



Published in final edited form as:

J Correct Health Care. 2016 July ; 22(3): 206–217. doi:10.1177/1078345816653875.

Developing a Culturally Appropriate HIV and Hepatitis C Prevention Intervention for Latino Criminal Justice Clients

Gladys E. Ibañez, PhD¹, Elaine Whitt, MA², Mario de la Rosa, PhD¹, Steve Martin, MA², Daniel O'Connell, PhD², Jose Castro, MD³

¹Epidemiology Department, Florida International University, Miami, FL, USA

²Center for Drug and Health Studies, University of Delaware, Newark, DE, USA

³Miller School of Medicine, Division of Infectious Diseases, University of Miami, Miami, FL, USA

Abstract

The population within the criminal justice system suffers from various health disparities including HIV and hepatitis C virus (HCV). African American and Latino offenders represent the majority of the offender population. Evidence-based interventions to prevent HIV and HCV among criminal justice clients are scant and usually do not take cultural differences into account. Toward this end, this study describes the process of culturally adapting an HIV/HCV prevention intervention for Latino criminal justice clients in Miami, Florida, by using the ecological validity model. Recommendations for culturally adapting an intervention for Latinos include an emphasis on language and integrating cultural themes such as familism and machismo.

Keywords

cultural adaptation; intervention; HIV; hepatitis C; Latinos; Hispanic; criminal justice

Introduction

According to the Centers for Disease Control and Prevention (CDC, 2014), there are 81 evidence-based risk reduction interventions for the prevention of HIV. Of these, only eight target Latino populations exclusively or had at least a large majority represented in their sample (>75%). Interestingly, although Latino men are more at risk of HIV, four interventions focused on women (i.e., Amigas, Project SAFE, Salud, Educacion, Prevencion, y Autocuidado [SEPA], and Women's Health Promotion), three on Latino youth (i.e., Cuidate, Familias Unidas, and Project Image), and only one intervention focused on Latino

Corresponding Author: Gladys E. Ibañez, PhD, Robert Stempel College of Public Health and Social Work, Epidemiology Department, Florida International University, 11200 S.W. 8th Street, Miami, FL 33199, USA, gibanez@fiu.edu.

Authors' Note

The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Declaration of Conflicting Interests

The authors disclosed no conflicts of interest with respect to the research, authorship, or publication of this article. For information about *JCHC*'s disclosure policy, please see the Self-Study Program.

men (i.e., Hombres). None of these interventions were conducted with a criminal justice population.

Latinos living in the United States experience numerous health disparities including HIV/AIDS and hepatitis C virus (HCV). These health disparities are more evident when working with Latinos who are involved in the criminal justice system. By criminal justice system, we are referring to not only those who are incarcerated but also those who are under some type of criminal justice supervision (e.g., court mandated to drug abuse treatment, jail diversion programs, probationers/parolees). Although they represent 17% of the population in the United States (U.S. Census Bureau, 2014), Latinos represent approximately 22% of all individuals in the criminal justice system (Carson, 2014). Up to 33% of all Latino men and 21% of Latina women living with HIV/AIDS in the United States enter some type of correctional facility in any given year (Spaulding et al., 2009). In Florida, approximately 18% of all HIV cases reported by the Department of Corrections are Latino (Florida Department of Health in Miami–Dade County, 2014).

Data on the coinfection of HIV and HCV are scant but do suggest that it is high among incarcerated populations. One study found an HIV prevalence of 6.6% and almost 30% HCV prevalence in an incarcerated population in Maryland, with a coinfection rate of 65% (Solomon, Flynn, Muck, & Vertefeuille, 2004). Although still substantial, coinfection is lower among jail versus prison samples (38%; Hennessey et al., 2009). HCV has been identified as a contributing factor for various causes of death such as end-stage liver disease, cirrhosis, liver cancer, hepatitis B, and HIV among criminal justice populations (Baillargeon et al., 2010; Harzke et al., 2009). Little is known about HCV and Latino offenders; however, one study found that HCV-related mortality among male prison inmates in Texas was highest among Latino inmates (Harzke et al., 2009). It is clear that the criminal justice system provides health care professionals with unique access to provide health care services and to develop HIV and HCV prevention interventions for a Latino population that is often difficult to reach and retain and that experiences multiple health disparities. The purpose of this study is to describe the development of a culturally appropriate HIV/HCV prevention intervention for Latino criminal justice clients that can be easily and effectively implemented within the criminal justice system.

HIV and HCV Interventions for Criminal Justice Clients

Only nine interventions that target correctional populations have shown any effectiveness (Bryan, Robbins, Ruiz, & O’Neill, 2006; Zack, 2007), and of those, only four reported a decrease in postrelease sexual risk behaviors. In evaluating an HIV intervention for a prison setting, Bryan, Robbins, Ruiz, and O’Neill (2006) found that Latinos reported lower gains in condom use self-efficacy and condom use intentions. The authors suggested that the intervention was not culturally appropriate for Latinos and therefore was not as efficacious for this population. Research has indicated that brief interventions (lasting about 1–2 hours) are effective in reducing drug use (Field & Caetano, 2010; Walton et al., 2010) and sexual risk behaviors, which could make them ideal for a criminal justice population; yet, there are only two brief interventions targeting a criminal justice population and neither one reported inclusion of Latinos (Grinstead, Zack, Faigeles, Grossman, & Blea, 1999; Martin,

O’Connell, Inciardi, Surratt, & Beard, 2003). Evidence-based HCV prevention interventions for criminal justice clients are even more lacking than HIV interventions. To the authors’ knowledge, there are no evidence-based HCV interventions that target Latinos in the criminal justice system.

Criminal Justice Drug Abuse Treatment Studies (CJ-DATS)

In 2002, the National Institute on Drug Abuse began its first national CJ-DATS research initiative (Martin, O’Connell, Inciardi, Surratt, & Maiden, 2008). One CJ-DATS study was a randomized control trial to test the efficacy of a brief intervention targeting White and African American offenders before their release from prison using a DVD to convey HIV and HCV prevention messages (Inciardi et al., 2007; Martin et al., 2008). The trial focused only on White and African American offenders. The randomized trial was conducted at three sites: Delaware, Kentucky, and Virginia. The intervention used members of the target populations to convey prevention messages via testimonials and risk scenarios from their real-life experiences. The intervention was also matched on gender and race, which resulted in four different DVDs (African American men, African American women, White men, and White women).

The DVD had five segments: an introduction by an offender, a demonstration of the needle cleaning process, testimonials from HIV- and HCV-positive persons, scenarios/skits based on real-life experiences that were shared in the formative research phase of the intervention study, and positive and negative commentaries from offenders about what they have done in the past, given similar situations. The brief intervention was found effective; that is, participants who were assigned to the intervention reported a reduction in sexual risk behaviors versus those who did not participate in the intervention (Martin et al., 2008).

Building on the success of this brief intervention with White and African American offenders, the present study was initiated to try to adapt this brief intervention for drug-involved Latino criminal justice clients in Miami, Florida. Our Latino-focused intervention was used as a group intervention (the original study was an individual-level intervention) and focused on a community-based sample of Latino criminal justice clients at postrelease or who were already in the community awaiting trial or sent to a diversion program (the original study targeted incarcerated offenders).

There are several reasons why we decided to conduct a group intervention focused on a community-based sample rather than an individual intervention focused on an incarcerated sample. The nonincarcerated population in the United States is substantial. Although approximately 2 million individuals are incarcerated, almost 5 million are not incarcerated but still involved in the criminal justice system under some type of correctional supervision (Glaze & Kaeble, 2014). Many of these individuals have a history of incarceration or are initiating a criminal life trajectory, and they share many of the same risky behaviors reported by incarcerated populations. Some studies have reported high rates of sexual risk and drug use risk among probationers and parolees (Belenko, Langley, Crimmins, & Chaple, 2004; Gordon, Kinlock, McKenzie, Wilson, & Rich, 2013). Given the overlap in risky behaviors between incarcerated and nonincarcerated populations, the fact that most incarcerated individuals will return to their communities, and the high rates of recidivism, intervention

efforts are needed for individuals involved in the criminal justice system but who are not currently incarcerated. From a public health perspective, targeting community-based criminal justice clients who have more interactions with the public and arguably may have more opportunities for risky sexual and drug use behaviors than their incarcerated counterparts can have potentially a great impact.

Likewise, the intervention delivery was changed from an individual to a group intervention for several reasons. The main reason was because group interventions may be less demanding for staff to implement and because they could reach more criminal justice clients more quickly. Besides the obvious logistical advantages to group interventions, a recent study found that most intervention trials were individual interventions, which led the authors to suggest more group interventions are needed for criminal justice clients (Underhill, Dumont, & Operario, 2014). This study attempts to fill that gap. Lastly, another systematic review found no difference in terms of effectiveness between individual and group HIV risk reduction interventions among a high-risk group (i.e., men who have sex with men). In fact, the group-level intervention approach led to more condom use than other types of interventions (Herbst, Beeker, et al., 2007).

In sum, the main reasons for the changes to the original intervention are threefold: (1) to develop an intervention that would be less resource intensive—that is, from an individual to a group intervention, (2) a less resource-intensive group intervention increases the chances of widespread adoption within the criminal justice system and its partner agencies, and (3) perhaps most importantly, by targeting the larger, nonincarcerated population that is under some type of correctional supervision, an intervention has more potential of making a public health impact.

Eligibility criteria included the following: must self-identify as Hispanic/Latino, age 18 to 49, self-identify as heterosexual, currently or recently involved in the criminal justice system (within the last 3 months); and current or recent drug use (within the last 3 months). Participants were recruited from several local jail diversion and substance abuse service agencies in the Miami–Dade County area. Recruitment was done via fliers posted in waiting rooms, word of mouth, research staff introducing the study to agency clients prior to group classes at the community agencies, and referrals from the community agency staff. The majority of participants in our sample were either attending a court-mandated substance abuse treatment or diversion program (48%) or on probation or parole (35%).

The present study focused on making the intervention more culturally appropriate for a Latino population. The intervention facilitators and DVD actors were gender and language matched to the offender, which resulted in four different DVDs (English-speaking men, English-speaking women, Spanish-speaking men, and Spanish-speaking women). In addition, extensive formative research in the form of focus groups was conducted prior to intervention development in order to integrate cultural themes important in tailoring HIV/HCV prevention messages. Findings from the focus groups are reported elsewhere (Sastre et al., 2015). This article will describe the process that the research team undertook to culturally adapt an HIV/HCV prevention intervention for Latino criminal justice clients.

Developing a Culturally Appropriate Intervention

Cultural adaptation refers to the process of changing an existing intervention in ways that make it more compatible with the cultural values and processes important to a certain cultural group (Bernal & Domenech-Rodríguez, 2009; Bernal & Sáez-Santiago, 2006; Domenech-Rodríguez, Baumann, & Schwartz, 2011), which may include changing the intervention content or using different modes of intervention delivery. A recent meta-analysis found that culturally adapted interventions were more effective and resulted in better treatment outcomes than traditional treatments, especially when focused on one single cultural group (Smith, Domenech-Rodríguez, & Bernal, 2011).

There are several cultural adaptation models, such as the ecological validity model (EVM) that focuses on intervention content (Bernal, Bonilla, & Bellido, 1995) and the cultural adaptation process model, which emphasizes the importance of including the population being served in the intervention adaptation process (Domenech-Rodríguez et al., 2011). However, for this study, Bernal and colleagues' EVM (Bernal et al., 1995) will be used to describe the process undertaken to adapt this intervention to a Latino population. For a more comprehensive review of these and other models, see Zayas, Borrego, and Domenech-Rodríguez (2009). The EVM was chosen for several reasons: (1) it was the first cultural adaptation model, (2) it was developed specifically for Latino populations, (3) it has been used successfully with interventions adapted to Latino populations including Latino families and youth (Domenech-Rodríguez et al., 2011; Duarte-Velez, Bernal, & Bonilla, 2010), and (4) it focuses on different dimensions of the intervention content, which was the main aspect of the present intervention that researchers were interested in culturally adapting.

Making sure that an intervention is culturally appropriate is important for several reasons. Recent meta-analyses suggest that HIV interventions that are culturally adapted are more likely to be effective (Herbst, Kay, et al., 2007). They also increase the chances that translational research efforts are successful by taking into account the real-world setting. Culturally adapted interventions try to improve the ecological validity of an intervention by promoting acceptability and positive perception of the intervention in the community (Lau, 2006). If the evidence-based intervention is not generalizable to a particular setting or cultural group, there may be poor outcomes even with high intervention fidelity.

The Present Study

The DVD-based HIV/HCV intervention for Latino criminal justice clients took the CJ-DATS brief intervention previously found effective with White and African American offenders (Martin, et al., 2008) and culturally adapted it to a Latino population. The DVD consists of HIV and HCV prevention messages with embedded video segments of Latino criminal justice clients sharing their stories or enacting a risky scenario. The DVD format was the same as the previous CJ-DATS intervention; however, it was matched by language as well as gender. The intervention content was based on the information, motivation, and behavioral skills (IMB) model (Fisher, Fisher, & Harman, 2003), and the videos were based on personal stories and recurrent themes that were shared in the focus groups.

Method

The EVM is a theoretical framework for “culturally centered” psychosocial interventions (Bernal & Sáez-Santiago, 2006) that consists of eight dimensions: (a) language, (b) persons, (c) metaphors, (d) content, (e) concepts, (f) goals, (g) methods, and (h) context. The following is a definition of each dimension, a description of how we addressed each dimension in the intervention development process, and the challenges faced and how they were addressed.

Language

Language is the “carrier of culture” (Crowder & Broome, 2012), essential for not only communication of intervention materials but also conveying the message that the participant’s culture is respected. For Latinos, creating an intervention in Spanish as well as English is critical yet can be very challenging. It is not enough to translate an intervention to Spanish. The first issue to keep in mind is “which” Spanish to use. There are important differences among Latin American countries in the type of Spanish spoken; each has its own slang and dialects. Second, literacy level and verbal skills in Spanish will also vary across immigrant groups from different countries as well as among U.S.-born Latinos.

Interventions that target specific subgroups should be in the language of that subgroup and use a literacy/verbal level similar to that of the target population. Toward this end, we developed a DVD using members of the target population and asked them to speak as they normally would, which would ensure that the language used in the intervention would be more likely to be accepted and understood by the community. We also used bilingual “member actors” to make the English and Spanish versions of the DVDs as similar as possible. In addition, we conducted a second round of focus groups after development of the intervention to obtain feedback on the language used in the DVD and other components. These groups, or mock intervention sessions, resulted in further refinement of the intervention including defining street slang, providing more information on other diseases affecting Latinos such as hepatitis A and B, and general perception of the actors’ language skill level.

One challenge in trying to use language to develop a culturally appropriate intervention was that not everyone was equally bilingual. Some of our “DVD member actors,” although self-reported as bilingual, were more comfortable and fluent in English than Spanish or vice versa. We were concerned that the Spanish being spoken in the DVD intervention would not be accepted by more traditional and fluent Spanish-speaking community members and that the prevention messages would be lost. However, fluency and appropriateness of the actor’s language was deemed adequate by the second round of groups.

Persons

The dimension of *persons* refers to the importance of having the interventionist and participants share ethnic/racial similarities. We hired interventionists who were matched by gender and language to the intervention group participants. We required the interventionists to be fluent in both English and Spanish, identify as Latino, and be trained as an HIV

educator/counselor. Ideally, the interventionist could also be a peer facilitator, someone from the community with a background similar to the target population including criminal justice involvement. In our case, our male interventionist was HIV positive and considered a peer; however, our female interventionist was not a peer.

Culturally appropriate interventions should have interventionists and research team members from the target population and have members of the community review assessment tools for language and cultural appropriateness (Crowder & Broome, 2012). Our research team had two staff members (including the principal investigator) who were Latinas: a Cuban American and a native speaking Colombian-born research assistant. Our research coordinator was a White American who had lived in Argentina for several years and was fluent in Spanish. Although our sample is not a random sample, it was very diverse and representative of the general population in Miami (see Table 1). By having a Cuban and a Colombian member on the research team, we ensured that the majority of our target community in Miami—that is, of Cuban and South American descent—would be represented.

Metaphors

Metaphors, the third dimension, are used least in developing a culturally appropriate intervention and refer to shared symbols, concepts, and *dichos* or cultural sayings (Crowder & Broome, 2012). The use of metaphors reduces resistance and increases the cultural sensitivity of the intervention (Bernal et al., 1995). We conducted extensive formative research to inform our intervention development. Specifically, we conducted 16 focus groups (4 English-speaking Latino male groups, 4 Spanish-speaking Latino male groups, 4 English-speaking Latina female groups, and 4 Spanish-speaking Latina female groups). Participants were recruited from several local jail diversion and substance abuse service agencies in the Miami–Dade County area. Recruitment was done via fliers posted in waiting rooms, word of mouth, research staff introducing the study to agency clients prior to group classes at the community agencies, and referrals from the community agency staff.

Metaphors captured in these focus groups helped inform how to structure our intervention message and the scenarios used in the DVD. For example, the concept of trust in their steady partners being a risk factor for Latina women was a shared concept across both English- and Spanish-speaking women. A *dicho* or saying that kept coming up in the focus groups was the term “hitting it raw” for unsafe sex or “strap up and sliding” for safe sex. These concepts and sayings were included in the video. In addition, we asked the actors in our DVD scenarios to use their own words. Metaphors, *dichos*, and slang are readily evident in these scenes. Once the intervention was developed, a second round of focus groups was shown the DVD and feedback was obtained on whether these sayings and other components of the intervention were understandable.

Content

Content refers to cultural knowledge about values, customs, and traditions shared within an ethnic group (Crowder & Broome, 2012). Understanding the values of a culture is important when tailoring intervention messages. Cultural values such as *machismo* (the cultural value

placed on masculinity and being the protector of the family), *marianismo* (the value place on women being chaste), *familism* (the importance of family), and *traditional gender roles* were topics of discussion in our formative research. These concepts molded our prevention messages and guided our video scenarios. For example, a major theme to come out of the focus groups was that Latino men have sexual partners outside of their primary relationship. A scenario depicting this theme also included the values of familism, machismo, and traditional gender roles. We also gender matched and language matched our prevention message content.

Concepts and Goals

The fifth dimension, *concepts*, refers to the constructs within the theoretical model on which the intervention is developed. Our intervention was based on the IMB model. Therefore, information was provided in a culturally appropriate manner by using a facilitator from the same community, using the appropriate language to convey the information, and using DVD actors from the same community conveying the prevention messages. We included cultural values such as familism and the positive side of machismo to motivate positive behavioral changes.

Goals refers to the transmission of positive adaptations of cultural values (Bernal et al., 1995). Our intervention had a lot of discussion about machismo and how it influences HIV risk; however, we also adapted the positive side of machismo, which is referred to as *caballerismo* in the literature (Herrera, Owens, & Mallinckrodt, 2013). We had scenarios where men displayed positive behavior changes such as condom use with casual partners in order to protect their families, and women using condoms to keep themselves healthy for their children. These scenarios display the importance of family, or *familism*, as well.

Methods

Methods are the culturally appropriate development and adaptation of treatment methods such as involving community in the intervention development and assessing whether the questionnaire is appropriate. Our intervention was tailored by the feedback provided by Latino criminal justice clients. The DVD displayed HIV and HCV information that focus group participants mentioned not knowing, cultural themes that were important, and reenactment of real-life scenarios to be used as basis for discussion. We showed the DVD and did mock intervention sessions with the second round of focus groups of Latino criminal justice clients to further fine-tune the intervention. We asked focus group participants to assess the language, cultural themes, and appropriateness of the actors. We also asked if the Latino culture was portrayed appropriately. Participants stated that the culture was portrayed appropriately and that there was nothing offensive. The feedback that we received from focus group participants led to minor changes to the DVD, which included defining certain street slang, adding information about other diseases such as hepatitis A and B, and removing certain actors who were not perceived as believable.

We did not pilot the assessment tool with the target population, which in hindsight would have been beneficial. However, we chose questionnaires that had been used previously and successfully with Latino populations.

Context

The last dimension, *context*, refers to the importance of acknowledging the varied and changing contexts to which the person belongs, including social, political, and historical contexts. With Latino criminal justice clients, the reason for their migration, their process of adapting to their new culture (or acculturation), social support, and documentation status are examples of context. We assessed most of these factors and included some assessment of these sociocultural contexts in our formative research. We also took participants' relational context into account, especially for women. For example, we assessed dyadic sexual communication, power within sexual relationships, and sexual comfort in order to understand the barriers and facilitators to HIV prevention behaviors facing Latina women.

Discussion

This study describes the development of a culturally appropriate HIV and HCV intervention for Latinos involved in the criminal justice system using the EVM (Bernal et al., 1995). This multimedia HIV and HCV intervention used extensive formative research including key informant interviews and focus groups to develop the intervention content. The initial focus groups were stratified by gender and language. A second round of groups was then conducted as a "member checking" process to further ensure that the intervention content was culturally appropriate for Latinos. The second round of focus groups reviewed the intervention content and provided suggestions such as defining certain street slang and drug use terms, including more information on hepatitis A and B, and deleting actors in the DVD who were not believable or came across as not likeable.

The EVM worked well as a framework to culturally adapt this intervention because of its focus on multiple intervention dimensions. However, several other models that could have been used focus on other aspects of intervention development as well as the process of conducting an intervention study. For example, the cultural adaptation process model (Domenech-Rodríguez et al., 2011) could be used to help guide the participation of the community in the adaptation process and making any modification to the intervention more of an iterative process. Effective recruitment and community engagement strategies may also need to be culturally adapted and can be a focal point for cultural adaptation (Barrera & Castro, 2006). In the present study, we did not specifically focus on culturally adapting recruitment or community engagement strategies but instead focused on intervention content. However, successful engagement of the community throughout the intervention development process increases the social validity of the intervention (Barrera & Castro, 2006). Future studies using this intervention should also assess the cultural appropriateness of the recruitment strategies as well as the assessment tools and intervention content.

Culturally appropriate interventions should also aim to be as efficacious as possible. Rotheram-Borus and colleagues (2009) summarized the common factors in effective HIV prevention programs. This intervention addressed most of these factors. First, it *establishes a framework to understand behavioral change* via the IMB theory (Fisher et al., 2003) and augments it with motivational components such as cultural pride, the positive side of machismo, and empowerment messages. These motivational components are seen in the intervention messages embedded within the DVD such as *Plan before you Party; Take*

Control, Use a Condom; and Family First. Second, it conveys issue and population-specific information by integrating information and cultural values specific to Latinos. Third, *it builds cognitive, affective, and behavioral self-management skills* through condom demonstrations, videos and discussion on condom negotiation, and how to problem solve challenging situations and scenarios that may hinder condom use. Lastly, it *addresses environmental barriers* to healthy behaviors indirectly by identifying and problem solving contextual and cultural barriers to condom use.

Future HIV prevention intervention studies should use cultural adaptation models to guide their research when implementing an intervention with different cultural groups. Future research can focus further on any cultural differences between Latino subgroups that may be important for interventions development. More research is also needed to define the best strategies that can be used to address the different components of cultural adaptation models. For example, if using the EVM, what are the different ways that *context* can be integrated into an intervention. Finally, studies that compare the same intervention with and without cultural adaptations with the same population are needed to determine the relevancy of culturally adapting interventions.

Strengths and Limitations

A notable strength of the study is that, at least to the authors' knowledge, this is the first detailed description of how to culturally adapt an HIV/HCV intervention for Latinos that can be implemented with criminal justice clients. Individuals involved in the criminal justice system are predominantly from ethnic/racial minority groups and therefore any intervention targeting this population would benefit from a cultural adaptation process. Other strengths of the study were the extensive formative research that was conducted to form the basis of the intervention as well as the heavy involvement of the target population in the research process.

However, there were also some limitations to the study. One of the limitations was that the target population could have been involved in the actual research methodology and design process. For example, the assessment tools were not pilot tested with the target population, and members of the study population did not suggest assessment items. The research team also did not realize the importance of receiving ongoing feedback from the community and did not include a community advisory board (CAB) at the beginning of the study. This was an oversight. Obtaining feedback from the target population via focus groups was not enough. Feedback throughout the study was needed and not just at one point in time through focus groups. The study could have benefited from a CAB representing the target population that would have provided ongoing feedback throughout the study including aspects of recruitment and intervention implementation. Future studies focusing on Latino populations should incorporate a CAB to ensure continuous input on all aspects of the research process. Other ways that the target population could be involved would be to pilot test or get community input on recruitment strategies and screening procedures. Still, the authors believe that the information collected during the formative research phase of the study—through the focus groups—created a good foundation for the cultural adaptation process of this intervention.

Conclusion

Although the intervention trial is ongoing and no efficacy data are currently available, several lessons were learned from the process of culturally adapting this intervention. When developing culturally adaptive interventions, it is imperative that the target population is involved in most, if not all, aspects of intervention development. A cultural adaptation model or theoretical framework should guide HIV/HCV prevention interventions that are being developed for any specific ethnic/cultural group. In addition, formative research is important, as is implementing a forum where the target population can provide continuous feedback on the intervention project.

Acknowledgments

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by the National Institute on Drug Abuse of the National Institutes of Health under award number R34DA031063.

References

- Baillargeon JG, Giordano TP, Harzke AJ, Baillargeon G, Rich JD, & Paar DP (2010). Enrollment in outpatient care among newly released prison inmates with HIV infection. *Public Health Reports*, 125, 64–71. [PubMed: 20408389]
- Barrera M, & Castro FG (2006). A heuristic framework for the cultural adaptation of interventions. *Clinical Psychology: Science and Practice*, 13, 311–316.
- Belenko S, Langley S, Crimmins S, & Chaple M (2004). HIV risk behaviors, knowledge, and prevention education among offenders under community supervision: A hidden risk group. *AIDS Education and Prevention*, 16, 367–385. [PubMed: 15342338]
- Bernal G, Bonilla J, & Bellido C (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, 23, 67–82. [PubMed: 7759675]
- Bernal G, & Domenech-Rodríguez MM (2009). Advances in Latino family research: Cultural adaptations of evidence-based interventions. *Family Process*, 48, 169–178. [PubMed: 19579903]
- Bernal G, & Sáez-Santiago E (2006). Culturally centered psychosocial interventions. *Journal of Community Psychology*, 34, 121–132.
- Bryan A, Robbins RN, Ruiz MS, & O'Neill D (2006). Effectiveness of an HIV prevention intervention in prison among African Americans, Hispanics, and Caucasians. *Health Education and Behavior*, 33, 154–177. [PubMed: 16531511]
- Carson EA (2014). Prisoners in 2013 (NCJ 247282). Bureau of Justice Statistics Retrieved from <http://www.bjs.gov/content/pub/pdf/p13.pdf>
- Centers for Disease Control and Prevention. (2014). Compendium of evidence-based interventions and best practices in HIV prevention. Retrieved from <http://www.cdc.gov/hiv/research/interventionresearch/com-pendium/index.html>
- Crowder SJ, & Broome ME (2012). A framework to evaluate the cultural appropriateness of intervention research. *Western Journal of Nursing Research*, 34, 1002–1022. [PubMed: 22815180]
- Domenech-Rodríguez MM, Baumann AA, & Schwartz AL (2011). Cultural adaptation of an evidence based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology*, 47, 170–186. [PubMed: 21116707]
- Duarte-Velez Y, Bernal G, & Bonilla K (2010). Culturally adapted cognitive-behavior therapy: Integrating sexual, spiritual, and family identities in an evidence-based treatment of a depressed Latino adolescent. *Journal of Clinical Psychology*, 66, 895–906. [PubMed: 20568254]

- Field C, & Caetano R (2010). The role of ethnic matching between patient and provider on the effectiveness of brief alcohol interventions with Hispanics. *Alcoholism: Clinical and Experimental Research*, 34, 262–271.
- Fisher WA, Fisher JD, & Harman J (2003). The information-motivation-behavioral skills model: A general social psychological approach to understanding and promoting health behavior In Suls J & Wallston KA (Eds.), *Social psychological foundations of health and illness* (pp. 82–106). Malden, MA: Blackwell.
- Florida Department of Health in Miami-Dade County. (2014). Monthly HIV/AIDS surveillance report, September 2014 Retrieved from http://miamidade.floridahealth.gov/programs-and-services/infectious-disease-services/hiv-aids-services/_documents/hiv-surveillance-monthly-report-september-2014-10-06.pdf
- Glaze LE, & Kaeble D (2014). Correctional populations in the United States, 2013 (NCJ 248479). Bureau of Justice Statistics Retrieved from <http://www.bjs.gov/content/pub/pdf/cpus13.pdf>
- Gordon MS, Kinlock TW, McKenzie M, Wilson ME, & Rich JD (2013). Rapid HIV testing for individuals on probation/parole: Outcomes of an intervention trial. *AIDS and Behavior*, 17, 2022–2030. [PubMed: 23536140]
- Grinstead OA, Zack B, Faignes B, Grossman N, & Blea L (1999). Reducing postrelease HIV risk among male prison inmates: A peer-led intervention. *Criminal Justice and Behavior*, 26, 453–465.
- Harzke AJ, Baillargeon JG, Kelley MF, Diamond PM, Goodman KJ, & Paar DP (2009). HCV-related mortality among male prison inmates in Texas, 1994–2003. *Annals of Epidemiology*, 19, 582–589. [PubMed: 19443239]
- Hennessey KA, Kim AA, Griffin V, Collins NT, Weinbaum CM, & Sabin K (2009). Prevalence of infection with hepatitis B and C viruses and co-infection with HIV in three jails: A case for viral hepatitis prevention in jails in the United States. *Journal of Urban Health*, 86, 93–105.
- Herbst JH, Beeker C, Mathew A, McNally T, Passin WF, & Kay LS, ... Task Force on Community Preventive Services. (2007). The effectiveness of individual-, group-, and community-level HIV behavioral risk-reduction interventions for adult men who have sex with men: A systematic review. *American Journal of Preventive Medicine*, 32, S38–S67. [PubMed: 17386336]
- Herbst JH, Kay LS, Passin WF, Lyles CM, Crepaz N, & Marin BV, & HIV/AIDS Prevention Research Synthesis (PRS) Team. (2007). A systematic review and meta-analysis of behavioral interventions to reduce HIV risk behaviors of Hispanics in the United States and Puerto Rico. *AIDS and Behavior*, 11, 25–47. [PubMed: 16917668]
- Herrera CJ, Owens GP, & Mallinckrodt BM (2013). Traditional machismo and caballerismo as correlates of posttraumatic stress disorder, psychological distress, and relationship satisfaction in Hispanic veterans. *Journal of Multicultural Counseling and Development*, 41, 21–35.
- Inciardi JA, Surratt HL, Martin SS, O'Connell DJ, Salandy AD, & Beard RA (2007). Developing a multimedia HIV and hepatitis intervention for drug-involved offenders reentering the community. *The Prison Journal*, 87, 111–141.
- Lau AS (2006). Making the case for selective and directed cultural adaptations of evidence-based treatments: Examples from parent training. *Clinical Psychology: Science and Practice*, 13, 295–310.
- Martin SS, O'Connell DJ, Inciardi JA, Surratt HL, & Beard RA (2003). HIV/AIDS among probationers: An assessment of risk and results from a brief intervention. *Journal of Psychoactive Drugs*, 35, 435–443. [PubMed: 14986872]
- Martin SS, O'Connell DJ, Inciardi JA, Surratt HL, & Maiden KM (2008). Integrating an HIV/HCV brief intervention in prisoner reentry: Results of a multisite prospective study. *Journal of Psychoactive Drugs*, 40, 427–436. [PubMed: 19283947]
- Rotheram-Borus MJ, Swendeman D, Flannery D, Rice E, Adamson DM, & Ingram B (2009). Common factors in effective HIV prevention programs. *AIDS and Behavior*, 13, 399–408. [PubMed: 18830813]
- Sastre F, De La Rosa M, Ibanez GE, Whitt ES, Martin SS, & O'Connell DJ (2015). Condom use preferences among Latinos in Miami-Dade: Emerging themes on men and women's culturally-ascribed attitudes and behaviours. *Culture, Health, and Sexuality*, 17, 667–681.

- Smith T, Domenech-Rodriguez MM, & Bernal G (2011). Culture. *Journal of Clinical Psychology*, 67, 166–175. [PubMed: 21105069]
- Solomon L, Flynn C, Muck K, & Vertefeuille J (2004). Prevalence of HIV, syphilis, hepatitis B, and hepatitis C among entrants to Maryland correctional facilities. *Journal of Urban Health*, 81, 25–37. [PubMed: 15047781]
- Spaulding AC, Seals RM, Page MJ, Brzozowski AK, Rhodes W, & Hammett TM (2009). HIV/AIDS among inmates of and releasees from U.S. correctional facilities, 2006: Declining share of epidemic but persistent public health opportunity. *PLoS One*, 4, e7558. [PubMed: 19907649]
- Underhill K, Dumont D, & Operario D (2014). HIV prevention for adults with criminal justice involvement: A systematic review of HIV risk-reduction interventions in incarceration and community settings. *American Journal of Public Health*, 104, e27–e53.
- U.S. Census Bureau. (2014). Annual estimates of the resident population by sex, age, race, and Hispanic origin for the United States and states: April 1, 2010 to July 1, 2013. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2013_PEPASR6H&prodType=table
- Walton MA, Chermack ST, Shope JT, Bingham CR, Zimmerman MA, Blow FC, & Cunningham RM (2010). Effects of a brief intervention for reducing violence and alcohol misuse among adolescents: A randomized controlled trial. *Journal of the American Medical Association*, 304, 527–535. [PubMed: 20682932]
- Zack B (2007). HIV prevention: Behavioral interventions in correctional settings In Greifinger R (Ed.), *Public health behind bars: From prisons to communities* (pp. 156–173). New York, NY: Springer.
- Zayas LH, Borrego J, & Domenech-Rodriguez MM (2009). Parenting interventions and Latino families: Research findings, cultural adaptations, and future directions In Villarruel FA, Carlo G, Grau JM, Azmitia M, Cabrera N, & Chahin TJ (Eds.), *Handbook of U.S. Latino psychology: Developmental and community-based perspectives* (pp. 291–308). Thousand Oaks, CA: Sage.

Table 1.

Demographics of Focus Group Participants.

	Men	Women	Total
Age (mean)	35	32	33.5
Race			
White	26	19	45
Black	3	1	4
Other	10	8	18
Total	39	28	67
Country of origin			
U.S.-born	9	11	20 ^a
Cuba	16	8	24
Nicaragua	5	1	6
Honduras	3	3	6
Colombia	3	1	4
Puerto Rico	1	1	2
Mexico	0	2	2
El Salvador	1	0	1
Dominican Republic	1	0	1
Venezuela	0	1	1
Total	39	28	67
Time in the United States			
Native-born	8	11	19 ^a
1–5 years	4	1	5
6–10 years	8	4	12
11–15 years	6	4	10
16–20 years	5	4	8
20+ years	7	4	8
N/A	1	0	1
Total	39	28	44

Note. $n = 67$.

^aOne participant was born in the United States but grew up in Colombia; the designation “native-born” is used only for those born and raised in the United States.