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THE IMPLEMENTATION OF A CULTURALLY BASED HIV SEXUAL RISK REDUCTION PROGRAM FOR LATINO YOUTH IN A DENVER AREA HIGH SCHOOL

Trisha E. Mueller, Charlene Angel Castaneda, Shannon Sainer, Donna Martinez, Jeffrey H. Herbst, Aisha L. Wilkes, and Antonia M. Villarruel

In the United States, Latino youth experience disproportionately higher rates of teen pregnancy and sexually transmitted infections (STIs) than non-Latino Whites. As a result, organizations serving Latino youth seek culturally appropriate evidence-based prevention programs that promote sexual abstinence and condom use. *¡Cuídate!* is an efficacious HIV sexual risk reduction program for Latino youth aged 13-18. The program incorporates cultural beliefs that are common among Latino youth and associated with sexual risk behavior, and uses these beliefs to frame abstinence and condom use as culturally accepted and effective ways to prevent unintended pregnancy and STIs, including HIV/AIDS. *¡Cuídate!* has been successfully delivered in community agencies and after-school programs but has not been integrated into an existing school curriculum. This brief case study describes efforts to implement *¡Cuídate!* in a predominantly Latino urban high school in Denver. Ninety-three youth participated in the program from October 2007 to May 2008. *¡Cuídate!* was adapted to accommodate the typical class period by delivering program content over a larger number of sessions and extending the total amount of time of the program to allow for additional activities. Major challenges of program implementation included student recruitment and the "opt in" policy for participation. Despite these challenges, *¡Cuídate!* was implemented with minor adaptations in a school setting.

Trisha Mueller, Jeffrey Herbst, and Aisha Wilkes are with the Centers for Disease Control and Prevention (CDC), Atlanta, GA. Charlene Castaneda and Donna Martinez are with Denver Area Youth Services (DAYS), Denver, CO. Shannon Sainer is with Colorado Organization on Adolescent Pregnancy, Parenting and Prevention (COAPPP), Denver, CO. Antonia Villarruel is with the University of Michigan, School of Nursing, Ann Arbor.

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Address correspondence to Trisha Mueller, MPH, Division of Reproductive Health, Centers for Disease Control and Prevention, 4770 Buford Hwy. MS K-22, Atlanta, GA 30341; e-mail: tmueller@cdc.gov.

HIV/AIDS has significantly impacted Hispanic/Latino youth in the United States.[1] In 2006, Latinos aged 13-19 years accounted for the second highest proportion of HIV/AIDS cases among youth of the same age, and among all racial and ethnic groups (Centers for Disease Control and Prevention [CDC], 2008a). In addition, Latino adolescents in the United States experience disproportionately higher rates of teen pregnancy and sexually transmitted infections (STIs) than non-Latino Whites. In 2004, the pregnancy rate of U.S. teens aged 15-19 years was 132.8 per 1,000 among Latinas compared with 45.2 per 1,000 among White females (Ventura, Abma, Mosher, & Henshaw, 2008). In 2006, the rates of gonorrhea and Chlamydia among Latino youth were two to three times higher than those for White youth (CDC, 2007).

In the state of Colorado, Latino youth experience much higher rates of teen pregnancy and STIs than their non-Latino counterparts. Although Latina females account for 22% of the total population aged 15-19 in Colorado (Colorado State Demography Office, personal communication, September 16, 2008), over 55% of all teen births in the state occurred among Latinas compared with 36% among non-Hispanic Whites and 7% among Blacks (Colorado Organization on Adolescent Pregnancy, Parenting, and Prevention [COAPPP], 2008). Furthermore, in a national youth risk behavior survey, Latino youth in Colorado were more likely than Whites to report having sex before the age of 13, more likely to report having four or more sexual partners and less likely to report receiving education in school on HIV or AIDS (CDC, 2008d). As a result of these alarming statistics, two Colorado organizations serving Latino youth—COAPPP and Denver Area Youth Services (DAYS)—formed a partnership to implement an evidence-based HIV sexual risk reduction program for Latino youth in a Denver area high school.

¡Cuídate!—which means "Take care of yourself"— is a small-group HIV sexual risk reduction program for Latinos aged 13-18 years (Villarruel, Jemmott, Jemmott, & Eakin, 2006). The program consists of six 1-hour modules delivered to mixed-gender groups, and incorporates cultural beliefs that are common among Latinos and associated with sexual risk behavior. The program uses the cultural beliefs of familialism and gender roles, including *machismo,* to frame abstinence and condom use as culturally accepted and effective ways to prevent unintended pregnancy and STIs, including HIV/AIDS. For example, themes in the curriculum related to familialism include recognizing the family as a source of support and information, and understanding that individual actions affect the family (Villarruel, Jemmott, & Jemmott, 2005). Through the use of group discussions, role plays, a video, music, interactive games and skill building activities, *¡Cuídate!* helps youth increase their HIV knowledge, understand their vulnerability to HIV infection, identify attitudes and beliefs about HIV and safer sex, and increase self-efficacy and skills for the negotiation of abstinence and safer sex practices and correct condom use.

¡Cuídate! was rigorously evaluated in a randomized controlled trial that included 553 self-identified Latino, predominantly Puerto Rican male and female adolescents in Philadelphia (Villarruel, Jemmott, & Jemmott, 2006). Youth in the *¡Cuídate!* program were significantly less likely than youth attending a health promotion program to report ever having sexual intercourse, having multiple sex partners, and engaging in unprotected sexual intercourse. Among sexually active youth, those as-

1. Hispanics/Latinos include people whose origin or familial heritage include Mexico, Puerto Rico, Cuba, the Dominican Republic, or the Spanish-speaking countries of Central and South America. People of Hispanic origin may be of any race or religion.

signed to the *¡Cuídate!* program were more likely to report using condoms consistently than comparison youth (Villarruel, Jemmott, & Jemmott, 2006). *¡Cuídate!* has been successfully delivered in community agencies and after-school programs in the United States (Villarruel, Jemmott, & Jemmott, 2006) and in Mexico (Gallegos, Villarruel, Loveland-Cherry, Ronis, & Zhou, 2008) and is considered by the CDC as one of several programs providing the best evidence of efficacy in reducing HIV risk (CDC, 2008b).

As part of the CDC's Replicating Effective Programs (REP) project[2] (CDC, 2008c; Eke, Neumann, Wilkes, & Jones, 2006), COAPPP and DAYS agreed to serve as a case study agency to pilot the *¡Cuídate!* intervention package materials in a predominantly Latino high school. The case study site was selected based on three factors: (a) the HIV and teen pregnancy prevention needs of students in the Denver metropolitan region, (b) an established partnership with DAYS staff, and (c) an identified need to utilize an evidenced based curriculum that was developed and tested with Latino youth. *¡Cuídate!* was considered a culturally appropriate compliment to three additional sexual risk reduction programs offered at the school that included an after-school group for girls, a parental engagement program, and a school-based health center. The original developer of *¡Cuídate!*, Dr. Antonia Villarruel, provided training and technical assistance to the case agency to help them adapt the program for the school setting. The preimplementation and implementation phases of the pilot are described below based on feedback obtained from program facilitators and participants.

PROGRAM PREIMPLEMENTATION

COAPPP and DAYS staff obtained school and parental support for *¡Cuídate!* due to the recognized need for teen pregnancy and HIV prevention services for Latino adolescents in their community. School administrators and staff felt that their students needed an accurate HIV and teen pregnancy prevention education and, as a result, were willing to provide DAYS staff with the space needed to deliver the program. To further obtain support from parents, DAYS staff presented an introduction to the program at several parent education meetings, and parents were given the opportunity to review the curriculum at Back-to-School nights.

In planning to implement the program in the school, DAYS staff recognized the need to adapt the program delivery to fit the school schedule.[3] *¡Cuídate!* was originally tested as a 2-session intervention comprising six 1-hour modules. To accommodate the 45-minute class period, the program was extended to fifteen 45-minute sessions delivered over 3 weeks to facilitate the delivery of all intervention activities. The new 15-session format not only allowed for implementation of the full curriculum but also provided additional time to address questions from students and

2. More information on the *¡Cuídate!* intervention package can be found at http://www.cdc.gov/hiv/topics/prev_prog/rep/packages/!cuidate!.htm. *¡Cuídate!* will be available in English and Spanish in 2009.

3. The adaptations made did not modify or change the program's core elements (see Table 1). Adaptation is the process of making changes to curricula to meet the needs of a population or a school's capacity without compromising the core elements (Lesesne et al., 2007; McKleroy et al., 2006; Soloman, Card, & Malow, 2006). Core elements are program characteristics that should not be changed when the program is being replicated or adapted so that the program produces similar outcomes to those demonstrated in the original research (Division of HIV/AIDS Prevention, 2007; McKleroy et al., 2006;). Maintaining program fidelity (i.e. program is implemented as designed) is essential to ensure program effectiveness.

TABLE 1. Core Elements of *¡Cuídate!*

1. Incorporating the theme of *¡Cuídate!*—taking care of oneself and one's partner, family and community—throughout the program
2. Using culturally and linguistically appropriate materials and activities to show and emphasize core Latino cultural values, specifically *familialism* and gender roles, and how those are consistent with safer sex behavior
3. Incorporating activities that increase knowledge and influence positive attitudes, beliefs, and self-efficacy regarding HIV sexual risk reduction behaviors
4. Modeling and practicing the effective use of condoms
5. Building participants' skills in problem solving, negotiation of safe sex, and refusal of unsafe sex
6. Delivering sessions in highly participatory, interactive small groups

to facilitate classroom discussion. The increased number of sessions provided additional time for students to visit the school-based health clinic. These visits not only introduced students to clinic staff, but they allowed students to ask questions about HIV/STD testing and other available services.

Additional adaptations made to the curriculum involved the substitution of two songs and the video provided in the intervention package. For example, the video was replaced with a series of educational videos that focused on teen sex, STDs, HIV, and risky behavior.[4] Replacing the music and videos did not violate the core elements of the program (Table 1). Core elements are required elements that embody the underlying theory and internal logic of the intervention and are most likely responsible for the intervention effects (McKleroy et al., 2006).

PROGRAM IMPLEMENTATION

Physical education teachers recruited ninth-grade students and referred interested students to onsite DAYS staff for additional program information and to obtain a permission slip. Sixty-nine youth in mixed-gender ninth-grade physical education classes and an additional 24 youth in an 11th-and-12th-grade-level course, who were referred by a teacher, participated in *¡Cuídate!*. All students were required to provide signed parental permission prior to enrollment in the program. Over 94% of the youth reported they were Hispanic/Latino of predominantly Mexican descent, and all students were fluent in English.

There were several factors that contributed to the program's successful implementation in a school setting. In addition to the support provided by the school's principal and assistant principal, the partnership of COAPPP and DAYS increased students' access to school-based health services, linked students with services offered in the community, and reinforced the message of prevention. As the program was implemented during physical education classes, students did not miss out on core subjects, including math, science or language arts. Finally, the adapted format of fifteen 45-minute sessions allowed facilitators to implement the entire curriculum and to lead thoughtful classroom discussions.

Student feedback indicated that they were receptive to the program, enjoyed it, and felt they learned new information about HIV, sexually transmitted disease, and pregnancy prevention. The culturally specific and age-appropriate curriculum en-

4. A new video has been developed for the *¡Cuídate!* intervention package.

gaged students and encouraged participation. Students were particularly interested in discussions that focused on Latino cultural values and identity. As indicated in follow-up interviews, facilitators reported that students provided open and frank conversations in the classroom, particularly on sensitive topics.

The main challenge implementing *¡Cuídate!* was the recruitment of students into the program. DAYS staff determined that many students did not want to participate in *¡Cuídate!* because of embarrassment or fear of being judged by their peers. Other students felt they already knew enough about sex and did not need this type of information. Similar challenges were noted in the original research trial conducted in Philadelphia (Villarruel, Jemmott, Jemmott, & Eakin, 2006). Another challenge involved students not turning in permission slips from their parents or guardians. As a result, they were not allowed to enroll in the program. To overcome these challenges, DAYS staff offered students an incentive (e.g., a gift card) if they enrolled and completed the full program.

LESSONS LEARNED

Practical lessons learned from the *¡Cuídate!* pilot in Denver can help other implementing agencies incorporate the program into a school setting. Although adaptation may be needed to accommodate the curriculum within a typical class period, changes to the program should not compromise the program's six core elements. Activities can also be added to the program to encourage parents to become more involved in what their children are learning in school. To encourage greater parental involvement, we recommend hosting informational sessions with parents before program implementation. These sessions not only inform parents the purpose of *¡Cuídate!* but also provide them with answers to questions they may have when talking with their children about the program. These sessions would also be an ideal opportunity to obtain signed parental consent. Alternatively, information could be mailed to parents prior to the start of the program. As many students did not return a signed permission slip, the use of an "opt-out" enrollment process, instead of parental 'opt-in,' would enable greater student participation.

With each round of program implementation, it became evident that many students had not received formal education in basic human development and reproductive anatomy. Students had questions on a variety of topics that facilitators had to answer, including puberty and pregnancy. Although additional time was built into the revised curriculum for group discussion and review, these discussions frequently distracted from the curriculum. We recommend assessing students' knowledge on these topics before implementing the program. For the 2009-2010 school year, DAYS staff intends to host a question and answer session with students and school-based health center staff.

Although *¡Cuídate!* was successfully adapted and implemented in a school setting, limitations of this case study must be noted. Because this study only intended to pilot the intervention materials and was not a research study, participation rates were not tracked and behavioral outcomes were not assessed. As a result, it is unknown if the program produced significant reductions in sexual risk behaviors and increases in protective behaviors as reported in the original research (Villarruel, Jemmott, & Jemmott, 2006). Implementing agencies are strongly encouraged to conduct program evaluations that include outcome monitoring to determine the effectiveness of *¡Cuídate!* in real-world settings.

CONCLUSION

Formal sex education has been proven to be effective in reducing adolescents' involvement in risky sexual behaviors (Mueller, Gavin, & Kulkarni, 2008). Sexual risk reduction programs, such as *¡Cuídate!,* may be an appropriate option for schools seeking to implement a culturally appropriate, evidence-based program designed for Latino youth. Despite several implementation challenges, the program was well-received by school administrators, teachers and students who participated in the program. COAPPP and DAYS were able to successfully sustain this program within the school system. This pilot in Colorado demonstrates that *¡Cuídate!* is a feasible and culturally appropriate program for Latino youth that can be adapted and implemented as part of the school day.

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