referrals in the research program. Staffs of agencies that inquired about the finger-stick HIV-antibody test were taught the procedure and were given instructions on equipment disposal. They were provided information on the equipment needed, purchasing, and the laboratory that performed the serostatus analysis. They were also instructed on follow-up, confirmatory testing. Churches, literacy and English programs, immigration services, and vocational training programs did not request training in HIV-antibody testing, as they did not have staff or facilities to provide this service.

Service organizations that did not request a visit were mailed or had delivered to them written and video materials on AIDS prevention and education. These agencies were not appreciably different from those that did request a visit. They included organizations that provided services for child and domestic abuse, job training, counseling for low-income persons, immigration and citizenship, pregnant teens, boys and girls clubs, substance abuse, and residential care. Only one school did not request a visit, and no churches refused a visit. Reasons for refusing a visit were most commonly that AIDS was not a problem for their clients or that they were not interested in AIDS education. Other investigators also reported a lack of interest in AIDS education among established community agencies that did not want to dilute their priorities or associate their agency with the stigma of AIDS.³²⁻³⁴

Creating a network. A final aspect of the community dissemination phase of the research program was to create a community resource directory that listed all service organizations, churches, and schools that participated in the dissemination phase, along with the referral resources that had been used in the implementation phase of the program. This resource directory was copied and distributed to all participating agencies/organizations. This aspect of dissemination, known as linking or establishing a network, is common in community-based research. In a collaborative inquiry approach, the dissemination phase of the research program provides for dissemination of program products to the scientific community, clinicians, and the service community participating in the research effort. This approach takes research outcomes a step beyond the traditional research paradigm and provides a societal function in addition to a scientific and clinical function.

Empowerment and emancipation. Both participants and researchers are empowered and transformed by a successful collaborative research process. Researchers and participants acquire knowledge, skills, and resources that empower all of them. Putting knowledge into action and forging new bonds are empowering and emancipating experiences for both groups. Researchers are also emancipated from the strictures of traditional research methods and processes. Participants are emancipated from their "subject" status and ideally take control of their health and their community. This phase of the collaborative inquiry process is evident in health and lifestyle behavior changes, acquisition and control of health resources, and involvement in the political process. Changes in AIDS knowledge, attitudes, and behaviors among participants in the research program described here could be documented from the study results.^{16,17,19} Los Angeles county epidemiologic evidence documented a decline in cases of HIV in Los Angeles from 1992 to 1996.³⁵ This decline was attributed to a decrease in cases among white men who have sex with men and a plateauing of cases among Latinos (including Latina women) that had previously been rising steadily from 1988 to 1992. Of the community health workers trained for the project, two entered and completed community college programs in nursing, and three appear to be making careers as research assistants in community work. More important changes in acquisition of resources and involvement in the political process were not addressed in this research program and require a longitudinal research focus on community action and organization.

Conclusion

Collaborative inquiry represents a different paradigm for research than the traditional approach. However, this paradigm is very much in keeping with health care's purposes, ethics, and scientific contributions. This approach does not neglect or compromise the development of health science. What it does is add a societal context that is essential to the taxonomy of health. Lack of resources and power, discrimination, and violations of human rights are primary pathogenic forces in the major health problems facing the United States today.²⁴ These health problems cannot be solved without a research approach that takes into account the acquisition of power and resources by the community and its members as well as the development of science.

Although this paper focused on a particular example of collaborative inquiry with participants and the community, this is only one approach to conducting collaborative research and enhancing resources and power in the community. Researchers using qualitative methods also have used a collaborative approach to further these same aims.³⁶ Health care research and practice are enhanced by a focus on collaboration with participants and the community. Collaborative inquiry in the community has been credited with an increased use of health services, increased referral to clinical trials, and greater community knowledge of its own health problems.^{37,38} Some investigators emphasized that collaboration with the community is a vital part of the entire process of conducting research if researchers expect to continue to conduct research in the community.^{37,39} In addition to these reasons for collaborating

with participants and the community are the ethical and humanistic imperatives for doing so.^{8,25,26} The emancipation of the participants through their successful acquisition of power and skills to intervene on their own behalf is the ultimate goal for all types of collaborative inquiry.

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