

Adapting Evidence-Based Prevention Approaches for Latino Adolescents: The Familia Adelante Program – Revised*

Adaptación de Programas de Prevención Basados en la Evidencia para Adolescentes Hispanos: El Programa Familia Adelante – Revisado

Richard C. Cervantes and Jeremy T. Goldbach
Behavioral Assessment, Inc., USA

Abstract. Behavioral health is defined as the absence of mental illness or substance use problems and the presence of positive emotional well being. Although many U.S. Hispanic youth are at increased risk for substance abuse, suicidality, teen pregnancy, unsafe sexual practices and HIV, there exists a lack of available evidence-based practices for Hispanic youth which promotes behavioral health and HIV prevention. The objective of the current research was to adapt and revise the Familia Adelante (FA) Program, a behavioral health, drug intervention and prevention program to incorporate an HIV prevention component. Through qualitative community based participatory methods, including an expert panel and members of the target population, the curriculum was redesigned to integrate effective HIV risk reduction strategies. The process of adapting the intervention is described in this paper, as well as recommendations for future research in program adaptation.

Keywords: adolescent, hispanic, HIV, prevention, substance abuse.

Resumen. La salud conductual es definida como la ausencia de enfermedad mental o de problemas de consumo de sustancias, así como la presencia de un bienestar emocional positivo. Aunque muchos jóvenes hispanos estadounidenses se enfrentan a un riesgo cada vez mayor de abuso de sustancias, suicidio, embarazo adolescente, prácticas sexuales de riesgo y contagio del VIH, existe un vacío en cuanto a la disponibilidad de programas basados en la evidencia para jóvenes hispanos que fomenten los hábitos saludables y la prevención del VIH en estas poblaciones. El objetivo de la presente investigación ha sido adaptar y revisar el programa Familia Adelante (FA), un programa de salud conductual, intervención y prevención de consumo de drogas, para incorporar en el mismo un elemento de prevención del VIH. Mediante métodos cualitativos de participación basada en la comunidad y la incorporación de un panel de expertos y miembros de la población meta, se rediseñó el currículo de distintas estrategias de reducción de riesgo de contagio del VIH. En el presente artículo se describe el proceso de adaptación de dicha intervención, y se incluyen algunas recomendaciones para investigaciones futuras sobre la adaptación de programas.

Palabras clave: abuso de sustancias, adolescente, hispano, prevención, VIH.

Hispanics will reach one quarter (25%) of the U.S. population (about 97 million) by the year 2050, with one-third currently identified as youth under the age of (Census, 2010). A number of health disparities exist in the Hispanic population. A recent report by the Centers for Disease Control and Prevention (CDC) found that Hispanics have worse outcomes in controlling high blood pressure, live in more polluted areas of the U.S., and account for 1/3 of all uninsured persons (MMWR, 2011). Other disparities such as increased risk for dia-

betes and cardiovascular disease continue to impact Hispanics. The same report found that Puerto Rican's have the highest rates of asthma (18.4 percent), more than doubling the rate in non-Hispanic Whites (8.2 percent). In addition to differences in physical health outcomes, research indicates disparities in behavioral health, such as increased risk for HIV (CDC, 2007), substance use and alcoholism (NSDUH, 2007) and suicide (Prado, Schwartz, Pattatucci-Aragón, Clatts, Pantin, & Fernandez, 2006; Zayas, Hausman-Stabile & Pilat, 2009).

HIV and Substance Use among Hispanic Youth. Although Hispanics represent only 15% of the total U.S. population, they account for 19% of all HIV infections and are three times as likely to be infected when compared to White non-Hispanics (CDC, 2007).

Correspondence: Richard C. Cervantes. Behavioral Assessment Inc. 291 S. La Cienega, Suite 304. Beverly Hills, CA 90211. USA. Email: bassessment@aol.com

*Versión en castellano disponible en [spanish version available at]: www.psyshosocial-intervention.org

In 2004, HIV was the 6th leading cause of death for Hispanic men and the 5th leading cause of death for Hispanic women ages 25-44 (CDC, 2004). Furthermore, while unprotected sex is the primary route of HIV transmission for heterosexual contact, Hispanic adolescents are the least likely to report condom use (CDC, 2008).

Exposure to environmental stressors such as migration and language barriers contribute to HIV risk in Hispanics (Shedlin, Decena, & Oliver-Velez, 2005) as well as a lack of access to prevention services (Latino Issues Survey, 2010). Socioeconomic and cultural factors such as poverty, unemployment, transience, lack of formal education, immigration status, family dislocation due to deportations, inadequate health insurance, and limited access to health care all impact HIV prevention for Hispanics (CDC, 2010; DeNavas-Walt, 2005; Smedley, Stith, & Nelson, 2002). Further, some Hispanics may avoid testing, prevention counseling, or treatment due to fears of discrimination and stigma based on their cultural background (CDC, 2007; Morales, Lara, Kington, Valdez, & Escarce, 2002).

Hispanics also report disparate rates of substance use (CDC, 2004; 2007). For example, Pemberton, Colliver, Robbins, & Gfroerer (2011) found that one-fourth (25.7%) of Hispanic adolescents have used alcohol in the last 30 days. Hispanic adolescents also report the highest rates of crack, heroin and crystal methamphetamine use when compared to all other ethnic categories (Monitoring the Future, 2008). In a July 2009 report, the National Survey on Drug Use and Health found that 9.4% of Hispanics, 12 and older, were in need of substance abuse treatment for alcohol or illicit drug. Additionally, Hispanics born in the U.S. were 6.4 % more likely to need treatment when compared to their foreign born peers.

Interventions to address HIV risk and drug use. Recent advances have been made in the development of curriculum based behavioral health programs for adolescents. The National Registry of Effective Programs and Practices (NREPP), for example, now lists more than 200 substance abuse prevention interventions for various populations and settings. The CDC's Diffusion of Effective Behavioral Interventions (DEBI) registry lists more than 29 HIV prevention interventions. Interventions for Hispanics, however, continue to lag behind. For example, the DEBI registry includes some HIV education approaches for Hispanic communities, including ¡Cuidate! (Villarruel, Jemmott III & Jemmott, 2006) and Modelo de Intervencion Psicomedica (MIP; Robles, Pastor & Manjon, 2004), but do not address early prevention of substance use. A recent review by Szapocznik, Prado, Burlew, Williams & Santisteban (2007) identified only four drug abuse prevention models that, (a) utilized random control trials, (b) targeted Hispanic youth ages 12-17, and (c) had Hispanics representing 70% or greater of the sample.

Interventions that target both HIV and substance

abuse prevention in adolescents are scarce (*see* Hershberger, Wood, & Fisher, 2003; Rotheram-Borus et al., 1997), or are not designed for Hispanic youth. For example, *Familia Unida* is a substance abuse prevention model which incorporates HIV education. Based on an eco-developmental theory, participants are selected on the basis of macro-systemic risk factors (e.g., poverty, immigrant status). The model services the target community through parental investment, adolescent self-regulation/behavior control, and adolescent school bonding (Castro, Barrera, & Holleran Steiker, 2006). Another model, *Storytelling for Empowerment* (Nelson & Arthur, 2004) helps adolescents at risk for substance use, HIV and other behavioral health problems resulting from low socioeconomic status, violent community life and poor physical health. The program targets risk factors through stories that share cultural values and identity formation in a positive peer group session. To the research team's knowledge, these are the two primary programs which exist to target both HIV and substance use in Hispanic youth and their families. The strong connection between HIV and substance abuse calls for more integrated and comprehensive prevention programming, particularly for Hispanic youth (Cervantes, Goldbach, & Santos, 2011).

Adaptation of Existing Curricula

In recent years, researchers have begun exploring the efficacy of making adaptations to existing curriculum (e.g., Hecht et al., 2003; Kumpfer, Alvarado, Smith, & Bellamy, 2002). For example, research in the area of drug prevention shows that adapted versions of interventions can have increased effects, especially in recruitment and retention (Hecht et al., 2003; Kumpfer, Alvarado, Smith, & Bellamy, 2002; Holleran et al., 2005; Holleran & Hopson, 2012). However, as inappropriate implementation may result in lost program effects (Dusenbury, Brannigan, Falco, & Hansen, 2003), adaptations should be made with rigorous empirical approaches.

This qualitative study aimed to adapt an effective drug prevention and stress reduction program for Hispanic youth and families. Specifically the researchers used a 3-stage, community based participatory design to adapt *Familia Adelante* for use in HIV prevention settings with Hispanic youth and parents. Culturally focused recommendations were sought from community stakeholders, youth and experts.

Method

Rationale for Curriculum. The present study adapted *Familia Adelante* (Cervantes, 1993; Cervantes & Pratt Peña, 1998; Cervantes, Kappos, Duenas, &

Arellano, 2005; Cervantes, Goldbach, & Santos, 2011), a 12-session psycho-educational prevention/early intervention, curriculum based program from Hispanic youth ages 11-14. Familia Adelante (FA) was originally developed to expand the availability of culturally tailored behavioral health promotion and early intervention programming for Hispanic youth and families. In a series of qualitative studies similar to the current approach, Familia Adelante was developed as a culturally grounded approach to improving overall behavioral health functioning of Hispanic families through reducing acculturation stress (Cervantes, 1993). A comprehensive, 12 session curriculum for parents and youth prevention intervention sessions was developed covering topics that were grounded in stress research of the principal author and colleagues (e.g. Cervantes, Padilla, & Salgado de Snyder, 1991). The original curriculum included: (a) Family Stress and coping concepts, (b) Drug use knowledge, (c) Parenting problems and strategies, (d) Youth Acculturation issues and coping strategies, (e) Peer stress and resistance training, (f) Early identification of behavioral problems, (g) School stress and culture, (h) Immigration stress and coping, and (i) Family economic stress and coping. The curriculum was evaluated and found effective in reducing family stress, reducing youth behavior problems, enhancing academic achievement and psychosocial coping, and decreasing substance use patterns in Hispanic youth through multiple studies (*see* Cervantes, 1993; Cervantes & Pratt Peña, 1998; Cervantes et al., 2011).

Design. The study design was primarily qualitative, and was an adaptation of the method used to develop the original curriculum (Cervantes, 1993; Cervantes et al., 2005). The study employed a community based participatory research (CBPR; Minkler & Wallerstein, 2008) approach. In CBPR, researchers are joined in partnership with members of the community, identified as "experts". As the current study sought to develop an integrated behavioral health and HIV prevention program for Hispanic youth and their families, the community included members of this target population, as well as established research experts in the field, as an expert panel. Additionally, the study relied upon program development and adaptation methods established through prior research (e.g., Holleran & Hopson, 2012). The three-stage approach to adaptation is described below.

Expert Panel Sample. The Principal Investigator of this study is a charter member of the National Institute on Drug Abuse (NIDA) National Hispanic Science Network. From the network, two Hispanic clinical research experts were identified to serve on the expert panel. Additionally, a clinical expert in HIV and substance abuse was identified to participate on the panel. The inclusion criterion for the expert panel included having specific expertise in Hispanic mental health, substance abuse, and HIV best practices and research.

The experts selected were well published in the field of Hispanic mental health (*see for example* De La Rosa, Rugh, & Rojas, 2005; Guilamo-Ramos, Bouris, & Gallego, 2012). Additionally, all experts had established reputations of being leaders in the development and implementation of HIV and substance abuse research and services.

Community Participant Sample. Each of the three study sites (Los Angeles, Las Cruces and Miami) conducted eight focus groups (four with youth, four with parents) for a total of 24 groups. In order to identify potential participants, we approached several organizations in each of the cities with established ties to the research staff and/or expert panel. We also sought to identify community sites with ethnically diverse samples (e.g., Cuban, Mexican, Puerto Rican), to elicit a diverse set of feedback from culturally different groups, in an effort to ensure the final product would be relevant to the largest audience.

The sample of participants was stratified to engage unique risk factors that would be targeted through the FA-R. One group at each of the three community sites included active or recently active substance using teens, with a separate focus group held with their parents. It was expected that these youth, due to their experiences with substances, would be uniquely capable of making recommendations for their non-using peers. This method for identifying cultural appropriateness in substance use prevention curriculum adaptation has been shown successful in previous studies (Holleran, 2008). The other sample included sexually active or recently active teens and their families. It was expected that these youth, due to their experience with sexual behavior, would offer unique insight into what may prevent their abstaining peers from engaging in risky sexual practices.

Similarly to those youth and families that would participate in the program, inclusion criteria for the study were: 1) Hispanic ethnic identification (including Caribbean, Puerto Rican, Cuban, Dominican, Central American and Mexican backgrounds), 2) a parent and child both available for participation, 3) youth either has history of ATOD use or is sexually active, and, 4) all participants willing to provide consent. Both Hispanic-White and Hispanic-Black participants will be recruited and included in the sample. The only criteria for parental participation were a willingness to participate, and a child that met study inclusion criteria.

In the current climate, a constellation of sociodemographic and sociopolitical barriers prevent Hispanics from access to and utilization of mental health services. These same barriers, in addition to others (e.g., transportation, childcare), may have potentially prevented participants from attending the focus groups. Therefore, we over-recruited by 25% (Morgan, 1997). An overview of the focus group sampling is provided in Table 1, below.

Table 1. Sampling Schedule

	LOS ANGELES		MIAMI		LAS CRUCES	
	Parents	Youth	Parents	Youth	Parents	Youth
Families living in communities surrounding the collection sites	2 groups (n = 6)	2 groups (n = 5)	4 groups (n = 10)	4 groups (n = 12)	2 groups (n = 9)	2 groups (n = 12)
	(n = 6)	(n = 7)	(n = 8)	(n = 12)	(n = 9)	(n = 8)
			(n = 6)	(n = 6)		
			(n = 6)	(n = 6)		
Subjects (Total = 129)	12	13	30	36	18	20

Procedure

Stage 1. – Expert Panel Review of Familia Adelante. The first stage of the curriculum adaptation procedure included the use of a panel of experts in Hispanic mental health and HIV research. The experts were asked 1) to review a mail out package of FA-R related materials, and 2) to participate in a series of qualitative phone interviews. The purpose of these interviews was to facilitate their review of the original Familia Adelante curriculum and seek suggestions for modifications to existing components of the curriculum. Additionally, the interviews served as an opportunity to identify core HIV prevention related constructs that should be included in the adapted curriculum.

Prior to the interviews, the expert panel was sent an information packet that included a copy of the FA curriculum. Additionally, each member was sent a number of research articles on HIV and substance abuse in Hispanic families. Experts were provided with the NIDA Prevention Principles as general guidelines for adaptation (NIDA, 2011), and articles that identify evidence-based approaches for adolescent HIV prevention (Ingram, Flannery, Elkavich, & Rotheram-Borus, 2008), prevention of sexual debut, family mediators of sexual behavior (Guilamo-Ramos, Bouris, Jaccard, Lesesne, & Ballan, 2009), parenting communication and sexual behavior (Allen et al., 2008), and cultural factors in family-based HIV prevention with Latino youth (Lescano, Brown, Raffaelli, & Lima, 2009). Relying on these articles and other empirical works known to the reviewer, strategies were identified for content inclusion.

Expert reviewers were instructed to review all materials, and were also provided with scoring sheets for each of the twelve FA modules. The scoring sheets included six questions related to the current curriculum (e.g., current strengths, weaknesses, cultural changes needed, delivery approach) and three questions related to recommended HIV adaptations (e.g., what empirical principals can be integrated into this module, recommended delivery, behavioral target). This approach allowed the research team to clearly identify research-based content that did not rely solely upon clinical judgment. The scoring sheets were summarized by a

member of the research team. Based on the summary feedback from the panel, new HIV prevention content that was then included in each of the twelve modules. All changes were made directly into both youth and parent curricula using track changes, so that new content could be easily identified throughout the process. Final review and approval all content change was conducted by the PI/developer.

Stage 2. – Community Focus Groups Review of Familia Adelante. Following incorporation of the expert panel recommendations, a second stage of the adaptation process employed focus group interview methods with Hispanic families who are similar to those high-risk families that had previously participated in the FA program. Focus groups were also conducted with groups of Hispanic families that fit the characteristics of individuals who would likely benefit from the FA-R intervention. The inclusion of focus group methods was most appropriate, as they elicit a controlled form of group interaction that was likely to uncover latent domains of acculturation related experiences (Morgan, 1997; Stewart, Shamsani, & Rook, 2007). Focus group methods also enabled the research team to learn how Hispanic participants think about and describe life events, appraisals and coping mechanisms in a setting where other individuals were likely to have shared similar experiences in a group context. Focus groups allowed for participants to reflect on the relevance of the curriculum with similar peers, encouraging honest feedback.

The research team selected three unique sites throughout the United States (Los Angeles, Miami, Las Cruces) to complete community-based focus groups. At each focus group, parents and youth were divided into separate groups. This was done for two reasons. First, parents and youth may feel uncomfortable sharing honestly about curriculum content in the presence of their other family members. Second, the curriculum is designed with separate workbooks for the parent and youth, and so feedback opportunities were designed toward the appropriate curriculum. In the focus groups, participants completed consent forms, and were given scoring sheets related to each of the core objectives for each module in the curriculum. Participants then were given an opportunity to discuss

their reactions to the module content, provide feedback on improvements, and identify any negative reactions (e.g., content is offensive) to the material. All focus groups were recorded and reviewed during the analysis.

Participants of the focus groups were presented each session of the FA-R which was displayed by research team members using LCD projector and large projection screen. Depending on the language preference of the group members these presentations were given in English or Spanish. An interview protocol included a number of standard questions that were then asked following the presentation of each of the 12 FA session modules (e.g., What did you like/dislike about this module? What changes would you suggest?). Focus group questions related to improving clarity, comprehensibility, and cultural relevance. Recommended changes provided by the focus groups were identified in track changes within the original curriculum, and noted as community-level recommendations.

Stage 3. Based on expert panel and community participant input, a draft FA-R curriculum was developed by the research team. In the final stage of the adaptation process, the expert panel was provided with a marked version of the curriculum, which included all three expert panelists recommendations along with the community participant recommended changes. From this, additional interviews were scheduled with the expert panelists to clarify their written comments and point disagreement about changes to the curriculum.

Results

Demographic Characteristics. For the community sample, demographic information was collected from youth ($n = 60$) and adult ($n = 59$) participants. The majority of adult participants were female (65%). 25% of parents had 3 children, followed by 20% with four, then five (9.8%). 87% of participating parents were not

Table 2. Summary of HIV-related Adaptations to Familia Adelante Curriculum

Session	PARENT TOPICS	HIV ADAPTATION	YOUTH TOPICS	HIV ADAPTATION
1	Introduction & Evaluation	Introduction to HIV disparities in Latino's (Lescano et al., 2009)	Introduction & Evaluation	Introduction to HIV disparities in Latino's (Lescano et al., 2009)
2	Concept Building	Basic HIV Education (CDC2011)	Concept Building	Basic HIV Education (CDC, 2011)
3	Feelings	Communication Skills (Whitaker & Miller, 2000)	Feelings	Making healthy sexual decisions (self-efficacy; Ingram et al., 2008)
4	Stress Overview	Child Development and communication (Friedman Fisher, Schonberg & Alderman, 1998, Ingram et al., 2008)	Stress Overview	Stress and sexual decision-making (AAP, 2002)
5	Acculturation Stress	Traditional vs U.S. parenting practices (Cervantes, Goldbach, Yeung & Rey, 2012)	Acculturation Stress	Traditional vs U.S. norms (Cervantes et al., 2012)
6	Economic/Occupational Stress	Assertiveness in young elationships (Ingram et al., 2008)	School Related Stress	Communication Skills (Whitaker & Miller, 2000)
7	Parental Stress, Part I	Sexual planning	Negative Peer Pressure	Peer pressure and sex (Nahom et al., 2001)
8	Family Stress, Part I	Setting expectations with child about sex (Whitaker & Miller, 2000)	Family Stress, Part I	Reasons to have or not have sex (AAP, 2002)
9	Family StressPart II		Family Stress, Part II	
10	Gang Prevention	N/A	Gang Prevention	N/A
11	Substance Abuse Education	Role of substance use in HIV risk	Substance Abuse Education	Role of substance use in HIV risk
12	Evaluation & Celebration	N/A	Evaluation & Celebration	N/A

Table 3. Synopsis of Focus Group Findings

	Parent	Youth
Module 1	<ul style="list-style-type: none"> a. Concern that some parents might be too shy and therefore asked for another activity in addition to role playing. b. Want help in learning how to talk about sex... for example how parents should talk to kids when they ask "how do you put a condom". 	
Module 2	<ul style="list-style-type: none"> a. Identify the factors that are causing stress in their children's life. 	
Module 3		<ul style="list-style-type: none"> a. Take out family mapping. b. Bring in an expert/guest speaker; might be hard to do family mapping - hard to talk about bad things in family.
Module 4		
Module 5		<ul style="list-style-type: none"> a. Move gang activities to module 10. b. Group had trouble understanding what acculturation meant.
Module 6	<ul style="list-style-type: none"> a. Want to know more and asks for help on how to deal with discrimination at work, and school. 	<ul style="list-style-type: none"> a. Don't like the "School contract". b. Talk more about teacher discrimination. c. As a group - share experiences about stress in school and offer advice.
Module 7		<ul style="list-style-type: none"> a. Consider removing language about "gangs" since a whole session is already on it.
Module 8		
Module 9		
Module 10		<ul style="list-style-type: none"> a. Add a guest speaker.
Module 11	<ul style="list-style-type: none"> a. More information about the dangers of marijuana because there are mixed messages on its use. For example, currently it is used for medicinal purpose. 	<ul style="list-style-type: none"> a. Add more on HIV education.
Module 12	<ul style="list-style-type: none"> a. One parent felt that students and their families spent most of the day indoors and if they are part of this program they will go from school to this center, which would mean even more time inside. She would like this module to be held outside, maybe at a park, where the kids can be outdoors. 	

born in the U.S., which is supported by youth responses (86% of fathers; 93% of mothers). Most parents (80%) identify as Mexican American, and 81% of parents report speaking primarily Spanish at home, while nearly half (48%) of youth report speaking both English and Spanish at home and 50% report speaking both languages with their friends as well. Youth rarely reported speaking only Spanish with friends (6.7%).

Expert Panel Recommendations. Expert panelists identified a number of changes to the core curriculum to both enhance the current approach and incorporate HIV related materials. As described above, experts were asked to identify both new content, as well as

identify the empirical justification for the change. Table 3 below describes the substantive changes, and references the empirical works cited by the expert panel participants.

Overall, panel recommendations for the parent curriculum focused on educating parents about HIV in general, emphasizing culturally focused approaches to parent-child communication, and helping parents understand how developmental stages may impact their discussion with children. Additionally, a number of activities were added to help parents set expectations with their children about sex, and teaching self-efficacy and assertiveness to their children. For exam-

ple, our clinical expert emphasized the “need to partner with members of the community, understand their mistrust, fears, and stigma associated with HIV” that we “be aware that culture [of the country of origin] is not *bad* or *good*, that it just may be *different* from U.S. culture”. Finally, one expert panelist stated that we must “ensure we use multiple strategies including videos, games, group discussion, and homework to ensure parents feel comfortable following through with the program recommendations”.

Youth program adaptations also included basic HIV education, along with activities to help youth make healthy sexual decisions. These strategies were intended to help youth a) understand the role of stress and sexual decision-making, b) understand and combat peer pressure, c) create decisional balance in sexual decision-making, and d) communicate effectively with their parents about intimate relationships and sex. Content was also added to discuss with youth the differences between more traditional views of sex from their countries of origin, as well as how that may be different from their perception of U.S. views towards sex. As the literature suggested (AAP, 2002), an overarching recommendation was to create neutral content that did not necessarily discourage youth from sex, while illustrating some of the dangers that may occur as a result (e.g., HIV risk, pregnancy). As one expert stated, “for most of these kids, it is not their first time hearing this information, so you have to make it interesting and non-judgmental if you want to be effective”.

Focus Group Recommendations. During the focus group, participants were asked to reflect on two questions: 1) What do you like or dislike about this module; and 2) In your current life, how do you handle this type of stress. Their responses were then documented in the Focus Group Qualitative Coding Form. In total, parent participant’s identified six major changes to the curriculum, while youth participants recommended ten substantive changes, show below.

As shown, the comments made by participants in the focus group ranged from wanting the curriculum to have more information on how to talk to their children about sex and drugs to bringing in guest speakers and including activities/assignments that were practical in nature. For example, some parents asked for the elimination of role-playing, while students wanted the school contract to be removed from the revised FA curriculum. As one participant stated (translated from Spanish), “I know that I would not feel comfortable getting in front of a group and acting something out – some people are shy and you should not force them to participate”. As the role-play this individual was speaking about was in the second session, this minor adaptation to the approach may increase trust with participants early in the program delivery. As another participant stated, “we know our kids talk about sex, do drugs...but it is hard for us to talk to them and we need

to learn ways”. Based upon feedback like this, homework assignments were added for parent participants, to be reviewed in each of the following weeks to identify strengths and barriers to their incorporation of strategies into their family practices.

Once community participant changes were incorporated, phase 3 called for final review of the draft FAR curriculum by our expert panel. After agreement among the expert panel and the research team was reached, and each expert panelist had agreed to the changes, the curriculum, Familia Adelante-Revised, was finalized.

Discussion

The current study sought to employ a structured adaptation approach in the development of an improved prevention curriculum for Hispanic youth and their families as used in other studies (e.g., Holleran & Hopson, 2012). Both experts and community respondents were engaged in the study. The study successfully recruited a varied sample Hispanic parents and youth to learn more about preventative measures for substance abuse and risky sexual behavior. The investigators learned, as hypothesized, that there are a number of new and salient factors playing a critical role in youth’s exposure to substance and risky sexual behaviors.

A significant number of HIV prevention related changes were made to the curriculum, corroborated by existing research evidence. For example, the literature makes a strong connection to the importance of parent and youth communication around HIV risk and sexual behavior (e.g., Whitaker & Miller, 2000). Our findings reflect that a large number of changes to the curriculum focus on improving and enhancing parent-child communication about sexually relevant topics. Additionally, relevant content on self-efficacy and assertiveness (Ingram et al., 2008), handling peer pressure (Nahom et al., 2001), and information on weighing the benefits and drawbacks of having sex (AAP, 2002) were added to the existing curriculum.

Following edits and changes to the curriculum based on expert comments, we were able to further elaborate culturally appropriate messaging during the parent and youth focus groups. In some of the parent groups, discussion around the difficulty of talking to children about sexual behavior became apparent. Based upon this anxiety, some strategies were identified for best content delivery (i.e., homework assignments that included simple discussion of the weeks activity) that would make the topic easier for parents and youth to complete. Therefore, while the expert panel was able to easily identify evidence-based content, in many cases it was the community based focus groups that helped to clarify the most appropriate delivery mechanism.

By having an expert group with specific experience and knowledge in Hispanic mental health, substance abuse and HIV best practice and research, we were able to expand our inquiry into additional life domain areas, such as health and related substance abuse and HIV topics. In addition, some new content was identified by participating youth that was not in the original Familia Adelante curriculum, and somewhat unrelated to substance use or HIV risk. For example, several youth participants recommended that more information on body image, eating disorders, and healthy nutrition be added to the curriculum. Therefore, given that multiple participants deemed this content relevant, the research team determined it important to add content related to these domains.

There are limitations to the current study. First, although we included focus groups with Mexican, Cuban, Puerto Rican, and Dominican descent youth and families, the majority of participants were of Mexican descent. Thus, the adaptations may not be fully reflective of other ethnic minority communities. Second, the current study design included three unique U.S. sites, a large western city, a small southwestern city, and a large southern east coast city. While this approach ensured access to a variety of Hispanic perspectives, there may be some unique input we were unable to receive from, for example, northeastern or mid-western Hispanic families. Thus, the efficacy of the revised curriculum should be tested through a randomized control trial with diverse Hispanic families across the United States.

Acknowledgements

This research was supported by the National Institute of Minority Health and Disparities, Grant No. 1R43MD006150-01 to Dr. Richard C. Cervantes.

References

- Allen, E., Rhoades, G., Stanley, S., Markman, H., Williams, T., Melton, J., & Clements, M. (2008). Premarital precursors of marital infidelity. *Family Process, 47*, 243-259.
- [AAP] American Academy of Pediatrics. (2002). *Reducing the risk*. Retrieved from <http://www.californiasids.com/universal/mainpage.cfm?p=20>
- Castro, F. G., Barrera, M., & Holleran Steiker, L. (2006). Issues and challenges in the design of culturally adapted evidence-based interventions. *Annual Review of Clinical Psychology, 6*, 213-219.
- [CDC] Center for Disease Control & Prevention. (2004). Morbidity and mortality weekly report. *Morbidity and Mortality Weekly Report, 53*, 145-147.
- [CDC] Centers for Disease Control and Prevention. (2007).

Teen birth rates rise for first time in 15 years. Retrieved from <http://www.cdc.gov/nchs/pressroom/07newsreleases/teenbirth.htm>.

- [CDC] Center for Disease Control and Prevention. (2008). *Youth risk behavior surveillance-selected steps communities, United States, 2007*. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5712a1.htm>
- [CDC] Centers for Disease Control and Prevention. (2010). *HIV and AIDS among gay and bisexual men*. Retrieved from <http://www.cdc.gov/nchstp/newsroom/docs/FastFacts-MSM-FINAL508COMP>.
- [CDC] Centers for Disease Control and Prevention. (2011). *HIV/AIDS*. Retrieved from <http://www.cdc.gov/hiv/topics/surveillance/basic.htm>
- Cervantes, R. C., Padilla, A. M., & Salgado de Snyder, N. (1991). The Hispanic stress inventory: A culturally relevant approach to psychosocial assessment. *Psychological Assessment, 3*, 438-447.
- Cervantes, R. C. (1993). The Hispanic Family Intervention Program: An empirical approach toward substance abuse prevention. In B. Kail, R. Mayers, & T. Watt (Eds.), *Hispanic Substance Abuse*. Newbury Park, CA: Sage Publication.
- Cervantes, R. C., & Pratt Peña, C. (1998). Evaluating Hispanic/Latino programs: Ensuring cultural competency. *Alcoholism Treatment Quarterly, 16*, 109-131.
- Cervantes, R. C., Kappos, B., Duenas, N., & Arellano, D. (2005). Culturally focused HIV prevention and substance abuse treatment for Hispanic women. *Addictive Disorders and Their Treatment, 2*, 69-77.
- Cervantes, R., Goldbach, J., & Santos, S. (2011). Familia Adelante: A multi-risk prevention intervention for Latino youth. *Journal of Primary Prevention, 32*, 225-234.
- Cervantes, R. C., Goldbach, J., Yeung, A., & Rey, A. (2012). Development of the environmental strategies instrument to measure adolescent alcohol prevention-related outcomes in community settings. *The American Journal of Evaluation, 33*, 99-111.
- De La Rosa, M., Rugh, D. & Rojas, P. (2005). Substance abuse among Puerto Rican and Dominican gang members in a small city setting. *Journal of Social Work Practice in the Addictions, 5*, 23-43.
- DeNavas-Walt, C. (2005). *Income, Poverty, and Health Insurance Coverage in the United States: 2004*. Retrieved from <http://www.census.gov/prod/2005pubs/p60-229.pdf>
- [DHHS] Department of Health and Human Services. (2011). *Mental Health: Culture, Race and Ethnicity – A Supplement to Mental Health: A report to the Surgeon General*. Rockville, MD. Retrieved from <http://www.ncbi.nlm.nih.gov>
- Dusenbury, L., Brannigan, R., Falco, M., & Hansen, W. B. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research, 18*, 237-256.
- Friedman, S. B., Fisher, M., Schonberg, S. K., & Alderman, E. M. (1998). *Comprehensive Adolescent Health Care* (2nd ed.). (pp. 676-679). St. Louis: Mosby.

- Gilliam, A., Davis, D., Barrington, T., Lacson, R., & Phoenix, U. (2002). The value of engaging stakeholders in planning and implementing evaluations. *AIDS Education and Prevention, 14* (3, Suppl.1), 5-17.
- Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., & Ballan, M. (2009). Family mediators of acculturation and adolescent sexual behavior among Latino youth. *Journal of Primary Prevention, 30*, 395-419.
- Guilamo-Ramos, V., Bouris, A., & Gallego, S. (2012). Latinos and HIV: A framework to develop evidence-based strategies. In C. C. Poindexter (Ed.), *Social services and social action in the HIV pandemic: Principles, method, and populations*. Hoboken, NJ: John Wiley & Sons.
- Hecht, M. L., Marsiglia, F. F., Elek, E., Wagstaff, D. A., Kulis, S., Dustman, P. L., & Miller-Day, M. (2003). Culturally-grounded substance use prevention: an evaluation of the keepin' it R.E.A.L. curriculum. *Prevention Science, 4*, 233-248.
- Hershberger, S., Wood, M., & Fisher, D. (2003). A cognitive-behavioral intervention to reduce HIV risk behaviors in crack and injection drug users. *AIDS and Behavior, 7*, 229-243.
- Holleran, L. K., Castro, F., Coard, S., Kumpfer, K., Nyborg, V., & Stephenson, H. (May, 2005). *Moving towards state of the art, culturally relevant prevention interventions for minority youth*. Panel presentation at Society for Prevention Research Annual Meeting, Washington, DC.
- Holleran, L. K. (2008). Making drug and alcohol prevention relevant: Adapting evidence-based curricula to unique adolescent cultures. *Family & Community Health, 57*(S), S52-S60.
- Holleran, L. K., & Hopson, L. M. (2012). Methodology for evaluating an adaptation of evidence-based drug abuse prevention in alternative schools. *Children in Schools, 30* 116-127.
- Ingram, B. L., Flannery, D., Elkavich, A., & Rotheram-Borus, M. J. (2008). Common processes in evidence-based adolescent HIV prevention programs. *AIDS and Behavior, 12*, 374-383.
- Kumpfer, K. L., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family based prevention interventions. *Prevention Science, 3*, 241-246.
- Florida Department of Health, Bureau of HIV/AIDS. (2010). *Latino Issues Survey*. Retrieved from <http://www.wemakethechange.com/wpcontent/uploads/latinosummitfacts.pdf>
- Lescano, C. M., Brown, L. K., Raffaelli, M., & Lima, L. (2009). Cultural factors and family-based HIV prevention intervention for Latino youth. *Journal of Pediatric Psychology, 34*, 1041.
- Minkler, M., & Wallerstein, N. (Eds.). (2003). *Community based participatory research for health*. San Francisco: Jossey-Bass.
- Monitoring the Future. (2008). *Monitoring the Future National Survey Results on Drug Use, 1975-2008 Volume II*. Retrieved from http://monitoringthefuture.org/pubs/monographs/vol2_2008.pdf
- Morales, L. S., Lara, M., Kington, R. S., Valdez, R. O., & Escarce, J. J. (2002). Socioeconomic, cultural, and behavioral factors affecting Hispanic health outcomes. *Journal of Health for the Poor and Underserved, 13*, 477-503.
- Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed). Newbury Park, CA: Sage.
- [MMWR] Morbidity and Mortality Weekly Report. (2011). *Mental Illness Surveillance Among Adults in the United States*. Atlanta, GA: Centers for Disease Control.
- Nahom, D., Wells, E., Gillmore, M., Hoppe, M., Morrison, D., & Archibald, M. (2001). Differences by gender and sexual experience in adolescent sexual behavior. *Journal of School Health, 71*, 153-158.
- [NIDA] National Institute on Drug Abuse. (2011). *Preventing Drug Abuse among Children and Adolescents*. Retrieved from <http://drugabuse.gov/prevention/index.html>
- [NSDUH] National Survey on Drug Use and Health. (2007). *Results from the 2007 National Survey on Drug Use and Health: National findings*. Rockville, MD: U.S. Department of Health and Human Services. Retrieved from <http://www.samhsa.gov/data/NSDUH/2k10NSDUH/2k10Results.htm>
- Nelson, A., & Arthur, B. (2004). Storytelling for Empowerment: Decreasing at-risk youth's alcohol and marijuana use. *Journal of Primary Prevention, 24*, 169-180.
- Pemberton, M., Colliver, D., Robbins, T., & Gfroerer, J. (2011). *Underage Alcohol Use: Findings from the 2002-2006 National Survey on Drug Use and Health*. Substance Abuse and Mental Health Services Administration. Retrieved from <http://www.oas.samhsa.gov/underage2k8/toc.htm>.
- Prado, G., Schwartz, S., Pattatucci-Aragón, A., Clatts, M., Pantin, H., & Fernandez, M. I. (2006). The prevention of HIV transmission in Hispanic adolescents. *Drug and Alcohol Dependence, 84S*, S43-S53.
- Robles, N. R., Pastor, L., & Manjon, M. (2004). Lercanidipine in diabetic patients with renal failure. *Nefrologia, 24*, 338-43.
- Rotheram-Borus, M. J., Murphy, D. A., Coleman, C. L., Kennedy, M., Reid, H. M., & Cline, T. (1997). Risk acts, health care, and medical adherence among HIV+ youths in care overtime. *AIDS Behavior, 1*, 43-52.
- Szapocznik, J., Prado, G., Burlew, K., Williams, R. A., & Santisteban, D. A. (2007). Drug abuse in African American and Hispanic adolescents: Culture, development and behavior. *Annual Review of Clinical Psychology, 3*, 77-105.
- Shedlin, M. G., Decena, C. U., & Oliver-Velez, D. (2005). Initial acculturation and HIV risk among new Hispanic immigrants to New York. *Journal of the National Medical Association, 97*(7), 32S-36S.
- Smedley, B.D., Stith, A.Y., & Nelson, A. R. (2002). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Institute of Medicine Report. Washington, D.C.: National Academy Press. Retrieved from <http://www.nap.edu/openbook.php?isbn=030908265X>
- Stewart, D. W., Shamdasani, P. N., & Rook, D. W. (2007). *Focus Groups: Theory and Practice* (2nd ed.). Thousand Oaks, CA: Sage.

- Villaruel, A. M., Jemmott III, J. B., & Jemmott, L. S. (2006). A Randomized Controlled Trial Testing an HIV Prevention Intervention for Latino Youth. *Archives of Pediatrics & Adolescent Medicine, 160*, 772-777.
- Whitaker, D. J., & Miller, K. S. (2000). Parent-adolescent discussions about sex and condoms: Impact on peer influences of sexual risk behavior. *Journal of Adolescent Research, 15*, 251-272.
- Zayas, L. H., Hausmann-Stabile, C., & Pilat, A. M. (2009). Recruiting urban Latina adolescents and their families: Challenges and lessons learned in suicide attempts research. *Youth & Society, 40*, 591-602.

Manuscript received: 18/07/2012

Review received: 10/08/2012

Accepted: 12/08/2012