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# Effects of a Family Intervention in Reducing HIV Risk Behaviors Among High-Risk Hispanic Adolescents

## *A Randomized Controlled Trial*

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**Objective:** To determine the efficacy of a family intervention in reducing human immunodeficiency virus (HIV) risk behaviors among Hispanic delinquent adolescents.

**Design:** Randomized controlled trial.

**Setting:** Miami–Dade County Public School System and Miami–Dade County’s Department of Juvenile Services, Florida.

**Participants:** A total of 242 Hispanic delinquent youth aged 12 to 17 years and their primary caregivers completed outcome assessments at baseline and 3 months after intervention.

**Intervention:** Participants were randomized to either Familias Unidas (120 participants), a Hispanic-specific, family intervention designed to reduce HIV risk behaviors among Hispanic youth, or a community practice control condition (122 participants).

**Main Outcome Measures:** Self-reported measures included unprotected sexual behavior, engaging in sex while under the influence of alcohol and/or drugs, number of sexual partners, and incidence of sexually transmitted diseases. Family functioning (eg, parent-adolescent com-

munication, positive parenting, and parental monitoring) was also assessed via self-report measures.

**Results:** Compared with community practice, Familias Unidas was efficacious in increasing condom use during vaginal and anal sex during the past 90 days, reducing the number of days adolescents were under the influence of drugs or alcohol and had sex without a condom, reducing sexual partners, and preventing unprotected anal sex at the last sexual intercourse. Familias Unidas was also efficacious, relative to community practice, in increasing family functioning and most notably in increasing parent-adolescent communication and positive parenting.

**Conclusion:** These results suggest that culturally tailored, family-centered prevention interventions may be appropriate and efficacious in reducing HIV risk behaviors among Hispanic delinquent adolescents.

**Trial Registration:** clinicaltrials.gov Identifier: NCT01257022

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**H**UMAN IMMUNODEFICIENCY virus (HIV)/AIDS represents a major public health problem facing America’s youth. It is estimated that about 18% of new HIV cases reported in the United States in 2008 were among individuals ages 13 to 24 years.<sup>1</sup> Hispanic youth account for 17% of new HIV cases reported among this age group.<sup>1</sup> Furthermore, the rate of new HIV infections among Hispanics in 2006 was 2.5 times that of non-Hispanic whites.<sup>1</sup>

Delinquent adolescents are at risk of being incarcerated and have higher rates of sexually transmitted diseases (STDs), including HIV, than do adolescents in the general population. In addition, delinquent adolescents are more likely to be infected with HIV as they age compared with adolescents in the general population. Moreover, Hispanic delinquent youth are more likely to report an STD in young adulthood, relative to non-Hispanic white delinquent adolescents.<sup>2</sup> Thus, preventing HIV in

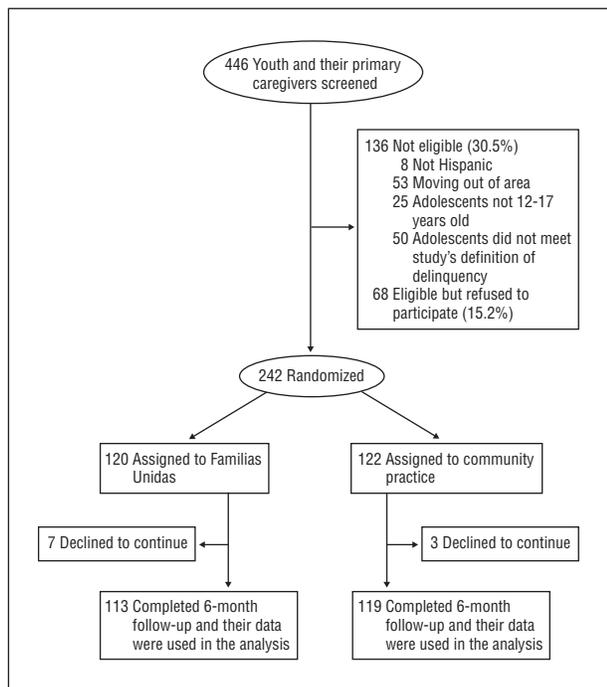


Figure. Flowchart of study participants.

Hispanic delinquent adolescents is of public health importance.

In adolescents, HIV is primarily transmitted through sexual risk behaviors, which include unprotected sexual behavior and engaging in sex with multiple partners.<sup>1,3</sup> Hispanic youth report higher rates of unprotected sexual behavior than do youth of other ethnic groups. According to the Youth Risk Behaviors Surveillance System,<sup>3</sup> Hispanic adolescents report lower rates of condom use (54.9%) than their non-Hispanic white (63.3%) and African American (62.4%) counterparts. Moreover, delinquent youth are more likely to engage in HIV risk behaviors than are nondelinquent youth.<sup>4</sup> Hispanic delinquent youth are at greater risk than their non-Hispanic white and African American counterparts. For example, Hispanic delinquent youth report higher rates of unprotected sex than both non-Hispanic white and African American youth.<sup>2</sup>

Despite the fact that HIV sexual risk behaviors are disproportionately prevalent among Hispanic delinquent youth, few family-based HIV preventive interventions have been developed and evaluated specifically for this population.<sup>5,6</sup> Informed by family systems theory, family-based interventions postulate that problem behaviors in adolescents do not occur in isolation, and in fact both influence and are influenced by the family.<sup>7,8</sup> It should not be surprising then that systematic reviews indicate that family-based interventions for Hispanic adolescents are more efficacious than individually targeted interventions in preventing and reducing a wide array of problem behaviors.<sup>9,10</sup> Unfortunately, few family-based interventions have been evaluated for this population. In fact, to our knowledge, this is the first study to evaluate the efficacy of a family-based, culturally specific program in preventing and reducing HIV risk behaviors among Hispanic delinquent youth.

To address this literature gap, the purpose of this study was to evaluate the efficacy of Familias Unidas, a Hispanic-specific, family-based, HIV preventive intervention, in a sample of Hispanic delinquent youth. Familias Unidas aims to prevent HIV by increasing family functioning between parents and adolescents. More recent HIV prevention frameworks have highlighted the importance of conceptualizing adolescent HIV risk behaviors as embedded within a system of networks, including family.<sup>11-13</sup> Given the central role of family in Hispanic populations, targeting family processes (eg, family functioning) may decrease HIV risk behaviors. In fact, previous studies have shown that increases in family functioning are associated with a decrease in HIV risk behaviors.<sup>5,6</sup> Unfortunately, Hispanic delinquent youth report lower levels of family functioning, relative to both non-Hispanic and nondelinquent youth.<sup>14,15</sup> Thus, this population may significantly benefit from interventions targeting family functioning as a means of preventing HIV risk behaviors. In fact, Prado and Pantin<sup>16</sup> have found that families with poor family functioning benefit significantly from family-based HIV preventive interventions.

## METHODS

### PARTICIPANTS

The study was conducted from August 2009 to June 2010 and was approved by the University of Miami's institutional review board (Miami, Florida). Referrals for the study came from both Miami-Dade County's Department of Juvenile Services and from the Miami-Dade County Public School system (MDCPS). However, even youth recruited from the Department of Juvenile Services were enrolled in the MDCPS system. Recruiters screened a total of 446 self-identified Hispanic youth and their primary caregivers. Of these (Figure), 310 met the study's eligibility criteria: the participating adolescents had to be of Hispanic origin (defined as having  $\geq 1$  parent born in a Spanish-speaking country of the Americas), had to be 12 to 17 years old, had to have plans to remain a resident of South Florida during the study period, and had to be a delinquent youth. Delinquency was defined as having been arrested or as having committed at least 1 "level III behavior problem," described by MDCPS as assault or threat against a nonstaff member, breaking and entering or burglary, fighting (serious), hazing, possession or use of alcohol and/or controlled substances, possession of simulated weapons, trespassing, and vandalism. Of those ineligible participants, most either had plans to move from South Florida (39.0%) or the adolescent did not meet the study's definition of delinquency (36.8%). Of the 310 eligible participants, 68 (15.2%) refused to participate. The remaining 242 youth and their primary caregivers agreed to participate, signed informed assent (youth) or consent (primary caregivers), completed the baseline assessment (in separate rooms), and were randomized to 1 of the 2 study conditions (Figure).

### STUDY DESIGN

The study was a randomized controlled trial. Assignment to study conditions was conducted using concealment of allocation procedures. Prior to enrollment, a study investigator (S.H.) used a random-numbers table to generate the allocation sequence. As participants completed baseline assessments, sealed envelopes were used to execute the assignments. Participants were randomly assigned to either Familias Unidas or community practice.

## EXPERIMENTAL AND CONTROL CONDITIONS

Familias Unidas is guided by ecodevelopmental theory,<sup>11,17</sup> a socioecological public health model, and influenced by culturally specific models developed for Hispanic populations in the United States.<sup>18</sup> Consistent with ecodevelopmental theory, Familias Unidas aims to reduce HIV risk behaviors by improving family functioning. Although Familias Unidas is not a sex-specific preventive intervention, we do incorporate sex-specific aspects of Latino cultural values or norms. The intended dosage for families randomized to Familias Unidas included eight 2-hour group sessions and four 1-hour family visits (actual mean [SD] dosage received was 6.9 [4.0] sessions) administered over a 3-month period. All sessions were parent-centered, with adolescents' participation in intervention activities limited to the 4 family visits. The sessions focused on positive parenting, family communication, parental monitoring, and adolescent HIV risk behaviors. Additional details regarding the intervention's content can be found elsewhere.<sup>5,6</sup> The intervention was delivered by 3 master's level Hispanic facilitators with backgrounds in social work, mental health counseling, or family therapy (M.C. and G.L.J.). Facilitators had a minimum of 2 years of experience in working with Hispanic families, including HIV prevention as well as in implementing interventions across several contexts, including individual, couple, and family settings.

Participants in the community practice condition received standard care services available to youth and parents of delinquent youth in Miami-Dade County. Standard care services include referrals to a network of community-based agencies that address problem behaviors. Services provided included both individual and family therapy. Unfortunately, the actual number of services received by families in this condition were not collected. Participants in both the experimental and control conditions also received the HIV prevention curriculum offered by the MDCPS system.

## DATA COLLECTION

Data collection occurred at baseline and at 6 months postbaseline. At each assessment, both parents and adolescents completed the questionnaires on computers using the audio-CASI system (audio-enhanced, computer-assisted self-interviewing), in either English or Spanish.<sup>19</sup> Individuals supervising the data collection process were blinded to condition assignment. Participants were compensated \$60 and \$70 for completing the baseline and 6-month follow-up assessments, respectively.

## PRIMARY OUTCOME

### HIV Sexual Risk Behaviors

The HIV sexual risk behaviors were measured using items from the Sexual Behavior instrument developed by Jemmott et al.<sup>20</sup> At each assessment, adolescents were asked to indicate whether they had ever had sex in their lifetime and during the past 90 days. Adolescents who reported having had sex at either baseline or the follow-up assessment were also asked if they had used a condom during their last sexual intercourse. In addition, those adolescents who reported having had sex in the past 90 days were asked how often condoms were used (rated on a 5-point Likert scale ranging from 1 [never] to 5 [every time]), how many days they were under the influence of alcohol or drugs and engaged in sex without a condom, and how many partners they had sexual intercourse with in the past 90 days. Adolescents who reported having sex during their lifetime were also asked whether they had ever contracted an STD.

## Secondary Outcome: Family Functioning

Family functioning was measured using 3 parent-reported indicators: positive parenting, parent-adolescent communication, and parental monitoring. The Parenting Practices Scale (9 items)<sup>21</sup> was used to obtain reports of positive parenting ( $\alpha = .72$ ). This subscale assesses to what extent the parent uses positive affirmations and appraisal. Items are rated on a 3-point Likert scale ranging from 1 (almost never) to 3 (often). The Parent-Adolescent Communication Scale (20 items)<sup>22</sup> was used to obtain parent report of effective communication ( $\alpha = .77$ ). This subscale assesses the extent to which there is open and honest communication. Items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The Parent Relationship with Peer Group Scale (5 items)<sup>23</sup> was used to obtain parent reports ( $\alpha = .84$ ) of parental monitoring. This subscale assesses to what extent parents spend time with, monitor, and know their adolescent's friends. Items are rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely often). A family functioning variable consisting of the 3 indicators was used to create a single measure of family functioning.

## Statistical Analyses

Generalized linear models (GLMs) were conducted to compare the differences between Familias Unidas and community practice in HIV sexual risk behaviors and family functioning at 6 months post-baseline after controlling for the corresponding baseline levels of HIV sexual risk behaviors and family functioning. We estimated GLMs that included a main effect for condition (1, Familias Unidas; 0, community practice) and the corresponding baseline levels of HIV sexual risk behaviors and family functioning. Depending on the distribution of the outcome variables being analyzed, different distributions and link functions were specified for the GLMs. Only participants who reported having had sex in the past 90 days were included in the analyses in which the outcome was sexual risk behaviors in the past 90 days. Generalized linear models were also estimated to assess differences in family functioning as well as in its 3 constituent indicators at 6 months postbaseline, controlling for the corresponding baseline level.

We then conducted  $\chi^2$  tests to compare the proportion of youth who reported unprotected vaginal or anal sex during the last sexual intercourse. Only participants who reported having had sexual intercourse after the baseline assessment were included in the analyses. Finally, a  $\chi^2$  test was conducted to assess whether sex initiation and the incidence of a sexually transmitted disease differed by condition.

## RESULTS

### BASELINE AND ATTRITION RATES BY CONDITION

Of the 242 participating families, 120 and 122 were randomized to Familias Unidas and community practice, respectively. Baseline demographics and outcome variables by condition are presented in **Table 1** and **Table 2**. There was no differential attrition across the 2 conditions (5.8% and 2.5% for Familias Unidas and community practice, respectively;  $\chi^2 = 1.74$ ;  $P = .19$ ).

### QUALITY ASSURANCE AND INTERVENTION FIDELITY

All sessions in Familias Unidas were videotaped with participants' consent or assent. To assess fidelity to Fa-

**Table 1. Baseline Comparisons by Condition on Adolescent Demographic Characteristics and HIV Risk Variables<sup>a</sup>**

Variable	Condition	
	Familias Unidas (n=120)	Community Practice (n=122)
Sex		
Male	80 (66.7)	76 (62.3)
Female	40 (33.3)	46 (37.7)
Age, mean (SD), y	14.8 (1.36)	14.6 (1.41)
Born in United States	75 (62.5)	83 (68.0)
Country of origin for foreign-born adolescents		
Cuba	9 (20.0)	12 (30.8)
Nicaragua	5 (11.1)	3 (7.7)
Honduras	7 (15.6)	6 (15.4)
Dominican Republic	3 (6.7)	3 (7.7)
Other	21 (46.7)	15 (38.5)
Years in the United States for foreign-born adolescents, No.		
<3	9 (20.0)	9 (23.1)
3-10	24 (53.3)	25 (64.1)
>10	12 (26.7)	5 (12.8)
Family income, \$		
0-9999	30 (25.0)	41 (33.6)
10 000-19 999	38 (31.7)	35 (28.7)
20 000-29 999	26 (21.7)	22 (18.0)
>30 000	26 (21.7)	24 (19.7)
Participants reporting		
Vaginal sex in lifetime	66 (56.9)	57 (47.5)
Vaginal sex in the past 90 d	41 (35.3)	36 (30.0)
Anal sex in lifetime	32 (27.1)	28 (23.0)
Anal sex in the past 90 d	15 (12.7)	13 (10.7)
Unprotected vaginal sex at last sexual intercourse	21 of 66 (31.8)	25 of 57 (43.9)
Unprotected anal sex at last sexual intercourse	6 of 32 (18.8)	12 of 28 (42.9)
History of STD	2 (1.7)	5 (4.1)

Abbreviations: HIV, human immunodeficiency virus; STD, sexually transmitted disease.

<sup>a</sup>Data are given as number (percentage except where noted).

milias Unidas, independent raters rated all of the group sessions and 25% of the family visits. Measures to assess (observational) behaviors were developed to identify key facilitator behaviors for each session. The rater first indicated (on a fidelity form) whether the facilitator had attempted to complete the behavior (eg, guide the group in developing a plan for talking with youth about HIV/AIDS) as detailed in the manual. Raters then identified the extent to which each facilitator behavior was present using a 7-point Likert scale ranging from 0 (not at all) to 6 (extensively). Ninety-one percent of the behaviors were adhered to. The mean (SD) extent to which each facilitator behavior was present was 3.97 (0.47).

#### PRIMARY OUTCOMES: HIV SEXUAL RISK BEHAVIORS

There was a significant difference between Familias Unidas and community practice in inconsistent condom use during vaginal sex in the past 90 days at 6 months postbaseline (relative risk [RR]=0.61) (**Table 3**). Youth in Familias Unidas were 39% less likely to report inconsis-

tent condom use during vaginal sex than youth in community practice. The percentage reporting that they always used a condom in Familias Unidas increased from baseline to 6 months postbaseline, whereas it decreased in community practice. There was also a significant difference between Familias Unidas and community practice in inconsistent condom use during anal sex in the past 90 days at the 6-months' postbaseline follow-up (RR=0.40) (Table 3). Youth in Familias Unidas were 60% less likely to report inconsistent condom use during anal sex than youth in community practice. There was also a significant difference between Familias Unidas and community practice in the number of days adolescents got high and had sex without a condom in the past 90 days at the 6 months postbaseline (incidence rate ratio [IRR]=0.36) (Table 3). The mean number of days youth were under the influence of drugs or alcohol and had sex without a condom in Familias Unidas decreased from 2.05 days at baseline to 1.65 days at 6 months postbaseline, whereas it increased from 0.39 days to 3.50 days in community practice. There was also a significant difference between Familias Unidas and community practice in the number of sexual partners in the past 90 days at 6 months postbaseline (IRR=0.35) (Table 3). Finally, there was a significant difference in the number of youth reporting unprotected anal sex at last sexual intercourse (**Table 4**). Seventeen percent of youth in Familias Unidas reported unprotected anal sex at last sexual intercourse, compared with 69% of youth in community practice (RR=0.24). There were no significant differences in unprotected vaginal sex at last sexual intercourse, vaginal sex initiation rates (17.8% in Familias Unidas vs 20.3% in community practice), and anal sex initiation rates (5.0% in Familias Unidas vs 5.6% in community practice).

#### SECONDARY OUTCOMES: FAMILY FUNCTIONING VARIABLES

Family functioning was significantly different by condition at 6 months postbaseline (adjusted mean difference=0.29), controlling for baseline, in the 232 participants who were followed up at 6-months postbaseline.

Condition	Adjusted Mean Difference at Follow-up (95% CI)
Family functioning	0.29 (0.08 to 0.50)
Parent-adolescent communication	2.51 (2.31 to 2.72)
Positive parenting	0.77 (0.09 to 1.46)
Parental monitoring	0.77 (-0.09 to 1.62)

In addition, parents in Familias Unidas reported significantly higher parent-adolescent communication (adjusted mean difference, 2.51) and positive parenting relative to parents in community practice (adjusted mean difference, 0.77). No significant difference was observed for parental monitoring of peers.

#### COMMENT

To our knowledge, this study is the first to evaluate the efficacy of an HIV preventive intervention for Hispanic delinquent youth. The findings indicate that Familias Unidas was efficacious in reducing HIV sexual risk behav-

**Table 2. Sexual Behavior Variables and Family Functioning by Condition and Time<sup>a</sup>**

Variable	Baseline	6-mo Follow-up
Condom use during vaginal sex in the past 90 d		
Famílias Unidas	3.24 (1.50)	3.53 (1.34)
Community practice	2.92 (1.56)	2.81 (1.45)
Days participant was under influence of drugs or alcohol and had vaginal sex without condoms in the past 90 d, No.		
Famílias Unidas	2.05 (9.61)	1.65 (5.03)
Community practice	0.39 (1.10)	3.50 (15.04)
Sex partners in the past 90 d during vaginal sex, No.		
Famílias Unidas	4.43 (9.72)	4.73 (10.76)
Community practice	4.89 (8.91)	6.62 (17.87)
Condom use during anal sex in the past 90 d		
Famílias Unidas	3.07 (1.49)	3.36 (1.50)
Community practice	2.46 (1.51)	2.21 (1.42)
Family functioning		
Famílias Unidas	0.03 (1.19)	0.56 (1.13)
Community practice	-0.03 (1.13)	0.21 (1.24)
Parent-adolescent communication		
Famílias Unidas	69.33 (10.83)	72.89 (10.03)
Community practice	70.23 (12.00)	71.13 (13.64)
Positive Parenting		
Famílias Unidas	20.05 (2.97)	20.52 (3.01)
Community practice	19.81 (2.91)	19.63 (3.12)
Parental monitoring		
Famílias Unidas	14.63 (4.79)	15.87 (4.58)
Community practice	14.20 (4.44)	14.74 (4.57)

<sup>a</sup>Data are given as mean (SD) percentages except where noted.

**Table 3. Intervention Effects on HIV Risk Behaviors**

HIV Sexual Risk Behavior in the Past 3 mo (Participants, No.)	Risk Ratio or IRR <sup>b</sup> (95% CI)
Inconsistent condom use during vaginal sex (114) <sup>a</sup>	0.61 (0.39-0.87)
Inconsistent condom use during anal sex (42) <sup>a</sup>	0.40 (0.13-0.89)
Days participant was under influence of drugs or alcohol and had sex without condoms, No. (114) <sup>a</sup>	0.36 (0.22-0.58)
Sexual partners, No. (114) <sup>a</sup>	0.35 (0.28-0.44)

Abbreviations: HIV, human immunodeficiency virus; IRR, incidence rate ratio.

<sup>a</sup>Sample size for the generalized linear model models included only participants who reported having had sex in the past 90 days at baseline or at the 6-mo follow up.

<sup>b</sup>Relative risk is reported for inconsistent condom use during vaginal and anal sex outcomes; IRR is reported for the number of days under the influence of drugs or alcohol while having sex without condoms and the number of sexual partners outcomes.

**Table 4. Effects by Condition on Unprotected Sex at Last Sexual Intercourse (Vaginal and Anal) and Sexually Transmitted Disease (STD) Incidence**

HIV Risk	No. (%)		RR (95% CI)
	Famílias Unidas	Community Practice	
Unprotected vaginal sex at last sexual intercourse <sup>a</sup>	11 of 43 (25.6)	20 of 53 (37.7)	0.68 (0.37-1.26)
Unprotected anal sex at last sexual intercourse <sup>a</sup>	2 of 12 (16.7)	11 of 16 (68.8)	0.24 (0.07-0.90)
STD incidence rate <sup>b</sup>	2 of 110 (1.8)	3 of 113 (2.7)	0.68 (0.12-4.02)

Abbreviations: HIV, human immunodeficiency virus; RR, relative risk.

<sup>a</sup>Only participants who reported having had sexual intercourse after the baseline assessment were included in the analyses.

<sup>b</sup>Caution should be used when interpreting this finding, given the small number of participants reporting an STD.

iors, including unprotected sexual behavior, number of days under the influence of drugs or alcohol while having unprotected sex, and number of partners. Demonstrating that an intervention can reduce sexual risk behaviors in Hispanic delinquent youth has important public health implications for the prevention of HIV among Hispanic delinquent youth.

In addition to its impact on HIV risk behaviors, parents' self-reports of family functioning (eg, parent-adolescent communication), theoretically important mechanisms of change and targets of the intervention, also improved in parents randomized to Famílias Unidas. Improving family functioning is important in the prevention of sexual risk behaviors. For example, there is

evidence that poor communication between parents and youth is associated with increased sexual risk behaviors.<sup>5,24</sup> Consequently, targeting family processes, such as communication in interventions, may be beneficial in preventing HIV risk behaviors. Although family-based interventions have rarely been evaluated for the prevention of sexual risk behaviors, meta-analyses have shown that family-based interventions are among the most efficacious modalities for preventing and reducing adolescent substance use.<sup>25-27</sup>

It is noteworthy that Familias Unidas produced favorable outcomes in the adolescents, even though most of the sessions were delivered only to the parents. This finding is consistent with other studies that have found that adolescent problem behaviors can be altered when most of the sessions are delivered to parents.<sup>28,29</sup> Moreover, the consistency of these findings,<sup>5,6</sup> combined with findings from other family-based interventions using non-Hispanic population samples,<sup>30,31</sup> suggest that the efficacy of parent-based interventions in reducing adolescent HIV sexual risk behaviors may generalize across ethnic groups.<sup>32</sup> Future research in HIV prevention with Hispanic delinquent adolescents should also examine whether intervention effects vary by sex<sup>33</sup> and age group,<sup>34</sup> as well as the pathway through which these changes occur.<sup>35</sup> Such research could contribute to our understanding of how preventive interventions work and for whom.<sup>35,36</sup>

This study is not without limitations. First, the present sample is not representative of the US Hispanic population or even of Hispanic delinquent youth, and hence the results may not generalize to all Hispanic adolescents. A second limitation is the reliance on self-reported measures. Self-reported measures may present problems with regard to sexual risk taking behaviors and to STDs. For example, Harrington et al<sup>37</sup> found that the reliance on self-reports of STD history produced substantial underreporting of STD incidence and thereby may lead to false conclusions with respect to the effects of prevention interventions. Although studies suggest that self-reported measures of sexual behaviors, such as condom use, tend to be reliable,<sup>38</sup> future studies should use biological measures. Another limitation may be that an attention control condition was not used in this study. Thus, we are not able to control for nonspecific elements of intervention exposure. Future studies could match the duration of total intervention contact time to that of Familias Unidas.<sup>30</sup> An advantage, however, of using a community practice condition is its ecological validity. That is, to change current community practice in any way might be construed as an experimental manipulation in its own right. Another limitation is that data to assess the history of exposure to physical and sexual abuse were not collected. Given that previous studies have shown that a history of physical and sexual abuse is related to engaging in HIV risk behaviors,<sup>39</sup> future studies should collect these data. A final limitation is that specific data on the type or number of services sought and received by participants randomized to the control condition were not collected.

In summary, the present results suggest that Familias Unidas may have the potential to help reduce HIV rates among Hispanic delinquent youth by preventing and reducing sexual risk behaviors in this population. The

present study suggests that working primarily with parents may be an especially effective strategy for preventing or reducing HIV risk behaviors among Hispanic delinquent youth.

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**Author Contributions:** Dr Prado had full access to all of the data in the study and takes responsibility for the integrity of the data, and the accuracy of the data analysis. *Study concept and design:* Prado, Pantin, Huang, and Tapia. *Acquisition of data:* Velazquez, Calfee, Arzon, Villamar, Jimenez, and Cano. *Analysis and interpretation of data:* Prado, Huang, Cordova, Malcolm, Brown, and Estrada. *Drafting of the manuscript:* Prado, Huang, Cordova, Malcolm, and Arzon. *Critical revision of the manuscript for important intellectual content:* Prado, Pantin, Cordova, Tapia, Velazquez, Calfee, Villamar, Jimenez, Cano, Brown, and Estrada. *Statistical analysis:* Huang and Brown. *Obtained funding:* Prado. *Administrative, technical, and material support:* Velazquez, Calfee, Malcolm, Arzon, Villamar, Jimenez, Cano, and Estrada. *Study supervision:* Prado, Pantin, Huang, Tapia, and Velazquez.

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