

Reducing cultural and psychological barriers to Latino enrollment in HIV-prevention counseling: Initial data on an enrollment meta-intervention

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Aspects of Latino culture (e.g., *machismo*, *marianism*) can act as barriers to enrollment in HIV-prevention programs. To lift these barriers, a culturally appropriate meta-intervention was designed to increase intentions to enroll in HIV-prevention counseling by Latinos. Latino participants ($N = 41$) were recruited from the community and randomly assigned to either an experimental or control meta-intervention condition that varied the introduction to a HIV-prevention counseling program. Following the meta-intervention, participants were issued an invitation to take part in HIV-prevention counseling. The outcome measure was the intention to enroll in a HIV-prevention counseling session. Findings indicated that enrollment intentions were higher in the experimental meta-intervention condition (96%) than in the control meta-intervention condition (53%). In addition, the effects of the meta-intervention were comparable across genders and participant ages. Findings suggest that the use of a culturally appropriate meta-intervention may be an effective strategy for increasing Latino enrollment in HIV-prevention programs. These promising findings warrant further investigation into the efficacy and effectiveness of this meta-intervention.

Keywords: HIV prevention; intervention; Latinos; enrollment in health promotion programs; culture

Introduction

Latinos in the USA are disproportionately impacted by the burden of HIV (Prejean et al., 2011). Even though Latinos represent 16% of the US population they accounted for 20% of new HIV infections in 2009 (CDC, 2011), and HIV is the fourth leading cause of death among Latinos between the ages of 35–44 years (CDC Division of HIV/AIDS Prevention, 2011). Despite these statistics, Latino access to health services, including HIV-prevention, remains a concern (PEW Hispanic Center 2009; Solorio, Currier, & Cunningham, 2004).

Lack of access to HIV-prevention is due in part to *de facto* or structural aspects. For example, isolated rural residence and lack of fluency in the English language are linked to reduced access, as these factors can decrease incidental exposure to prevention services (Solis, Marks, Garcia, & Shelton, 1990). However, psychological and cultural factors may also play an important role in reducing access to HIV-prevention as they may actively lower Latinos' intentions to enroll in HIV-prevention programs. In particular, evidence suggests that certain aspects of Latino culture are associated with avoidance of HIV-prevention services, including counseling programs and testing (Brooks, Etzel,

Hinojos, Henry, & Perez, 2005; CDC Division of HIV/AIDS Prevention, 2011; Marin, 1989). Given that Latinos are vulnerable to HIV infection but are reluctant to participate in HIV-prevention programs, it is imperative to develop interventions that reduce psychological and cultural barriers to Latino enrollment in these programs.

Latino culture as a barrier to enrollment

A number of behavioral interventions have been created to modify HIV risk behaviors (Albarracín et al., 2005), and evidence suggests there are effective HIV-prevention interventions for Latinos (Albarracín, Albarracín, & Durantini, 2008; Herbst et al., 2007). However, Latinos cannot benefit if they do not receive interventions due to resistance to enrollment. Constructs, such as relevance, beliefs, and perceptions of risk, have a role in health behavior in general (Ajzen & Madden, 1986; Fishbein & Ajzen, 1975; Janz & Becker, 1984), and may also affect enrollment decisions. However, the content of these constructs is likely culturally shaped. Several cultural factors that may create barriers to enrollment are crucial to our understanding of Latino enrollment in HIV-prevention counseling.

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Intervention relevance

Aspects of Latino culture may be associated with decreased perceptions of HIV-prevention relevance. Negative aspects of *machismo* (masculine pride and honor) and associated homophobia (Brooks et al., 2005; Díaz, 1998) place a burden on men to demonstrate that they are heterosexually oriented (Díaz, Ayala, & Bein, 2004; Marin, 2003), and may lead to the denial that HIV-prevention is relevant (Díaz, 1998; Marin, 2003). Moreover, Latino men often reject activities which do not reinforce their masculinity, and may be unwilling to enroll due to the perception that participation in health promotion programs is the responsibility of women (Sternberg, 2000). Perceptions of relevance shape enrollment intentions (Noguchi, Durantini, Albarracín, & Glasman, 2007), and cultural factors that decrease perceived relevance likely act as a barrier to enrollment in HIV-prevention programs. As Latinos are more sensitive to HIV-threat inducing arguments than other ethnic groups (J. Albarracín et al., 2008), designing a recruitment message that sensitizes Latinos to the presence of HIV in their communities should help overcome this enrollment barrier.

Additionally, *familism* (high position of family in the goal hierarchy; Burgess & Locke, 1945) places family before the needs and well-being of the individual, and delegitimizes concerns about personal safety. Competing priorities, such as providing for the family, are barriers to accessing care among HIV-positive Latinos (Bowden, Rhodes, Wilkin, & Jolly, 2006), and may also pose a barrier to enrollment in HIV-prevention counseling. For example, a Latino man may be unwilling to participate if doing so requires taking time off work, as providing for the family may be a more important concern than reducing his HIV risk. However, emphasizing how what happens to one person affects the family can increase the effectiveness of HIV-prevention interventions (Koniak-Griffin et al., 2008). Therefore, a recruitment message underscoring the importance of protecting the health of the family/community may possibly increase Latino enrollment in HIV-prevention counseling.

Decreased feelings of power

Additional aspects of Latino culture may be associated with feelings of decreased power to seek help and change behavior. For example, *fatalismo* refers to the belief that conditions, such as HIV, are inevitable (Moreno & Guido, 2005). Fatalistic views about being unable to change one's situation, may create a

passive, unempowered approach to help seeking, and can provoke reluctance to utilize prevention services (Larkey, Hecht, Miller, & Alatorre, 2001). Specifically, *fatalismo* may convince some Latinos that it is their fate to have HIV, thereby making HIV-prevention unnecessary, a belief that is likely reinforced by Catholicism and a resignation to God's will (Rhodes, Hergenrather, Wilkin, Alegría-Ortega, & Montano, 2006). However, a recruitment message empowering Latinos to take control of their own health should help reduce this enrollment barrier.

Fear of stigma

Some Latino cultural norms (e.g., religiosity, *marianism*, *machismo*, sexual silence) may also contribute to fears of experiencing HIV-related stigma, such as moral sanctions, due to enrollment. For example, religiosity and adherence to Catholic teachings may result in stricter moral expectations and closer adherence to *marianism*, the expectation that women are pure and do not have sexual needs (Gomez & Marin, 1996). *Marianism* may be related to avoidance of HIV-prevention programs in Latina women due to fears of being perceived as "easy" women (*mujeres rapidas*, Voisin, 2009). Similarly, homophobic stigma based on *machismo* may lead to avoidance due to fears that one may be perceived as gay (Brooks et al., 2005; Marin, 1989). Finally, sexual silence dictates that sex is not discussed and results in discomfort surrounding discussion of sexual behavior (Marin, 2003). This likely contributes to avoidance of HIV-prevention programs that often promote open sexual communication. A recruitment message highlighting the importance of solidarity, protecting the health of the family/community, and religious mandates of compassion may be a useful basis for reducing these fears.

Taken together, these cultural norms may lead to decreased participation in HIV-prevention programs as a result of Latinos (1) perceiving low relevance of HIV-prevention, (2) feeling a lack of power to seek help and change their behavior, and (3) fearing stigma due to enrollment. However, incorporating appropriate cultural norms into a recruitment message may help increase Latino enrollment in HIV-prevention programs. Specifically, barriers to enrollment may be reduced by delivering a recruitment message that emphasizes the relevance of HIV-prevention for Latinos, empowers Latinos to change their own behavior, and provides information to reduce stigma-related fears related about enrollment.

A meta-intervention to increase enrollment among Latinos

Procedures, such as recruitment messages, can be developed to reduce barriers to enrollment in HIV-prevention counseling. These procedures, termed meta-interventions, entail a standardized message to increase exposure to a behavioral intervention (Albarracín, Durantini, Earl, Gunnoe, & Leeper, 2008). Development of the experimental meta-intervention was based on the principle of selective exposure to information (Festinger, 1964; for reviews see Eagly & Chaiken, 1993; Frey, 1986), as well as behavior models such as the reasoned action approach (Fishbein & Ajzen, 1975). In the context of a HIV-prevention, enrollment in an intervention depends on the expectations and goals of a potential audience (Noguchi et al., 2007). First, individuals may expect to achieve objective outcomes, such as reducing one's HIV risk, while at the same time avoiding the risk of being socially stigmatized (Noguchi et al., 2007). Second, individuals are motivated to achieve subjective self-validation, which involves the feeling that they are not being forced to change their HIV-relevant behaviors and that others respect them (Albarracín, Durantini, et al., 2008; Noguchi et al., 2007). A recruitment message that emphasizes HIV-risk among Latinos and reduces fears of experiencing stigma, while at the same time empowers behavior change, should successfully target two central psychological determinants of enrollment by Latinos.

The current study

We conducted a preliminary, randomized controlled trial to examine the efficacy of a meta-intervention designed to increase enrollment by changing the motivational factors that comprise intentions to enroll in HIV-prevention counseling among Latinos. If a simple, culturally appropriate meta-intervention is shown to be effective there will be more tools to promote behavior change in vulnerable Latino populations. The experimental meta-intervention consisted of a brief (3–8 minute), participant-tailored, theoretically-founded recruitment message, in which Latino cultural norms (i.e., *familism*, *machismo*, *marianism*, religiosity) were used to decrease reluctance to participate in HIV-prevention counseling. In contrast, the control meta-intervention consisted of a brief description of the counseling program. We predicted exposure to the experimental meta-intervention would be associated with higher intentions to enroll in a hypothetical HIV-prevention counseling session. Intentions can reliably predict actual behavior (see Armitage & Conner, 2001; Notani, 1988,

Randall & Wolff, 1994); Therefore, they should provide an adequate indicator of the effectiveness of the experimental meta-intervention.

Method

Recruitment

Recruitment took place at an event organized in Champaign, IL, USA, by the Mexican General Consulate in Chicago as part of a program called Mobile Consulates. The purpose of this program is to process passports and consular identification cards for Mexican citizens. Individuals attending the event were approached and invited to participate. To increase participation of women, husbands were asked permission to interview their wives. The only requirement for participation was self-identifying as Latino.

Procedure

We randomly assigned participants, using a random number generator, to the experimental or control (standard of care) condition of an enrollment meta-intervention. To reduce language barriers, participants were given the option of having the meta-intervention message delivered in Spanish. Immediately following the meta-intervention, an invitation to receive a hypothetical HIV-prevention counseling session was issued. The outcome variable was the intention to take part in HIV-prevention counseling, as indicated by whether or not participants reported that they were willing to undergo the counseling described by the professional. The University of Illinois IRB approved the study, and each participant provided informed consent.

Meta-intervention conditions

The meta-interventions consisted of a standardized invitation to participate in HIV-prevention counseling. Each condition is described below.

Experimental meta-intervention

In addition to being theoretically founded, the experimental meta-intervention was refined with data collected from qualitative interviews and questionnaires completed by the target audience. Core elements of the experimental meta-intervention include tailoring the meta-intervention to the client and addressing barriers to enrollment (e.g., anticipated stigma) by connecting to cultural norms, such as religiosity, *familism* and solidarity to the community.

Although it was required to discuss all components of the experimental meta-intervention, it was possible to tailor the recruitment message. For example, the recruitment message could be tailored to address stigma expectations based on *machismo* or *marianism* for men and women, respectively.

Participants were approached by a professional who introduced himself and clearly self-identified as Latino/a. The professional provided a brief description of the program, stating that the counseling provides information about HIV and condom use, and would help them assess their risk for HIV infection and the risk of people close to them. To increase perceived relevance, HIV infection rates among Latinos were contrasted to the rate of infection in the general population, and the need for HIV-prevention programs for Latinos/as was emphasized. Given the importance of *familism*, HIV was highlighted as a possible family risk. To empower participants, it was explained that the counseling would not force condoms use. The professional developed a theme of how Latinos are powerful and determined, and can use these resources to change their behavior, if they choose to do so, based on their own beliefs and resources. Finally, information to reduce fears of anticipated stigma from seeking HIV-prevention services was provided, and it was discussed how these fears have caused many Latinos to become sick. The importance of solidarity, protecting the health of the family/community, and religious mandates of compassion were used as a basis for reducing fears of stigma.

Control meta-intervention

The control meta-intervention was developed based on the standard of care determined from observations of recruitment practices in local clinics. Participants were informed that they had the option to speak with an HIV-prevention counselor, and that the counseling provides information about HIV and condom use. It was explained that the counseling would allow them to assess their risk for HIV infection, and the risk of those close to them.

Data analysis

We examined the relationship between the meta-intervention conditions and acceptance of the hypothetical HIV-prevention counseling session using Fischer's exact test, which was selected because some of the cells had a count fewer than five. Data were analyzed using SPSS (V18.0).

Results

Participants

A total of 41 participants, most who were born in Mexico, took part in this pilot study. The mean age of participants was 31.7 years ($SD = 8.8$, range = 18–52), and 53% were women. Most participants reported sexual activity in the past six months (78.8%), and the majority had a main partner (84%). Thirteen percent reported a casual partner in the past six months, with an average of 2.2 casual partners ($SD = 2.9$, range = 1–8) reported during this time period. Condom use was inconsistent, with only 15% of participants reporting always using condoms (49% never, 21% sometimes, 15% often).

Meta-intervention analysis

We predicted the experimental meta-intervention would be associated with greater intentions to enroll in HIV-prevention counseling. As presented in Table 1, this hypothesis was strongly supported. Approximately 96% of participants in the experimental condition indicated that they were willing to undergo HIV-prevention counseling in comparison to only 53% of participants in the control condition (Fisher's exact $\chi^2 (1, N = 41) = 10.69, p < 0.01$).

Next, we examined whether the effects were similar for men and women. Approximately 93% of

Table 1. Percent willing to undergo HIV-prevention counseling as a function of experimental condition.

Meta-intervention	Not willing ($n = 9$) (%)	Willing ($n = 32$) (%)	Total
<i>Total sample</i>			
Experimental	4	96	$n = 24$
Control	47	53	$n = 17$
<i>Men</i>			
Experimental	0	100	$n = 10$
Control	33	67	$n = 9$
<i>Women</i>			
Experimental	7	93	$n = 14$
Control	57	43	$n = 7$
<i>Older participants</i>			
Experimental	0	100	$n = 9$
Control	44	56	$n = 7$
<i>Younger participants</i>			
Experimental	9	91	$n = 15$
Control	50	50	$n = 10$

Notes: Total sample: Fisher's exact $\chi^2 (1, N = 41) = 10.69, p < 0.01$; Men: Fisher's exact $\chi^2 (1, N = 19) = 3.99, p = 0.09$; Women: Fisher's exact $\chi^2 (1, N = 21) = 6.43, p < 0.05$; Older participants: Fisher's exact $\chi^2 (1, N = 16) = 7.06, p < 0.05$; Younger participants: Fisher's exact $\chi^2 (1, N = 19) = 4.00, p = 0.07$.

women in the experimental condition versus 43% of women in the control condition were willing to undergo HIV-prevention counseling (Fisher's exact χ^2 (1, $N=21$) = 6.43, $p < 0.05$). Enrollment intentions were also higher for men in the experimental condition (100%) versus the control condition (67%); However, this trend was not significant, Fisher's exact χ^2 (1, $N=19$) = 3.99, $p = 0.09$.

We also examined whether the effects were comparable for younger versus older participants. To compare the effects across ages, this variable was dichotomized around the median age of the sample (median age = 31.0). Younger participants were more willing to enroll in the experimental condition (91%) versus the control condition (50%), and this trend approached significance, Fisher's exact χ^2 (1, $N=19$) = 4.00, $p = 0.07$. Similarly, older participants in the experimental condition (100%) were more willing to undergo HIV-prevention counseling than those in the control condition (56%; Fisher's exact χ^2 (1, $N=22$) = 7.06, $p < 0.05$). Although not all tests were significant, the similar pattern of results suggests that the effects of the experimental meta-intervention were comparable across genders and participant ages.

Discussion

The purpose of this study was to examine the efficacy of a meta-intervention designed to increase intentions to enroll in HIV-prevention counseling in Latino populations. Our findings suggest that a culturally tailored meta-intervention addressing barriers to enrollment has the potential to significantly increase Latino participation in HIV-prevention counseling. Importantly, this meta-intervention can be implemented at little or no cost to existing programs. The use of a brief meta-intervention that nearly doubles enrollment intentions could have a major impact on the lives and health of Latinos in the USA, and has the potential to transform practices and likely success in the area of HIV-prevention.

Limitations

Despite these promising findings, this study has several limitations. One limitation is that the outcome measure was the intention to enroll in HIV-prevention counseling. It is likely that intended participation and actual enrollment in HIV-prevention counseling are highly discrepant, with intentions overestimating actual enrollment. Nonetheless, the differences across conditions speak to the appropriateness and acceptability of the meta-intervention, and the effects were

comparable across genders and participant ages, suggesting wide applicability. A second limitation is related to the small sample size, which likely reduced our power to detect significant differences in all analyses reported in this paper.

While the experimental meta-intervention was designed to increase enrollment in HIV-prevention counseling among Latinos, the sample consisted mainly of individuals born in Mexico. Latinos are a diverse ethnic group, and HIV incidence and transmission factors vary across Latino subpopulations (CDC, 2011). However, common barriers to accessing HIV services have been identified in Latino populations (e.g., Brooks et al., 2005; HRSA, 2012), suggesting that the use of a culturally appropriate meta-intervention to overcome these barriers may be effective among diverse Latino populations. Related to this concern, it is possible that acculturation influenced enrollment intentions. Specifically, more acculturated Latinos may anticipate fewer negative consequences for enrollment and this expectation may be associated with greater willingness to enroll in HIV-prevention counseling following the experimental meta-intervention.

Future directions

Additional research is needed to address the limitations of this study. Future research will need to go beyond examining if the meta-intervention increases intentions to enroll, and determine if it is associated with an increase in *actual* participation. To this end, participants could be randomly assigned to a meta-intervention condition in the context of a mobile outreach clinic, and participation in HIV-prevention counseling that occurred during the clinic appointment could be assessed. Future research should also assess mediators by asking participants to report on their thoughts about enrolling in HIV-prevention counseling following delivery of the meta-intervention. The effects of the meta-intervention may be mediated by expectations about the usefulness of counseling for risk reduction (e.g., Albarracín, Leeper, Earl, & Durantini, 2008), or by expectations that one will experience negative consequences, such as homophobic reactions, for enrollment. Research should also examine whether these expectations interact with characteristics such as gender, relationship status, country of origin, and acculturation to predict enrollment. Developing an understanding of such mechanisms is critical to the interpretation of the effectiveness of this meta-intervention.

Conclusion

Considerable effort has been devoted to developing HIV-prevention interventions for Latinos (Herbst et al., 2007). While efficacious interventions are key in the prevention of HIV, interventions cannot be successful if vulnerable populations are unwilling to enroll. Limitations notwithstanding, the use of a culturally appropriate meta-intervention appears to be a promising strategy for reducing cultural and psychological barriers to Latino enrollment in HIV-prevention counseling.

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