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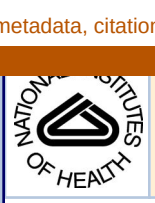

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Cult Health Sex. Author manuscript; available in PMC 2015 May 28.

Published in final edited form as:

Cult Health Sex. 2014 ; 16(7): 820–834. doi:10.1080/13691058.2014.918282.

Migration and HIV risk: Life histories of Mexican-born men living with HIV in North Carolina

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Abstract

Latino men in the Southeastern USA are disproportionately affected by HIV, but little is known about how the migration process influences HIV-related risk. In North Carolina (NC), a relatively new immigrant destination, Latino men are predominantly young and from Mexico. We conducted 31 iterative life history interviews with 15 Mexican-born men living with HIV. We used holistic content narrative analysis methods to examine HIV vulnerability in the context of migration and to identify important turning points. Major themes included the prominence of traumatic early life experiences, migration as an ongoing process rather than a finite event, and HIV diagnosis as a final turning point in migration trajectories. Findings provide a nuanced understanding of HIV vulnerability throughout the migration process and have implications including the need for bi-national HIV prevention approaches, improved outreach around early testing and linkage to care, and attention to mental health.

Keywords

HIV prevention; migrant men; life history; narrative analysis; USA

Introduction

People of Latino descent are disproportionately affected by HIV in the USA, representing 21% of all new cases each year but only 16% of the total population (CDC 2013a). Latino men make up 87% of new cases among Latinos and experience infection rates nearly three times as high as those of non-Hispanic White men (CDC 2013a). HIV disparities can also observed at the state level in North Carolina (NC), for example, where Latinos have HIV rates three times higher than non-Hispanic Whites (NC DHHS 2012).

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New destinations

NC has one of the fastest-growing Latino populations in the nation (Kochhar, Suro, and Tafoya 2005); Latinos made up an estimated 8.7% of the state population in 2012, compared with 4.7% in 2000 (US Census Bureau 2011, 2014). As a new destination state, NC is part of a larger trend in which migration from Latin America to the USA has expanded beyond longstanding receiving areas, such as New York and California, to other regions, such as the Southeast, that previously did not have large Latino populations (Kochhar, Suro, and Tafoya 2005; Massey 2008). Latinos in NC and other parts of the Southeast tend to be young, unaccompanied, foreign-born, male, and predominantly of Mexican descent (Frasca 2008; Kochhar, Suro, and Tafoya 2005; Painter 2008; Pew Hispanic Center 2011).

Compared with the rest of the Southeast, NC was initially welcoming of newly arrived migrant labour and offered a greater number of Latino-oriented services than neighbouring states. However, in recent years, anti-immigrant policies have emerged on the state and local levels that have increased mistrust and affected migrants' access to bicultural and bilingual health services (Frasca 2008). For example, in 2006 the state Department of Motor Vehicles blocked undocumented immigrants' access to driver's licences, and in 2009 local law enforcement agencies in certain municipalities began entering into partnerships with US Immigration and Customs Enforcement through the 287(g) Program[1] (Frasca 2008; Nguyen and Gill 2010).

In addition to these policy-level factors, the social context in which Latino immigrant men live in NC also creates heightened HIV risk. This risk is shaped by multiple factors including neighbourhood gender imbalance with disproportionately more men than women, social isolation, a well-organised sex industry, long work hours, stress and stigma associated with migrant status and sexuality, and HIV-related stigma (Apostolopoulos et al. 2006; Hirsch et al. 2009; McQuiston et al. 2005; Organista et al. 2013; Parrado and Flippen 2010a; Parrado, Flippen, and McQuiston 2004; Viadro and Earp 2000). Research indicates that norms regarding sexual activity and substance use may be re-formulated in this new context, with migrants reporting greater participation in HIV-related risk behaviours than in their country of origin (Hirsch et al. 2002; Parrado and Flippen 2010b; Rhodes, Hergenrather, Griffith, et al. 2009).

In the light of these epidemiological and demographic trends, and given the political and social context, there is a need to better understand HIV in the context of migration from Mexico to new destination states in the Southeast USA. In this study, we examined the life histories of Mexican migrant men in NC living with HIV to understand how events during the life course relate to experiences with HIV and identify key turning points, and to explore the relationship between the migration processes and HIV vulnerability. We then considered the implications of findings for HIV prevention and care throughout the migration process.

[1]Under Section 287(g) of the Immigration and Naturalization Act, U.S. Immigration and Customs Enforcement trains and cross-deputizes state and local police officers in participating municipalities to also act as federal immigration agents, including initiating deportation proceedings. While initially intended to target undocumented immigrants who had committed serious crimes, most immigrants who have been incarcerated through 287(g) have been charged with minor offenses and traffic infractions and the program has been criticized for violations of civil rights (Nguyen and Gill 2010).

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Methods

Study setting and sample

The study received approval from the Office of Human Research Ethics at the University of North Carolina at Chapel Hill. Participants were male, at least 18 years old, born in Mexico, and enrolled in HIV care at one of two clinics in NC with substantial numbers of Latino patients: a state hospital outpatient infectious diseases clinic and a county health department HIV/STD clinic. Providers from the clinics introduced the study to potential participants during routine care visits and referred those who expressed interest. We interviewed 15 participants from April 2010 to June 2011, at which point we determined that we had reached saturation, or the identification of recurring themes related to our key study aims (Corbin and Strauss 1990).

Data collection

Following a written consent process, we collected each participant's life history in the course of a series of one to three interview sessions. We used multiple sessions to build trust and rapport, reduce burden on participants, and allow for an iterative analytical process. We conducted a total of 31 interview sessions, each lasting 45 minutes to two hours, with the 15 participants. Participants received a $40.00 gift card after each interview session. All interviews were conducted in Spanish by the principal investigator or project coordinator. Initial interviews took place at the clinic where the participant was enrolled in care; subsequent interviews occurred at locations selected by the participant.

During the interview, we used a combination of unstructured and semi-structured techniques to elicit each participant's life history. As a starting point, we asked participants to think about their lives as a story, to break that story into different 'chapters' or meaningful segments of their choosing, and to describe those segments in detail. We asked probing questions regarding social networks, sexual behaviour and substance use, and other themes that emerged during the data collection period. All interviews were audio-taped, transcribed verbatim, and reviewed for accuracy.

Data analysis

We analysed data in Spanish using techniques defined by Maxwell and Miller (2008) as 'connecting' strategies to assess the chronological stories of participants' lives in the broader context of the migration experience. Following Lieblich, Tuval-Mashiach, and Zilber's (1998) recommendations for holistic content analysis of life histories, we first developed a narrative summary of each participant's entire life history. All summaries highlighted the role of migration experiences and HIV risk behaviours, as well as key themes specific to the participant's story.

Next, we produced a timeline for each participant by plotting important events in his migration process and key moments related to HIV. The interview structure lent itself to the identification of trajectories and turning points, two complementary concepts that are unique to narratives. A trajectory is defined as a smooth, stable movement in one direction; the life course consists of a series of these trajectories connected by transitions. A turning point is a

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transition that redirects that movement and connects two distinct trajectories (Abbott 1997; Wheaton and Gotlib 1997). We identified the most important turning points in each participant's life history and examined migration and HIV diagnosis experiences to understand how they related to other events and trajectories in participants' lives.

We also employed 'categorising' techniques (Maxwell and Miller 2008) by creating matrices that allowed for the comparison of narrative and timeline elements across participants while at the same time keeping those elements within the context of an individual's life history.

Throughout the analysis process, our interpretation of the data was informed by our team's experience with HIV prevention research and practice in Latin America and with Latino migrants in the USA, as well as our commitment to improving migrant health.

In presenting our findings in the Results section, we have used pseudonyms for all participants.

Results

We first present a summary of participant demographics. We then present the three main themes identified through our analysis: (1) the prominence of early life turning points, (2) migration as an ongoing process rather than a finite turning point, and (3) HIV diagnosis as a final turning point. To preserve the holistic nature of our life history data, we demonstrate our findings by tracing the story of Emilio, a participant in his 40s, and supplement this with information from other participants' life histories. We selected Emilio's story as a case example because it included clear and detailed illustrations of the main themes that were common among the 15 study participants as a whole.

Participant demographic characteristics

Participants ranged in age from 24 to 46 years (Table 1) and reported having migrated from 11 different states in Mexico. Time living in the USA ranged from four to 15 years, and time since HIV diagnosis ranged from less than one to 16 years. Education levels ranged from some primary school to some college education, and all participants were employed. Seven participants reported having sex with men. Four participants were married or partnered at the time of their interview, and four had children.

Stories of migration and HIV

The significance of early life turning points—Turning points during participants' childhood and adolescence played an important role in shaping their life histories. For example, although Emilio reflected that growing up in a small agricultural community near Mexico's Pacific coast was mostly pleasant, he began his interview by sharing a memory from when he was five years old and overheard his mother telling her friends that he was 'different' and destined for suffering:

> Everything was going well until one day I heard that I was different, that I was going to suffer a little in this life because I was not the same as my brother.

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Emilio's mother's words affected him greatly, though he did not fully understand her comment until years later, after he had come out as gay and experienced some of the difficult events that have shaped his life history. The fact that this was the first moment that came to mind when asked to describe the first chapter of his life reflects a deterministic tone running throughout Emilio's story. The feeling that he did not have control over his future and his physical and mental health continued later in his interviews when he described migrating to the USA as unplanned and becoming infected with HIV as unavoidable; this sense of powerlessness and inevitability also affected his sexual risk and HIV testing behaviour.

Emilio later experienced other forms of emotional distress and even abuse when he came out as gay. At age 13 he began to have sex with male friends in encounters that he describes as 'secrets.' He began to express his sexual identity more openly a few years later. His earliest relationship was with an older man whom Emilio described as controlling and possessive. This partner forced him to have sex, did not allow him to go out, and at one point suggested a joint suicide. Emilio then went on to date the person he referred to as his first boyfriend, but his relationship with this partner was difficult to maintain because his partner also had a girlfriend and because his partner's brother strongly opposed his involvement with Emilio.

These romantic relationships at a young age that ended painfully, and where Emilio felt that he had little control, also contributed to his growing sense of determinism. However, despite such emotional challenges it was also during this time in his life that he began to build a greater sense of self-esteem, finding that a new, more confident personality emerged when he began dressing up in nice clothes to go out dancing with gay friends.

Like Emilio, many other participants highlighted challenging and traumatic early life events in their narratives. Examples included a participant who lost his parents and was later expelled from his orphanage to live on the streets, a participant who had to drop out of school when his father went in to rehabilitation for alcoholism, a participant who was falsely accused of a crime and incarcerated, and a participant who was held as a prisoner of war while serving in the military in his late teens.

Multiple participants spoke of separation from a parent at a young age due to illness, death, or other circumstances as having a profound impact on their lives. Instances of abuse, both physical and emotional, by parents and other caretakers also came up repeatedly. For participants identifying as gay, expression of sexual orientation sometimes led to emotional stress, as reflected in Emilio's early memory of his mother's discouraging prediction, and even physical punishment. For some, early turning points also created an economic need for migration, such as increased family financial responsibilities or job loss. These early life events set the tone for subsequent stages, including participants' experiences as migrants and living with HIV.

Migration as an ongoing process—Rather than appearing on their timelines as a discrete event, participants described migration as a gradual process occurring over an extended period. Primary motivations for migrating were family reunification and economic factors. Numerous participants migrated internally within Mexico prior to leaving the

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country or lived in one or more states in the USA in addition to NC. In many cases, migration often seemed relatively unplanned and was surrounded by ambivalence. Participants talked about deciding to migrate because others encouraged them to, because they had little keeping them in Mexico, or out of curiosity about life in the USA.

Emilio's move to the USA typifies these trends. He migrated at age 27 and had been living in the USA for 14 years at the time of his interview. While many from his hometown were leaving due to a financial crisis in the agricultural sector, at the time that he migrated he was making a living as a hair stylist and did not have an economic need to move. Instead, he originally intended to accompany his sister only as far as the US-Mexico border, after which she was to join her husband in California. When they arrived at the border, however, he decided to go with her into the USA because she was afraid to cross alone. Other participants' border-crossing experiences varied. Although some arrived to the USA with a visa, many had entered without documentation. Some, like Emilio, described the experience as relatively brief and uneventful, whereas others had more arduous, and even traumatic, journeys.

After spontaneously crossing the border with his sister, Emilio decided to stay just long enough to make some money. He soon became involved in daily life in the USA and never returned to Mexico as planned, though he disliked the social environment in California and found limited work opportunities in the region. Because he was so unhappy, Emilio decided to move to NC to live with an uncle. He and his uncle later had a disagreement and cut ties. This was another turning point in Emilio's life because it led him to decide to stay in the USA in order to prove to himself and others that he could make a life for himself despite this setback.

While the men in our sample had been in the USA for varying lengths of time, their identity as migrants and adjustment to a new setting continued to shape their experiences and affect their quality of life. More than the specific act of crossing the border, the ongoing migration and settlement process brought about changes in their circumstances, including their career paths. For example, Emilio had received training and experience as a stylist in Mexico, but because he did not intend to stay permanently in the USA, he did not initially pursue work in this field. Furthermore, he lacked connections to secure well-paid employment and worked up to three jobs at a time in factories, restaurants, and housekeeping to support himself. Other participants described similar changes in the type of work that they carried out, shifting from professional or skilled jobs in Mexico to physical labour in the USA. Emilio also felt unable to move freely due to his migrant status, concerns that were echoed by others including two participants who had been previously detained and deported by US immigration authorities.

Aspects of participants' social life also changed with migration. Many men went from having strong ties with friends and co-workers in Mexico to having very limited social networks and relying mostly on family in the USA. Notably, a few participants' support networks shifted in the opposite direction. For participants identifying as gay, some felt able to express their sexual identity more freely whereas others who had been highly involved in the gay community in Mexico were not entirely out in the USA.

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In Emilio's case, over the course of his time in the USA he withdrew from both family and friends. When he first arrived in California he mostly spent time with others from his hometown, though he did not feel as comfortable in this group as he had with his friends in Mexico. His friends had started using drugs since migrating and pressured him to use as well, but he never did. He continued to go out with groups of gay friends in California and NC, but did not feel a strong connection to gay Latino communities in the USA; he described members as being competitive with one another. He had one serious relationship, with a White American man in NC, but had not dated since.

The migration process also created the context in which important turning points and experiences related to HIV occurred. While not as prominent in Emilio's life history, for many participants, differences between life in the USA and Mexico related to their vulnerability to HIV. These included increased contact with environments where risk factors such as drinking, drug use, and sex with sex workers were common. For some, already existing behavioural risk intensified in this new context. For example, participants who were married and whose partners remained in Mexico talked about how distance from their partners and different social norms in the USA contributed to increased extramarital sex, echoing findings from previous studies (Hirsch et al. 2002; Parrado, Flippen, and McQuiston 2004; Viadro and Earp 2000). These changes over the course of an extended migration process created a unique backdrop against which participants experienced heightened vulnerability to HIV, as well as diagnosis and initiation of treatment processes.

Diagnosis as a final turning point—For many participants the moment of HIV diagnosis served as a final turning point in their retelling of their life history. Three participants were diagnosed in Mexico, while the rest were diagnosed in the USA. In most cases men did not know for certain when or where they became infected with HIV, but many indicated periods of time during which they perceived infection to have occurred that included both the USA and Mexico. Despite the variation regarding when and where infection and diagnosis occurred, nearly all of the men in the sample were diagnosed with advanced cases of HIV and began their HIV care in the USA.

This finality with which participants viewed diagnosis took several different forms, many of which are demonstrated in Emilio's life history. Like several other participants, Emilio conceptualised diagnosis as an inevitable endpoint of a long trajectory over the course of his life that led to getting HIV. Rather than attributing his illness to a specific moment where he became infected, he talked about HIV as inescapable, predestined, and a form of punishment. Emilio learned that he had HIV approximately six years after he arrived in NC. He was 'prepared' for the news because he was aware of risks associated with his sexual behaviour and had a growing sense that he might be infected. While he had learned about safer sex as a teenager and had used condoms since he was 18, he felt that complete prevention was impossible. Some of the condoms that he used broke, and he also insinuated that some level of risk-taking was to be expected, saying it was natural to want to explore with different partners and describing sex as an addiction 'like a drug.' He knew of other people that had become infected, and he felt that many people were not honest with their partners about their HIV status.

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Despite the fact that Emilio had suspected for some time that he was infected, he delayed getting tested because he did not know where to go. He believed he could have gotten HIV either in Mexico or California, but finally got tested in NC when he and a group of friends were out dancing and decided to participate in testing offered at a local nightclub. When Emilio received his results, he was told that he was in an advanced stage of infection. He was referred to a local hospital, where he began managing his HIV through regular appointments.

After diagnosis, many participants considered the rest of their life path to be fixed and their migration process to be complete. Some participants experienced strong emotional responses to learning that they were infected that, at times, further exacerbated existing mental health issues and preexisting trauma. These including periods of depression, self-isolation, and substance abuse immediately after diagnosis. Several participants, including Emilio, also retreated from society after they found out that they had HIV, withdrawing from social networks, discontinuing certain activities, and no longer planning to date or start a family. Emilio described his life since diagnosis as consisting primarily of going to work and maintaining his HIV treatment. He rarely went to clubs anymore and began to doubt that he would date again. In contrast with the self-assurance about his sexual identity that he developed at a young age, he was hesitant to disclose his HIV status because of ignorance and HIV discrimination. He also did not want others to worry about him. While his family knew about his sexuality and had grown more accepting, he had only confided about his diagnosis to a few friends and relatives.

One of the youngest participants, Fernando, who was in his mid-20s and had migrated to the USA as a child, described a similar sense of resignation:

> I feel like an empty shell… Sometimes I think I live just to live … I no longer have a reason. I feel like a ghost in the world.

Drawing had been a passion and a form of stress-relief for Fernando in the past, but he had recently thrown away all his artwork. He also spoke about feeling separate from other people and used the vivid image of feeling like he was under a frozen lake, watching the rest of the world through a sheet of ice:

> Sometimes I think… that it is a lake and… it is already all covered in ice. And I find myself under the ice. And the people, I see them walk. Free. And I, wanting to be like them, to get out of that lake. But… I see them and it isn't… possible. It is difficult… I feel like… something very big… separates me. From humanity.

For many men, diagnosis also meant a truncation of traditional cyclical patterns of migration in which migrants return temporarily or permanently to their place of origin after a period of time in the USA. While a few had plans for future endeavors in Mexico, most participants no longer considered return an option, even those who had originally intended to only migrate temporarily or who had constructed a house in their home community using money earned in the USA.

For example, Emilio remained in touch with friends back home and would have preferred to move back to Mexico to start his own business and continue his studies. However, he

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worried about access to HIV care and even greater HIV-related stigma in Mexico, to the extent that he was afraid to inquire about the availability of HIV medications in his hometown because he believed people would gossip about him. While he refused to give up, he felt stuck in an isolated lifestyle in the USA and unable to pursue his larger goals.

In spite of these perceptions of diagnosis as an endpoint, several participants continued to be future-oriented in some respects. Emilio translated finding out that he had HIV into motivation to return to his preferred career. Knowing that he had HIV gave Emilio the impetus to return to 'the world of the hair salon' because he suddenly felt that he had little to lose. After he learned that he was infected, Emilio found a salon owner who hired him and helped him to get his NC cosmetology licence. Though he still considered himself generally socially isolated and would have preferred to be in Mexico, he enjoyed his work and interacting with his co-workers and clients.

Other participants also demonstrated this type of positive forward thinking after diagnosis, including one who felt that his communication with his family was better after finding out that he had HIV. He had reduced his risk-taking behaviour out of respect for the support his wife provided and to avoid transmitting HIV, and, while he felt guilt and regret, his current focus was on educating his children so that the same thing would not happen to them.

Discussion

The three main themes from our analysis—significant early life turning points, migration as a process, and the finality of HIV diagnosis—are helpful for understanding the relationship between migration and HIV vulnerability in the context of a new destination state.

Our findings indicate the need for a more holistic approach to studying and preventing HIV among migrant populations, including increased emphasis on the impact of early life conditions and mental health throughout the life course. Experiences from when participants were young figured prominently in their life histories and included many examples of diverse forms of trauma. Other studies have also identified a high prevalence of traumatic events in the lives of people living with HIV (Whetten et al. 2008), and the specific types of hardships described by participants in this study parallel common early life experiences among non-migrant individuals with HIV in NC and other parts of the Southeast (Whetten et al. 2006). The particular prominence of traumatic early life experiences, including emotional and physical abuse, among participants in our study who identified as gay, such as Emilio, warrants special attention. Other studies have also found childhood abuse to be prevalent and associated with sexual risk-taking among Latino men who have sex with men (Arreola, Neilands, and Diaz 2009).

Participants also described long-term mental health challenges such as depression and substance abuse, issues that have also been described in other studies with migrant men in NC (McQuiston et al. 2005). Latino migrants tend to underutilise mental health services for a variety of reasons, including stigma, lack of medical insurance, lack of knowledge, and other access issues (Garcia et al. 2011; Manoleas 2008; Nadeem et al. 2007). These findings highlight the need for improved attention to mental health among migrants as a risk factor

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for HIV, especially in a new destination such as NC where many migrants experience isolation and loneliness.

Our findings also demonstrate how HIV relates to traditional and shifting migration patterns. Historically, the flow of people between Mexico and the USA has been circular; most migrants to the USA have planned to eventually return to Mexico, though some have settled in the USA as they formed ties in their receiving communities (Massey 1987). The experiences of participants in this study reflect, but also complicate, these models. Emilio and most of the other men did not migrate with explicit plans to stay in the USA permanently. Though a few participants had put down roots in NC, many shared Emilio's preference to live in Mexico long-term but felt that going back was not an option due to concerns about HIV-related stigma and lack of access to medical care. As such, HIV may interact with larger forces related to changing migration patterns, and effective approaches to HIV prevention and care for migrants will need to take in to consideration and address such stress about the future and challenges related to continuity of care.

Our participants' experiences are also consistent with previous findings regarding a tendency for Mexican migrants in new destination states in the Southeast to delay testing for HIV (NC DHHS 2010; Sena et al. 2008; Torrone et al. 2007; Dennis et al. 2013). For many men in the study, HIV infection was detected after they had developed symptoms and, in some cases, were seriously ill. Emilio and the other participants described fear, stigma, fatalism, lack of knowledge, and lack of access as reasons that they did not test earlier, all of which are common barriers identified in the migrant health literature (Persichino and Ibarra 2012; Rhodes et al. 2006; Rhodes and Hergenrather 2007). However, several, including Emilio, described ways that some aspects of their lives had improved after they finally were diagnosed and began receiving HIV care. Given growing support for early treatment as both a means of providing direct health benefits to people living with HIV and a form of HIV prevention (Cohen, McCauley, and Gamble 2012), increasing testing rates and linkage to care among migrant men is essential and also aligns with large-scale efforts such as the National HIV/AIDS Strategy for the US (ONAP 2010).

Fully addressing the issue of delayed testing must also include efforts both in Mexico and in the USA, as many participants in this study experienced periods of perceived risk in both countries. Zimmerman, Kiss, and Hossain's (2011) Migratory Process Framework may be a useful tool in addressing HIV vulnerability that transcends all stages of the migration process. This framework considers migration to be cyclical and multi-staged, dividing the process into five phases that each involve distinct health-related risk exposures with cumulative effects over the course of migration and that each present distinct opportunities for intervention: Pre-departure, Travel, Destination, Interception, and Return.

The Migratory Process Framework has not been explicitly applied to HIV among Mexican-born migrant men, yet existing prevention efforts align with various phases of the framework. For example, prioritised health strategies in Mexico focus on Pre-departure conditions, such as limited access to condoms and testing and social norms regarding sexuality, by using mobile health units, campaigns to incorporate HIV testing into routine primary care visits, and mass media campaigns addressing homophobia, gender inequality,

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and stigma related to HIV (Izazola Licea et al. 2010; Magis-Rodriguez et al. 2004; Strathdee and Magis-Rodriguez 2008).

During the Travel phase, special attention has been paid to increased social vulnerability and sexual risk experienced by migrants en route to the USA. Accordingly, HIV prevention programs have been implemented in migrant transit stations throughout Mexico and Central America (Leyva Flores et al. 2006). In addition, behavioural interventions have been implemented among commercial sex workers in the US-Mexico border region, with preliminary results indicating significant improvements in safer sex practices and STD incidence (Patterson et al. 2008).

With regard to the Destination phase, current HIV prevention efforts in NC emphasise lay health advisor (LHA) models that tap into migrant men's social networks. An LHA intervention implemented with members of Latino men's soccer leagues in rural NC has been included in the Centers for Disease Control and Prevention's Compendium of Evidence-Based HIV Behavioral Interventions based on demonstrated effectiveness in increasing condom use and HIV testing (Centers for Disease Control and Prevention 2013b IN FULL PLs; Rhodes, Hergenrather, Bloom, et al. 2009).

The level of social isolation among participants in the study, as well as this population's transient nature and reluctance to use services, imply that other methods may be necessary to complement current intervention designs and to facilitate initiation of HIV care when necessary. Suggested approaches include encouraging migrant men who test positive or are high-risk to refer others in their social networks for testing (CDC 2006). Additionally, NC-based programmes using social marketing, outreach, and coordination of care to promote testing and linkage to care have been associated with increased retention of young Latino and African American men who have sex with men in HIV primary care services (Hightow-Weidman et al. 2011). As rates of internet use among Latinos in the USA have been increasing rapidly, particularly through the use of mobile devices (Pew Hispanic Center 2013), Mexican-born men may also benefit from theory-based, interactive websites promoting HIV and STD prevention such as a recently piloted online intervention designed for African American men who have sex with men (Hightow-Weidman et al. 2012).

Finally, the Mexican government has developed bi-national programmes that take into account the Return phase of cyclical migration patterns. For example, the *Vete Sano, Regrese Sano* (Leave Healthy, Return Healthy) initiative, health initiatives at Mexican consulates in the U.S., and Bi-national Health Week seek to address migrant health prior to, during, and after migration. However, important gaps remain as these programmes do not focus specifically on HIV nor have they been rigorously evaluated (Leyva Flores et al. 2009). These programmes also reflect the assumption of return, which we did not find to be a reality for Mexican migrants living with HIV in NC.

A systematic application of the Migratory Process Framework may be especially effective for further examining and promoting testing from a bi-national perspective using intervention approaches that are tailored to the different stages of migration and also take into consideration the entire migration process. There is also a need for more rigorous

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assessment of the efficacy of intervention approaches, particularly those employed in sending communities in Mexico and those that address structural determinants of health, which have been recognised as essential to prevention efforts but difficult to evaluate using traditional study designs (Gupta et al. 2008).

Limitations

A major limitation of this study was that the sample included only participants who had been tested and were receiving care and who had already been through the process of migrating to the USA. If possible, future studies should examine experiences of men who are not actively in care and attempt to capture the perspectives of those at various points in the migration process. Aspects of the interview process may have also influenced the data collected. For example, the structure of the guide, which asked participants to list the chapters of their life story, may have contributed to greater emphasis on early life events.

Conclusions

Our findings provide compelling reasons for examining HIV and migration from a bi-national, life course perspective rather than focusing only on the risk behaviours of Mexican migrants in the US. Study findings indicate a need for greater attention to early life experiences and trauma. Implications also include the need to promote earlier testing across all stages of the migration process and to address continuity of care both in the USA and in Mexico for those who wish to return.

Acknowledgments

Funding

This research was supported by a Development Award from the Center for AIDS Research at the University of North Carolina at Chapel Hill. We are grateful for general support from the Population Research Infrastructure Program awarded to the Carolina Population Center [R24 HD050924] at The University of North Carolina at Chapel Hill by the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development.

References

Abbott A. On the Concept of Turning Point. Comparative Social Research. 1997; 16:85–105.

Apostolopoulos Y, Sonmez S, Kronenfeld J, Castillo E, McLendon L, Smith D. STI/HIV Risks for Mexican Migrant Laborers: Exploratory Ethnographies. Journal of Immigrant and Minority Health / Center for Minority Public Health. 2006; 8(3):291–302. [PubMed: 16791539]

Arreola SG, Neilands TB, Diaz R. Childhood Sexual Abuse and the Sociocultural Context of Sexual Risk among Adult Latino Gay and Bisexual Men. American Journal of Public Health. 2009; 2(99 Suppl):S432–S438. [PubMed: 19372522]

CDC (Centers for Disease Control and Prevention). Interim Guide for HIV Counseling, Testing, and Referral Programs. Atlanta, GA: CDC: 2006. Social Networks Testing: A Community-Based Strategy for Identifying Persons with Undiagnosed HIV Infection. http://www.cdc.gov/hiv/resources/guidelines/snt/

CDC. CDC Fact Sheet: HIV and AIDS among Latinos. Atlanta, GA: CDC: 2013a. http://www.cdc.gov/nchhstp/newsroom/docs/CDC-HIV-Latinos-508.pdf

CDC. Compendium of Evidence-Based HIV Behavioral Interventions: HoMBReS. Atlanta, GA: CDC: 2013b. http://www.cdc.gov/hiv/prevention/research/compendium/rr/hombres.html

Cohen MS, McCauley M, Gamble TR. HIV Treatment as Prevention and HPTN 052. Current Opinion in HIV and AIDS. 2012; 7(2):99–105. [PubMed: 22227585]

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Corbin, Juliet M.; Strauss, Anselm. Grounded Theory Research: Procedures, Canons, and Evaluative Criteria. Qualitative Sociology. 1990; 13(1):3–21.

Dennis AM, Wheeler JB, Valera E, Hightow-Weidman LB, Napravnik S, Swygard H, Barrington C, Eron JJ. HIV Risk Behaviors and Sociodemographic Features of HIV-Infected Latinos Residing in a New Latino Settlement Area in the Southeastern United States. AIDS Care. 2013

Frasca, T. Shaping the New Response: HIV/AIDS & Latinos in the Deep South. New York, NY: Latino Commission on AIDS; 2008. http://www.latinoaids.org/downloads/deepsouthreport.pdf

Garcia CM, Gilchrist L, Vazquez G, Leite A, Raymond N. Urban and Rural Immigrant Latino Youths' and Adults' Knowledge and Beliefs about Mental Health Resources. Journal of Immigrant and Minority Health / Center for Minority Public Health. 2011; 13(3):500–509. [PubMed: 20835762]

Gupta GR, Parkhurst JO, Ogden JA, Aggleton P, Mahal A. Structural Approaches to HIV Prevention. Lancet. 2008; 372(9640):764–775. 10.1016/S0140-6736(08)60887-9. [PubMed: 18687460]

Hightow-Weidman LB, Pike E, Fowler B, Matthews DM, Kibe J, McCoy R, Adimora AA. HealthMpowerment.Org: Feasibility and Acceptability of Delivering an Internet Intervention to Young Black Men Who have Sex with Men. AIDS Care. 2012; 24(7):910–920. [PubMed: 22272759]

Hightow-Weidman LB, Smith JC, Valera E, Matthews DD, Lyons P. Keeping them in "STYLE": Finding, Linking, and Retaining Young HIV-Positive Black and Latino Men Who have Sex with Men in Care. AIDS Patient Care and STDs. 2011; 25(1):37–45. [PubMed: 21162690]

Hirsch JS, Higgins J, Bentley ME, Nathanson CA. The Social Constructions of Sexuality: Marital Infidelity and Sexually Transmitted Disease-HIV Risk in a Mexican Migrant Community. American Journal of Public Health. 2002; 92(8):1227–1237. [PubMed: 12144974]

Hirsch JS, Munoz-Laboy M, Nyhus CM, Yount KM, Bauermeister JA. They 'Miss More than Anything their Normal Life Back Home': Masculinity and Extramarital Sex among Mexican Migrants in Atlanta. Perspectives on Sexual and Reproductive Health. 2009; 41(1):23–32. [PubMed: 19291125]

Izazola Licea JA, Magis-Rodriguez C, Bravo Garcia E, Ortiz Mondragon R, Rivera Reyes P, Garcia de Leon C. Advances and Challenges for the Prevention and Control of AIDS in Mexico. Gaceta Medica De Mexico. 2010; 146(6):411–422. [PubMed: 21384638]

Kochhar, R.; Suro, R.; Tafoya, S. The New Latino South: The Context and Consequences of Rapid Population Growth. Washington, DC: Pew Hispanic Center; 2005. http://www.pewhispanic.org/2005/07/26/the-new-latino-south/

Lieblich, A.; Tuval-Mashiach, R.; Zilber, T. Narrative Research: Reading, Analysis and Interpretation. Thousand Oaks, CA: Sage Publications; 1998.

Leyva Flores, René, Marta Caballero, César Infante Xibilé, and Mario Bronfman. VIH/SIDA y movilidad poblacional en México y Centroamérica: Respuestas regionales en contexto de vulnerabilidad social. SIDA: Aspectos de Salud Pública, edited by Centro Nacional para la Prevención y el Control del VIH/SIDA, 117–125. Deleg. Miguel Hidalgo: Centro Nacional para la Prevención y el Control del VIH/SIDA. 2006. http://www.cndh.org.mx/sites/all/fuentes/documentos/Programas/VIH/OtrasPublicacionesdeinteresrelacionadosconelVIH/CENSIDA/manualSIDA2006.pdf

Leyva Flores, René, Frida Quintino, Marta Caballero, and César Infante. El estado de la migración: Las políticas públicas ante los retos de la migración mexicana a Estados Unidos, edited by Paula Leite and Silvia E. Giorguli. México, D.F: Consejo Nacional de Población; 2009. Migración Internacional y VIH/SIDA en México; p. 249-263.http://www.conapo.gob.mx/work/models/CONAPO/migracion_internacional/politicaspublicas/COMPLETO.pdf

Magis-Rodriguez C, Gayet C, Negroni M, Leyva R, Bravo-Garcia E, Uribe P, Bronfman M. Migration and AIDS in Mexico: An Overview Based on Recent Evidence. Journal of Acquired Immune Deficiency Syndromes (1999). 2004; 4(37 Suppl):S215–S226. [PubMed: 15722864]

Manoleas P. Integrated Primary Care and Behavioral Health Services for Latinos: A Blueprint and Research Agenda. Social Work in Health Care. 2008; 47(4):438–454. [PubMed: 19042495]

Massey DS. Understanding Mexican Migration to the United States. American Journal of Sociology. 1987; 92(6):1372–1403. http://www.jstor.org/stable/2779841.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Massey, DS., editor. New Faces in New Places: The Changing Geography of American Immigration. New York: Russell Sage Foundation; 2008.

Maxwell, JA.; Miller, B. Chapter 22: Categorizing and Connecting Strategies in Qualitative Data Analysis. In: Hesse-Biber, SN.; Leavy, P., editors. Handbook of Emergent Methods. New York, NY: The Guildford Press; 2008. p. 461-477.

McQuiston C, Parrado EA, Martinez AP, Uribe L. Community-Based Participatory Research with Latino Community Members: Horizonte Latino. Journal of Professional Nursing : Official Journal of the American Association of Colleges of Nursing. 2005; 21(4):210–215. [PubMed: 16061167]

Nadeem E, Lange JM, Edge D, Fongwa M, Belin T, Miranda J. Does Stigma Keep Poor Young Immigrant and US-Born Black and Latina Women from Seeking Mental Health Care?". Psychiatric Services (Washington, D.C.). 2007; 58(12):1547–1554.

NC DHHS (North Carolina Department of Health and Human Services). NC Epidemiologic Profile for HIV/STD Prevention and Care Planning. Raleigh, NC: NC DHHS; 2010. http://epi.publichealth.nc.gov/cd/stds/figures/Epi_Profile_2010.pdf

NC DHHS. NC Epidemiologic Profile for HIV/STD Prevention and Care Planning. Raleigh, NC: NC DHHS; 2012. http://epi.publichealth.nc.gov/cd/stds/figures/Epi_Profile_2012.pdf

Nguyen, M.; Gill, H. The 287(G) Program: The Costs and Consequences of Local Immigration Enforcement in North Carolina Communities. Chapel Hill, NC: The Latino Migration Project, The Institute for the Study of the Americas, University of North Carolina at Chapel Hill; 2010. http://cgi.unc.edu/uploads/media_items/287g-report-final.original.pdf

ONAP (Office of National AIDS Policy). National HIV/AIDS Strategy for the United States. Washington, DC: White House; 2010. Available at http://www.whitehouse.gov/sites/default/files/uploads/NHAS.pdf

Organista KC, Worby PA, Quesada J, Arreola SG, Kral AH, Khoury S. Sexual Health of Latino Migrant Day Labourers Under Conditions of Structural Vulnerability. Culture, Health & Sexuality. 2013; 15(1):58–72.

Painter TM. Connecting the Dots: When the Risks of HIV/STD Infection Appear High but the Burden of Infection is Not Known--the Case of Male Latino Migrants in the Southern United States. AIDS & behavior. 2008; 12(2):213–226. [PubMed: 17373586]

Parrado EA, Flippen CA. Community Attachment, Neighborhood Context, and Sex Worker use among Hispanic Migrants in Durham, North Carolina, USA. Social Science & Medicine (1982). 2010a; 70(7):1059–1069. [PubMed: 20122769]

Parrado EA, Flippen CA. Migration and Sexuality: A Comparison of Mexicans in Sending and Receiving Communities. The Journal of Social Issues. 2010b; 66(1):175–195. [PubMed: 20454599]

Parrado EA, Flippen CA, McQuiston C. Use of Commercial Sex Workers among Hispanic Migrants in North Carolina: Implications for the Spread of HIV. Perspectives on Sexual and Reproductive Health. 2004; 36(4):150–156. [PubMed: 15321781]

Patterson TL, Mausbach B, Lozada R, Staines-Orozco H, Semple SJ, Fraga-Vallejo M, Orozovich P, et al. Efficacy of a Brief Behavioral Intervention to Promote Condom use among Female Sex Workers in Tijuana and Ciudad Juarez, Mexico. American Journal of Public Health. 2008; 98(11): 2051–2057. [PubMed: 18799768]

Persichino, Jon; Leticia, Ibarra. HIV and Latino Migrant Workers in the USA. Ethnic and Racial Studies. 2012; Vol. 35(1):120–134. page span needed.

Pew Hispanic Center. Demographic Profile of Hispanics in North Carolina, 2011. Washington, DC: Pew Hispanic Center; 2011. http://www.pewhispanic.org/states/state/nc/

Pew Hispanic Center. Closing the Digital Divide: Latinos and Technology Adoption. Washington, DC: Pew Research Center; 2013. http://www.pewhispanic.org/2013/03/07/closing-the-digital-divide-latinos-and-technology-adoption/

Rhodes SD, Hergenrather KC. Recently Arrived Immigrant Latino Men Identify Community Approaches to Promote HIV Prevention. American Journal of Public Health. 2007; 97(6):984–985. [PubMed: 17463364]

Rhodes SD, Hergenrather KC, Bloom FR, Leichliter JS, Montano J. Outcomes from a Community-Based, Participatory Lay Health Adviser HIV/STD Prevention Intervention for Recently Arrived

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Immigrant Latino Men in Rural North Carolina. AIDS Education and Prevention : Official Publication of the International Society for AIDS Education. 2009; 21(5 Suppl):103–108. [PubMed: 19824838]

Rhodes SD, Hergenrather KC, Griffith DM, Yee LJ, Zometa CS, Montano J, Vissman AT. Sexual and Alcohol Risk Behaviours of Immigrant Latino Men in the South-Eastern USA. Culture, Health & Sexuality. 2009; 11(1):17–34.

Rhodes SD, Hergenrather KC, Wilkin A, Alegria-Ortega J, Montano J. Preventing HIV Infection among Young Immigrant Latino Men: Results from Focus Groups using Community-Based Participatory Research. Journal of the National Medical Association. 2006; 98(4):564–573. [PubMed: 16623070]

Sena AC, Torrone EA, Leone PA, Foust E, Hightow-Weidman LB. Endemic Early Syphilis among Young Newly Diagnosed HIV-Positive Men in a Southeastern US State. AIDS Patient Care and STDs. 2008; 22(12):955–963. [PubMed: 19072102]

Strathdee SA, Magis-Rodriguez C. Mexico's Evolving HIV Epidemic. JAMA : The Journal of the American Medical Association. 2008; 300(5):571–573.

Torrone EA, Thomas JC, Leone PA, Hightow-Weidman LB. Late Diagnosis of HIV in Young Men in North Carolina. Sexually Transmitted Diseases. 2007; 34(11):846–848. [PubMed: 17595596]

US Census Bureau. The Hispanic Population. Washington, DC: US Census Bureau; 2010. http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf

US Census Bureau. North Carolina QuickFacts from the US Census Bureau. Washington, DC: US Census Bureau; 2014. http://quickfacts.census.gov/qfd/states/37000.html

Viadro CI, Earp JA. The Sexual Behavior of Married Mexican Immigrant Men in North Carolina. Social Science & Medicine (1982). 2000; 50(5):723–735. [PubMed: 10658852]

Wheaton, B.; Gotlib, IH. Trajectories and Turning Points Over the Life Course: Concepts of Themes. In: Gotlib, IH.; Wheaton, B., editors. Stress and Adversity Over the Life Course: Trajectories and Turning Points. Cambridge, UK: Cambridge University Press; 1997. p. 1-25.

Whetten K, Leserman J, Lowe K, Stangl D, Thielman N, Swartz M, Hanisch L, Van Scoyoc L. Prevalence of Childhood Sexual Abuse and Physical Trauma in an HIV-Positive Sample from the Deep South. American Journal of Public Health. 2006; 96(6):1028–1030. [PubMed: 16670226]

Whetten K, Reif S, Whetten R, Murphy-McMillan LK. Trauma, Mental Health, Distrust, and Stigma among HIV-Positive Persons: Implications for Effective Care. Psychosomatic Medicine. 2008; 70(5):531–538. [PubMed: 18541904]

Zimmerman C, Kiss L, Hossain M. Migration and Health: A Framework for 21st Century Policy-Making. PLoS Medicine. 2011; 8(5):e1001034. [PubMed: 21629681]

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Table 1

Characteristics of Mexican-born men living with HIV in NC (n=15).

Characteristic	Mean (range) or n
Age (years)	36 (24–46)
Years living in the USA	9 (4–15)
Years since diagnosis	5 (<1–16)
Education level	
Some primary school	1
Some middle school	4
Some high school	5
Some college or technical school	5
Reported sex with men	7
Did not report sex with men	8
Relationship status	
Married or partnered	4
In a dating relationship	1
Single	10