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Research Challenges to the Study of HIV/AIDS Among Migrant and Immigrant Hispanic Populations in the United States

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ABSTRACT *Migrant populations have been found to be at risk of HIV/AIDS. The growth in immigrant and migrant Hispanic populations in the United States increases the need to enhance understanding of influences on their HIV-risk behaviors. Four challenges to conducting research among these populations were identified: (1) the need to use multilevel theoretical frameworks; (2) the need to differentiate between Hispanic subgroups; (3) challenges to recruitment and data collection; and (4) ethical issues. This article describes how two studies of Hispanic immigrants and migrants in the New York area addressed these challenges. One study focused on new immigrants from Mexico, the Dominican Republic, El Salvador, Honduras and Guatemala, and a second study focused on Puerto Rican drug users. Both studies incorporated qualitative and quantitative methods to study these hard-to-reach populations. Continued study of the sociocultural and contextual factors affecting HIV risk for mobile populations, and addressing the research challenges, is crucial to developing effective intervention programs.*

KEYWORDS *Hispanics, HIV/AIDS, Immigrants, Migrants.*

INTRODUCTION

Understanding and addressing the causes of health disparities among the Hispanic population in the United States is increasingly important as the size of immigrant and migrant populations from Latin America and the Caribbean continue to grow. Approximately 35 million individuals identifying themselves as Hispanic were counted in the 2000 U.S. census survey, making them the largest ethnic or racial minority group in the country for the first time. This is even more significant because Hispanic immigrants are likely to have been undercounted.[1]

A significant proportion of the Hispanic population is foreign born. Between 1970 and 2000, the Hispanic population grew by 25.7 million, and immigrants accounted for 45% of that increase.[2]Overall, 40% of all Hispanics in the United States in 2002 were foreign born,[3] and the Hispanic population is projected to grow by 25 million people by 2020, when it will comprise 60 million persons, a third of whom will be first generation immigrants.[2]Migrants from Puerto Rico, who are technically not immigrants because of Puerto Rico's commonwealth status with the United States, face many of the same obstacles as immigrants, including needs for health, housing and other services.[4]

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HISPANIC MIGRANTS AND HIV/AIDS

Migrant populations have been found to be at risk of HIV/AIDS and of poor health in general. For example, health and social service providers working with Hispanic migrant populations report serious preexisting health conditions.[5] In addition, stress related to transition, poverty, language, social inequalities, and difficulties in accessing health services are associated with delayed access to care and increased vulnerability to risk and infection.[6,7]

Since the start of the AIDS epidemic, Hispanics in the United States have been disproportionately represented in HIV/AIDS cases. Hispanics comprise 13% of the US population[8] but accounted for 19% of all AIDS cases in 2002.[9] The AIDS case rate for Hispanics, per 100,000 persons, is almost four times larger than that of Whites. Furthermore, Hispanics are also more likely than Whites to be concurrently diagnosed with HIV and AIDS,[10] thus receiving medical care later in the course of their illness. Research on HIV seropositive immigrants has found that most become infected while in the United States,[11] underlining the importance of enhancing both HIV prevention and care efforts for Hispanic immigrants.

INFLUENCES ON HIV RISK BEHAVIORS

The HIV-related risk behaviors of immigrants are influenced by many complex and interrelated factors in the "sending" and "receiving" communities. These include health-related beliefs, traditional and evolving social norms, attitudes and behaviors which shape sex and drug use, and contextual and environmental factors such as social support, peer pressure, and the particular risk opportunities in their communities. Shedlin et al.[12], for example, discuss the cultural norms and behaviors which place housewives in San Salvador at risk of infection, and Aráuz et al.[13] present data on the social, political, and cultural factors that influence transactional sex and the sexual behavior of men who have sex with men (MSM) in Nicaragua. Gonzalez and Liguori (1992) propose that migration may encourage a rise in bisexual practices among migrant workers because many men migrate alone (unpublished data). National-level HIV/AIDS needs assessments have documented the HIV risks for mobile and migrating populations in Honduras and Nicaragua.[14,15]

Immigrants bring with them understandings of their social worlds and practices that are linked to the cities or villages from which they migrate. The dissonance created by applying these traditional beliefs in their New Communities often results in a sense of alienation that may impact health-risk behaviors. In addition, differences in the characteristics of migrants exist from country to country. For example, for Dominicans and Mexicans, economic pressures are key motivating factors, whereas for Salvadoran migrants, both economics and effects of a long civil war affect migration dynamics.

The process of migration itself has been found to be related to HIV risk and prevalence in studies of mobility patterns in Africa, Europe, and within the United States.[16–19] Increased risks for HIV infection have been associated with migration through increased substance abuse[20] or increased injection and sex-related risks.[21] Obstacles to receiving services in new locations include eligibility, language, and knowledge barriers.[22] The importance of acculturative stress[23,24] is another critical factor in understanding difficulties migrants experience in new locations, and their impact on risk behaviors. Research is needed to help identify HIV risks and service needs of migrant and immigrant populations to address these issues. This article identifies some

of the challenges to conducting research among migrant and immigrant groups and provides examples from two studies of Hispanic immigrants and migrants.

CHALLENGES TO CONDUCTING RESEARCH

Conducting HIV-related research with Hispanic immigrant and migrant populations raises numerous challenges. Four such challenges are described here.

The Need to Use Multilevel Theoretical Frameworks

Many theoretical frameworks used to study HIV-related risk behaviors focus on individual level factors and are not robust enough to incorporate the many influences operating among migrant and immigrant populations. As noted by Soskolne and Shtarkshall,[25] integrated, multilevel HIV prevention programs that incorporate structural, social, and individual level factors are needed for immigrant populations. Research efforts utilizing theoretical frameworks to incorporate this complexity are needed.

The Need to Differentiate Between Hispanic Subgroups

The umbrella category "Hispanic" obfuscates the characteristics and needs of large national and ethnic populations in the United States by combining immigrant and nonimmigrant populations and Hispanic subgroups with different characteristics, including cultural backgrounds, migration experiences, and risk behaviors.

Challenges to Recruitment and Data Collection

Recruitment of "hidden" or "hiding" populations and attention to the validity of data by implementation of steps to ensure comparability of meaning across populations are particularly important when studying migrant and immigrant populations.

Ethical Issues

The need to address ethical issues likely to arise include sensitivity to cultural norms, attention to human subjects protections, and the need for dissemination of research findings to community members.

DESCRIPTION OF STUDIES

New Hispanic Communities And HIV Risk (New Communities)

This study explores the ways that dynamic cultural schema and environmental factors interact and shape HIV-related risk and protective behaviors among Hispanic immigrants at the initial stage of acculturation in their US communities. The research focuses on Mexican, Dominican, El Salvadoran, Honduran, and Guatemalan men and women living in the United States for 3 years or less and residing in urban, suburban and rural communities in the New York City area. This article is based on data from the contiguous counties of Westchester and Putnam, located north of the city, and the mainly semi-rural North Fork of Suffolk County, Long Island. The study utilized qualitative methods that included: (1) semi-structured, in-depth interviews with participants from the target populations, (2) focus groups with members of the target populations; (3) interviews and one focus group with key informants, and (4) ethnographic observations in the communities.

Because of the fear prospective participants often had of immigration authorities, during preliminary fieldwork, the research team established contacts at each site with the assistance of trusted community advocates and leaders. Participants were recruited from the target populations at each site, using a snowball approach begun by community leaders and providers. Criteria for recruitment included: (a) age 18 or older; (b) born in one of the target countries; (c) immigrated to the United States within 3 years or less before recruitment; and (d) residing in one of the target areas at the time of participation. Focus group and in-depth interview participants received a $25 stipend. Fifty-one individual interviews (25 women and 26 men) and 11 focus groups (n=86; 37 women and 49 men) were conducted. Focus groups were organized by nationality, sex, and site. A focus group with professionals in health and social services and 26 key informant interviews including social workers, nurses, county officials, advocates, outreach workers, business owners, religious leaders, and AIDS educators were conducted.

Interview guides, observation guides, and mapping protocols were developed to facilitate comparability and analysis. Interview instruments explored individual and collective living conditions before, during, and after immigration; continuities and changes in attitudes, behaviors, and interactions with social networks and living conditions; attitudes and behaviors related to increased vulnerability to HIV and other sexually transmitted infections (STIs) and access to health and other social services. Field notes included information about the context and daily activities of immigrants in the areas being studied.

Alliance for Research in El Barrio and Bayamón

This dual-site study focused on identifying factors related to HIV risk among Puerto Rican drug users (injectors and crack smokers) in East Harlem, NY and Bayamón, PR. The study was conducted over an 8-year period (1996–2004), and included baseline and follow-up structured survey interviews with 1800 drug users, including 1200 who were recruited in East Harlem and 600 in Bayamón. A qualitative component, conducted by an ethnographic team in each site, included ethnographic mapping of the communities, focus groups, observations and qualitative interviews (see[26,27] for a more complete description of methods). This article draws primarily on the data collection in the New York site.

Criteria for recruitment into the study included: (a) aged 18 or over; (b) self-identified as Puerto Rican; (c) injected drugs or smoked crack within the prior 30 days; and (d) recent use of heroin or cocaine (verified by urinalysis). Participants were brought to the local field site, informed consent was obtained, and they received a $20 stipend for the baseline interview. This was a longitudinal study, and interviews were also conducted at multiple follow-up points. The interviews included sections on potential influences on risk behaviors, including demographics, psychological (e.g., depression), and social factors (e.g., networks), as well as behaviors that may increase or decrease risk (e.g., drug use, drug treatment, and use of condoms).

For the survey component, each community was divided into recruitment sectors based on the ethnographic mapping of locations where drug users could be found. Outreach/recruitment staff were indigenous community members who had been involved in prior HIV and drug-related research in these communities. Daily recruitment was based on random selection of a recruitment sector, to increase sample representativeness.

HOW THESE STUDIES ADDRESSED THE RESEARCH CHALLENGES

The Need To Use Multilevel Theoretical Frameworks

In the initial development of both studies, it became clear that multilevel theoretical frameworks were needed to address the complex levels of influences on immigrants, including environmental, cultural, social, and individual factors, and influences from the sending and receiving locations. Both studies utilized multilevel models, as heuristic devices to guide the development of the research questions, data collection, and data analysis.

The New Communities study utilized a model of culture and cultural change[28] that posits that cultures consist of evolving configurations of cognition, emotion and behavior within individually unique cultural sets. Culture embodied in individuals is seen as different from culture embodied in the properties of groups. This distinction makes it possible to explain the range and variability of individual attitudes and behaviors among members of the groups studied. Cultural and environmental variables are not seen as independent, but as interactive or mutually reciprocal. As the culture of individuals evolves (adaptation that includes changes in norms, knowledge, attitudes, etc.), so do the larger culture, society, and environment in which they live.

The model also posits that individuals do not possess or participate in a single culture. Rather, individual configurations of cultural influences contain elements shared with others. Thus, shared ethnic, familial, experiential, and historical elements influence and shape patterns of behavior and responses to, e.g., new environmental options, alternatives, and obstacles individuals face in common. Unlike the way in which the Health Belief Model[29] and other psychological models have generally been applied, this model does not assume that individuals use the same culturally based criteria to derive intentions and make cost-benefit decisions regarding risk behaviors.

The need for "careful examination of the specific cultural elements . . . within actual cross-cultural and historical context" has been identified[30] to replace sweeping assertions about Hispanics. In addressing this need, the New Communities study is documenting regional, national, and ethnic differences among immigrant groups. It is also placing the analysis within the broader historical experiences of particular Hispanic groups as immigrants (e.g., documented vs. undocumented) and their local level social dynamics. In this way, a more dynamic understanding of cultural change is achieved through an awareness of local opportunities and constraints that shape individual decision-making and behavior. The study also examines the ways in which the presence of new immigrant groups is shaping new and existing community vulnerabilities, strengths, and resources.

An example of the application of this model can be seen in understanding the influence of changing gender roles, which emerged as a key theme in the analysis of single and partnered men and women. New immigrants to the study communities were found to be predominately young men who migrated alone; most of the women immigrated with their male partners and/or children, or joined partners who were already established in the areas. Interviews revealed how variations and changes in life experiences (e.g., by age, gender, economics, education, ethnicity), influenced immigrants' perceptions of adaptive options and decisions. Both men and women reported that immigrant men were forced to participate in house work as a consequence of living in all male households or because women held jobs as well. In

many cases, these men engaged in activities they considered "women's work" for the first time. Individual interviews suggested that although the experience of sharing domestic tasks changed gender-based attitudes and expectations of the couple, some women would return to their traditional roles upon return to their countries, and the effects of immigration would be mitigated with time. Although the renegotiation of gender roles and expectations was evident among Dominican participants, the patterns of migration involving whole families and networks, and the degree of establishment of this community in the target areas, provided more elements for the reinforcement and retention of traditional gender expectations and behaviors. Thus, exploring the interaction of individual and shared cognition and behavior requires a focus on similarities and differences among individual informants and cultural groups. This model facilitates understanding how traditional gender role norms and dynamics can be challenged by new immigrant survival strategies.

The PRECEDE model[31] provided the framework for examining multiple levels of influence on HIV risk in the (Alliance for Research in El Barrio and Bayamón) ARIBBA study. The model identifies three types of factors: predisposing (characteristics that motivate behavior, e.g., knowledge and beliefs), enabling (characteristics that facilitate behaviors, e.g., personal skills or environmental resources), and reinforcing (anticipated rewards or punishments, e.g., based on community norms). Each of the factors can be examined according to individual-, societal- (including familial) or community-level variables, and the model was particularly useful in examining influences on the same ethnic group in two very different sociocultural and risk environments.

The PRECEDE model was used in an analysis of factors influencing syringe sharing.[32] Enabling factors in both communities (e.g., purchasing drugs with others and self-efficacy), were found to influence the sharing of injection-related paraphernalia. This pointed to the need to enhance self-efficacy for reducing risk and developing interventions to address the risks associated with joint drug purchasing. Another example of the importance of using a multilevel model in this study was in comparing subpopulations among the injection drug user (IDU) samples.[33] Study findings had indicated that IDUs in Puerto Rico had higher risk behaviors than those recruited in New York (e.g., in terms of frequency of injection and use of injection shooting galleries, which increase injection-related risks). An analysis of the New York sample, comparing Puerto Rican migrants (defined as those who had previously injected in Puerto Rico and lived there at least 1 year after becoming regular drug users) with nonmigrants, showed that migrant IDUs were less risky than IDUs recruited in Puerto Rico, but more risky than those in New York who were not migrants (Table). This indicates the importance of influences of the "sending"

TABLE. Frequency of injection and percent using shooting galleries: Puerto Rican IDUs in Puerto Rico and in New York (by migrant status)

	Puerto Rico	New York	
		Migrants	Nonmigrants
Behavior (in prior 30 days)			
Frequency of injection (Mean)*	184	87	69
Used shooting galleries*	79%	32%	18%

*$P < .001$.

(Puerto Rico), and "receiving" (i.e., East Harlem) locations, where the availability of risk reduction resources, such as drug treatment and needle exchange programs, influences risk behaviors. Hence, multilevel frameworks that account for changes in community-level factors are needed in planning research on mobile populations.

The Need to Differentiate Between Hispanic Subgroups

The Centers for Disease Control and Prevention, as well as most local and state health departments, generally combine US-born Hispanics into one group when collecting data on HIV/AIDS and on other health statistics. This process does not permit making comparisons between different US-born Hispanic groups or comparing immigrant with nonimmigrant Hispanics of the same background. Moreover, because the primary HIV transmission mode can vary between subgroups, and because some groups are significantly larger than others, conclusions about "Hispanic" HIV/AIDS infection rates not only miss or hide important distinctions but can be misleading.

For example, most HIV seropositive Puerto Ricans, including those living in the United States and in Puerto Rico, contracted the virus though injection drug use or through sex with an HIV-positive drug user.[9] This contrasts with HIV-positive Latinos of other nationalities, whose primary HIV transmission route has been through sexual contact between men (Figure). In 2002, the main exposure category for foreign-born Latinos who were diagnosed in the United States, including Cubans, South Americans, Mexicans, and other Central American groups, was through sexual contact between men.[9] The largest risk category among Puerto Ricans in the United States, who were born in Puerto Rico, was injection drug use (more than 50% are IDUs or both IDUs and MSMs), whereas drug injection accounts for less than 20% among all of the other foreign-born Latino groups noted. Furthermore, 48% of the cumulative number of AIDS cases in the United States among adults and adolescents through the end of 2002 are attributed to MSM, compared to 17% in Puerto Rico during the same period.[9] These distinctions are missed when Latino subgroups are combined as one group on HIV reporting systems and surveillance reports, because Puerto Ricans are subsumed into the broader category. Thus, because most (58%) of the Hispanic population in the United States is Mexican (about 10% are Puerto Rican and 9% are Central and South American), any summary of risk categories for Hispanics in the United States is predominately influenced by risks among Mexicans.

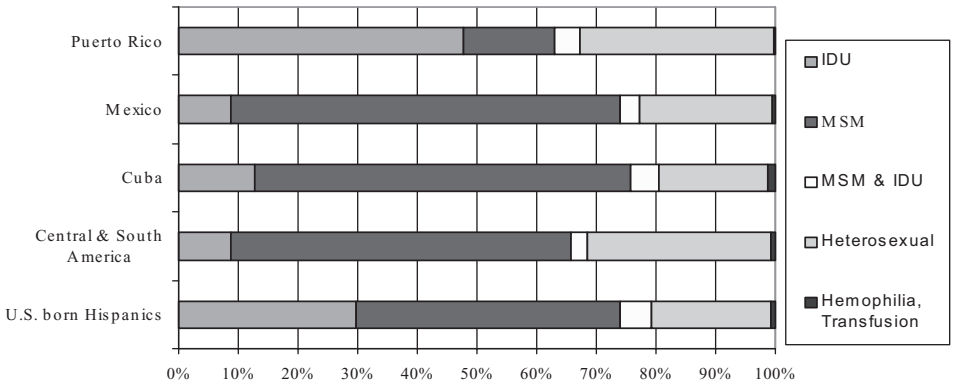

FIGURE. Risk categories of AIDS cases among foreign- and US-born Hispanics in the United States, by birthplace.[9]

Challenges to Recruitment and Data Collection

Recruitment Both studies recruited what are often considered "hidden" or "hiding" populations, e.g., those involved in illegal activities associated with drug use or those who are undocumented. The need for the research team to develop trust among the communities to be studied, either directly or through obtaining legitimization by identification with existing services or other groups in the communities, can present another challenge.

The New Communities study utilized a community collaborative model involving participatory research. From the onset, it was crucial to develop partnerships to include community perspectives in the research design, assure feedback of findings to community agencies and leaders, and obtain access and legitimacy to reach populations through immigrant-serving agencies. Potential interview and focus group participants were often contacted through a key informant (e.g., staff member of a local social service agency), an interview participant who agreed to collaborate in recruitment after participation, or a project consultant. Because many potential participants were undocumented, researchers were introduced to prospective participants by community members with the assurance that they were known to the service providers and were not immigration authorities (e.g.,"la migra"). Latino researchers conducted the interviews and facilitated the focus groups. The recruitment script described a study of "immigration and health." Receptiveness to the study varied across sites and it was necessary to maintain a presence (in one site at least every 2 weeks for a number of months), before recruitment assistance was established.

In the ARIBBA study, the fact that members of the research team had previously conducted work in the community provided reassurance that there would be no negative consequences and the team could be trusted, and that there were benefits to participating. These benefits included research stipends, referrals for treatment, and the availability of condoms. Having a stable field site, utilized in prior studies, helped reaffirm the legitimacy of the team and served as a location where participants could return for additional contacts with Latino staff and receive referrals. Because this was a longitudinal study, follow-up letters were sent to participants to remind them of their interview. Tracking of clients who did not respond to letters was also needed. Procedures to ensure confidentiality of clients, e.g., through identifying the study as a "Health Project" (and avoidance of mention of drug use or HIV) in contacts with individuals who might know a participant's whereabouts, were an essential part of the follow-up protocol. Follow-up recruitment can be a particular challenge in studies of immigrant, migrant, and drug-user populations, who are more likely to be homeless or have transient domiciles, as compared with other research participants. Efforts to contact research participants for follow-up may often need the assistance of additional contacts in the communities, requiring staff training in the importance of maintaining confidentiality regarding the context of study participation.

Data Collection The research teams in both studies were bilingual. However, to enhance the validity of data collection, knowledge and sensitivity to differences in language across Hispanic subgroups were essential. For the New Communities study, staff were trained on regional and national differences in the use of Spanish and interpersonal communication to facilitate fieldwork and to avoid misunderstandings or situations that could have made participants feel uncomfortable or

disrespected. Differences in Spanish vocabulary are particularly salient in studies of sexuality because regional and group differences reflect differences in meaning and acceptability/appropriateness in communication.

Apart from awareness of the nuances of word usage and their variations across ethnic groups and nationalities, researchers also took care to learn the nuances of interpersonal exchanges that varied between and among groups. While greetings and courtesy were crucial to appropriate communication with all participants in the New Communities study, formalities were particularly important with Central Americans and Mexicans, especially immigrants from rural areas. Though direct and maintained eye contact and some proximity were welcome among Dominican participants, these same dynamics made some participants from rural Mexico and Central America uncomfortable as they reflect traditional communication norms of long-oppressed communities. Finally, interviewers used the formal pronoun "you" in Spanish (usted), unless prompted by the participant to change to the informal form of the pronoun (tú). Among Dominican participants, the shift to the "tú" could indicate a sense of rapport, though Dominicans tended to be more casual in their use of informal forms than Central Americans or Mexicans. The shift to the informal pronoun could also be a sign of growing trust and rapport. Apart from formality, however, the use of the formal "usted" between researchers and participants was also indicative of respect.

In the ARIBBA study, several steps were used to ensure the comparability of the survey instruments. Using terms with comparable meanings in the two sites was critical, and qualitative research during the start-up phases helped inform the joint development of instruments. Draft interview guides and instruments were piloted by both teams before being finalized. The survey instrument was developed in English, translated into Spanish and back translated into English to enhance comparability. In addition, because the Spanish version was developed primarily for use in Puerto Rico, some changes in terminology to convey the same meaning in "spanglish" were needed for use with New York participants who preferred being interviewed in Spanish.

Enhancing validity of the data collection also occurred by the use of qualitative methods in both studies, including interviews with key informants and observations in the communities studied. These were essential to all phases of the research, including recruitment (e.g., in identifying locations where the target population could be found) and in developing interview instruments for the research participants (e.g., in identifying contextual and other issues to be addressed).

The types of data that could be collected were also influenced by immigrant status, especially for undocumented residents. In the New Communities study, although there had been early discussion of conducting HIV testing, the research staff decided against testing. It was believed that if HIV testing were part of the research protocol, participants with little knowledge about testing and fearing possible deportation or stigma associated with testing, would refuse to participate. In the ARIBBA study, HIV testing was conducted at baseline and each follow-up interview, because seroincidence was an important measure to assess. The researchers at both ARIBBA sites had extensive prior experience in conducting HIV testing in these communities, legal status was not an issue, and the research participants were familiar with prior studies by the researchers in those communities and knew that there were no negative consequences associated with research participation (or nonparticipation).

Ethical Issues

There are also ethical challenges inherent in conducting studies which involve multinational, multiethnic populations, marginalized by their immigration status, levels of education and acculturation, lack of resources, and communication obstacles. Moreover, the relativity of cultural norms and the "legality" of residence and behaviors (e.g., drug use), raise serious issues for research committed to "do no harm."

Both studies maintained careful attention to the protection of human subjects and respondent confidentiality. Extra attention is crucial where participants neither have past experience with research nor much experience with respect for human rights in their countries/communities of origin. The New Communities study did not obtain any follow-up identification, nor did it request direct information on immigration status or HIV status. Furthermore, in both studies, cognizant that respondents were likely to have health and social service needs, interviewers were prepared to refer interviewees to services when information on medical needs were revealed. In the ARIBBA study, referrals for risk reduction services for drug users were included in all HIV counseling sessions (e.g., drug treatment and needle exchange programs). Training of all interviewers regarding informed consent procedures included emphasis on the confidentiality of the interview and ensuring that participants understood the consent document. In addition, in the New Communities study, special sensitivity to the concerns of immigrants who might be undocumented was needed.

Cultural sensitivity to different national and ethnic groups and to subcultural issues such as drug use, were a continual concern. Both projects selected staff for their interpersonal and research skills and their abilities to communicate and interrelate appropriately and knowledgeably within the study populations. Both principal investigators, in fact, had long experience in the locations studied (Puerto Rico, Central America, and the Dominican Republic), as well as with the subcultures of drug-using and new immigrant communities, respectively. In addition, both studies maintained a current and historical view on the context of the lives of the Hispanic participants, both in the United States and in their countries of origin. In the New Communities study, participant exposure to war, violence, natural disasters, and political oppression were important considerations in researcher–participant interactions and protocols.

Finally, both study teams recognized the professional and ethical imperative of sharing the learning obtained with the communities involved, both in the United States and internationally. Research project funding does not usually include funds for dissemination beyond scientific venues. Peer-reviewed journal publication is important to scientific advancement and perhaps policy development, but community-based advocacy and service agencies need data specific to their target groups to address needs and to obtain resources. Government agencies may need data regarding specific subpopulations to be made aware of special service needs. Science-based platforms, proposals, and materials will assist them in identifying service needs and to achieve greater legitimacy and improved opportunities to serve their communities. Both projects have provided presentations and reports to key individuals and groups from social service agencies and universities in the United States, Puerto Rico, Mexico, the Dominican Republic, and Central America, as well as government health departments, international health and development agencies. These communications provide not only the data and conclusions of the study, but address the ethical issues inherent in partnerships and science.

DISCUSSION

Worldwide, 125 million people are estimated to live and work outside their country of citizenship, with between 2 and 4 million migrating permanently each year.[6] Mobility can be permanent, temporary or involuntary, and each group must be assessed in terms of their specific health risks and vulnerabilities.[34] The relationship between migration and HIV risk has been reported among diverse populations. An understanding of migration and the sociocultural and contextual factors affecting HIV risk has become essential in addressing the HIV/AIDS epidemic. Existing data only begin to demonstrate the importance of understanding these populations and the risks they may bring with them and those they encounter. Less is known about the experiences that lead to attitudinal and behavioral changes in host countries, and how the migrants and immigrants influence the cultures and subcultures into which they move. However, as shown by the two studies discussed, the many challenges to conducting research with these populations can be addressed, yielding knowledge useful in developing interventions.

Because there has been an unprecedented growth in the Hispanic immigrant and migrant populations in the United States, representing many subgroups, health needs, and risk factors, the two projects discussed were used to illustrate challenges in studying these populations. The adaptation of existing multilevel theoretical frameworks and the development of new ones to incorporate the complexity of issues confronting mobile populations are critically important in understanding and addressing their health needs. These schemas permit an examination of how immigrant risk evolves, shaped by individual and group experiences in new cultural environments.

Sensitivity to the population and awareness of its diversity are necessary for identifying cultural and social factors that influence risk as well as for developing effective interventions—both in terms of their content and delivery methods. Attention to cultural and legal issues and to cultural sensitivity in communication and data collection is an important part of these efforts. These nuances and subtleties have implications for the development of rapport with research participants, relationships, the quality of fieldwork, and ultimately for the validity and utility of the data obtained.

For migrant and immigrant populations, the research can itself be an intervention, and research staff should be aware of this. For example, interviews and data gathering with the target populations and key informants involved in service delivery and advocacy may raise new issues and concerns among them as well as increase their awareness of the research issues. Interviews with members of the target populations can also lead to behavior change directly or indirectly related to the research topics discussed with them. Thus, setting aside time at the end of formal interviews to discuss questions or concerns, and provide referrals if needed, should be a standard component of research in these communities. Finally, in addition to dissemination of findings to scientific audiences, efforts to share results with community members and community-based service institutions are a professional imperative. This can lead to enrichment and validation of the data as well as to the development of appropriate services to address the specific needs of these populations.

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