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Feasibility of a Parenting Program to Prevent Substance Use Among Latino Youth: A Community-Based Participatory Research Study

Michele L. Allen, MD, MS,

Department of Family Medicine, University of Minnesota, Minneapolis, Minnesota.

Ghaffar A. Hurtado, MEd,

University of Minnesota Extension Center for Family Development, St. Paul, Minnesota.

Kyu Jin Yon, PhD,

University of Minnesota Extension Center for Family Development, St. Paul, Minnesota.

Kola S. Okuyemi, MD, MPH,

Department of Family Medicine, University of Minnesota, Minneapolis, Minnesota.

Cynthia S. Davey, MS,

Biostatistical Design and Analysis Center, University of Minnesota, Minneapolis, Minnesota.

Mary S. Marczak, PhD,

University of Minnesota Extension Center for Family Development, St. Paul, Minnesota.

Patricia Stoppa, MS, and

University of Minnesota Extension Center for Family Development, St. Paul, Minnesota.

Veronica M. Svetaz, MD, MPH

Hennepin Family Care East Lake Clinic, Minneapolis, Minnesota.

Abstract

Purpose—Family-skills training programs prevent adolescent substance use, but few exist for immigrant Latino families. This study assesses the feasibility of a family-skills training intervention developed using a community-based participatory research framework, and explores parental traditional values as a modifier of preliminary effects.

Design—*One-group pretest-posttest.*

Setting—Four Latino youth-serving sites (school, clinic, church, social-service agency).

Subjects—Immigrant Latino parents of adolescents aged 10 to 14 years (N = 83).

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Send reprint requests to Michele L. Allen, Department of Family Medicine, University of Minnesota, 717 Delaware St SE, Minneapolis, MN 55414; miallen@umn.edu..

Manuscript format: research; Research purpose: intervention testing; Study design: nonexperimental; Outcome measure: behavioral; Setting: local community; Health focus: family skills; Strategy: education, skill building/behavior change; Target population age: adults; Target population circumstances: Latino immigrants

Intervention—Eight-session program in Spanish to improve parenting practices and parent-youth interpersonal relations designed with Latino parents and staff from collaborating organizations.

Measures—Feasibility was assessed through retention, program appropriateness, and group interaction quality. Preliminary outcomes evaluated were (1) parenting self-efficacy, discipline, harsh parenting, monitoring, conflict, attachment, acceptance, and involvement, and (2) parent perception of adolescent internalizing, externalizing, and substance use behaviors. Covariates included sociodemographics and parental endorsement of traditional values.

Analysis—Feasibility outcomes were assessed with descriptive statistics. Paired t-tests measured changes in parenting outcomes. Adjusted multiple regression models were conducted for change in each outcome, and t-tests compared mean changes in outcomes between parents with high and low traditional values scores.

Results—Program appropriateness and group interaction scores were positive. Improvement was noted for eight parenting outcomes. Parents perceived that adolescent internalizing behaviors decreased. Parents with lower endorsement of traditional values showed greater pretest-posttest change in attachment, acceptance, and involvement.

Conclusion—This intervention is feasible and may influence parenting contributors to adolescent substance use. (*Am J Health Promot* 2013;27[4]:240–244.)

Keywords

Latino; Adolescent; Substance Use; Parent Training; CBPR; Prevention Research

PURPOSE

Latino youth are a rapidly growing population in the midwestern United States, where they are largely immigrants or children of immigrants. Middle school-aged Latino youth have lifetime tobacco and other substance use rates equivalent to or greater than peers of other ethnicities.¹ Differential acculturation patterns between parents and youth, including degree of retention of traditional values, may undermine parenting practices and contribute to youth substance use in Latino immigrant families.² Reviews of family-skills training interventions indicate that strengthening parenting practices and parent-youth relationships prevents or reduces youth use of tobacco and other substances.³ However, few programs have been designed for Latino families of adolescents, and none have been developed utilizing community-based participatory research (CBPR).

CBPR is a research framework that recognizes the knowledge, expertise, and resources of communities, and so engages community members as research partners.⁴ Interventions developed using CBPR demonstrate increased feasibility, cultural relevance, and appropriateness for local settings.⁴

This paper describes the participatory development and feasibility testing of the parent component of a family-skills training program directed towards immigrant Latino families. We also explored (1) preliminary intervention effects, unadjusted and after adjusting for key

sociodemographic factors, and (2) parental endorsement of traditional values as a modifier of preliminary effects.

METHODS

Intervention Development

A core planning group included researchers, university extension (section of land-grant universities that use professionals to provide nonformal education) parent educators, and representatives from Latino-serving agencies (mental health and medical providers, social workers, and health educators). Decisions were made collaboratively at all project stages.

The core planning group determined that existing evidence-based substance use prevention curricula were too long, cumbersome, and expensive, and thus chose to develop an intervention to address these limitations. The development process considered ecodevelopmental and social cognitive theory, and usability for collaborating community agencies, but began with a parent advisory board (PAB) of 13 Latino parents of youth who identified core cultural values that informed their parenting practices and key parenting priorities. The PAB priorities were matched with evidence-informed topics based on review of the literature and local curricula. Each session was developed by the core planning group, reviewed by the PAB, and further modified. The final eight sessions addressed parenting styles, adolescent development, parenting across cultures, communication, discipline, conflict resolution, monitoring, and maintaining connection. Substance use prevention was emphasized through examples and reflections. Study design for assessing preliminary program effects was a one-group pretest-posttest. The University of Minnesota and Hennepin County Medical Center IRBs approved the research protocol.

Sample

Participants in this convenience sample were recruited with collaborating organizations (a health clinic, social service agency, school, and church). Recruitment strategies included announcements posted on four service-provider Listservs and a clinic Web site; flyers distributed at sites; and presentations. Parents were eligible to participate if they (1) had immigrated from Latin America, (2) spoke Spanish, and (3) had children between the ages of 10 and 14. A total of 123 participants were enrolled.

Parents participated in eight classes lasting 2.5 hours, delivered by three masters-level parent educators in Spanish at four collaborating sites (15–30 per site). Meals and babysitters were provided. All participants provided written informed consent in Spanish.

Data Collection

Data sources were attendance logs, eight after-session program evaluation surveys, and pretest and posttest outcome surveys that were read aloud in Spanish by research staff immediately before the first and after the last sessions in a group setting. Each participant received \$50 in gift cards divided between study midpoint and end.

MEASURES

Feasibility Outcomes

Participant retention was assessed based on attendance at a minimum of six sessions as well as completion of posttest surveys. Program evaluation surveys included four items assessing degree of program appropriateness (interest, relevance, comfort level, and satisfaction) on a three-point scale. In addition, three scales measuring quality group interaction (cohesion, engagement, and comfort sharing opinions) were included in the posttest. These scales included four items measured on a five-point Likert scale.

Sociodemographic Variables

Measures included age, gender, marital status, years in the United States, years of formal education, family income, country of origin, and the number, gender, and ages of children in the household. Participants' endorsement of traditional Latino values was assessed by 28 items from the enculturation subscale of the Mexican American Acculturation/Enculturation Scale Values.⁵

Parenting Outcome Variables

Parenting outcomes were assessed using measures with established psychometric properties that had been translated and used previously with Latino populations.^{5,6} *Consistent discipline* was measured by an 11-item scale capturing three components of discipline. *Harsh parenting* was assessed with eight items representing harsh, punitive, or demeaning parenting practices. *Parental monitoring* was measured by a 12-item scale capturing knowledge of children's whereabouts, activities, and friends. *Parenting self-efficacy* utilized a 17-item scale assessing the degree to which a parent perceived himself or herself capable of performing behaviors instrumental to good parenting practice. *Parent/youth attachment* was measured by nine items assessing adolescents' positive bonds to parents. *Parent personal involvement* was assessed by a five-item scale assessing parents' efforts to acquire information about their children's activities and their children's willingness to disclose information.⁷ *Parental acceptance* was measured by an eight-item scale capturing parental warmth and openness.⁸ *For parent-child conflict*, the frequency and extent of parent-teen conflict was measured with a 13-item scale.⁹

Secondary Outcome Variables

The Child Behavior Checklist was used to assess parent perception of adolescent adjustment with the internalizing (e.g., social withdrawal) and externalizing (e.g., rule breaking) subscales, and a subscale of perceived youth substance use (drinks alcohol without parents' approval; smokes, chews, or sniffs tobacco; and uses drugs for nonmedical purposes).¹⁰

ANALYSIS

Mean scores and standard deviations were calculated for each item measuring interest, relevance, comfort level, and satisfaction across sessions. Scores of group cohesion, engagement, and comfort with sharing opinions were calculated by averaging the four items for each scale; means and standard deviations were calculated across participants. Paired *t*-

tests were conducted to assess change from pretest to posttest in the eight parenting outcomes and three perceived child behaviors. Separate multiple regression models were then conducted with pretest-posttest change scores in each of the eight parenting outcome variables as the dependent variables, adjusting for sociodemographics. Initial independent variables included gender, years of education, years in United States, parent traditional values, adolescent's gender and age, and the number of sessions attended. Final variables were those correlated with at least one primary parenting outcome ($p < .1$) or with explanatory significance (number of sessions). Participants were categorized as high or low on endorsement of traditional values based on the score average (4.02) as is consistent with past use of this scale. *t*-tests were conducted to compare parenting outcome change scores between groups. In order to impute missing data, the item-mean substitution method was used for all parenting outcome scales provided that no more than 20% of items were missing. Data were analyzed with SPSS (version 17.0) and significance level (α) of .05 was used for all tests.

RESULTS

Of the 123 participants enrolled in the study, 10 were excluded for incomplete data and 30 did not complete the posttest. Final participants ($n = 83$) were primarily mothers (75%), with a mean age of 37 years. Most had immigrated from Mexico (80%) (3% were from Central and 14% from South America), and they had lived in the United States an average of 15 years (range 1–18 years). The majority of participants (84%) had completed 12 years of education or less, with 25% completing 6 years or less. Most participants (82%) reported monthly household income of \$2000 or less, and a majority of households included three or more children (65%). The target children were approximately evenly distributed by gender (54% boys) and across ages (10–14 years). When compared to 2006 census information, the study population was more likely to be less educated, low income, and of Mexican origin compared to the Latino population nationally.

Parents attended an average of six sessions; 76% attended six to eight sessions. Mean scores averaged across all sessions were similar for interest, relevance, comfort level, and satisfaction (mean = 2.90, 2.94, 2.90, 2.90 on three-point scale, and $SD = .20, .26, .25, .26$, respectively). Quality group interaction scores were 4.2 ($SD = .62$) for cohesion, 4.3 ($SD = .68$) for engagement, and 4.1 ($SD = .68$) for comfort sharing opinions (on a five-point scale).

Results of paired *t*-tests indicated significant changes (pretest-posttest) in the expected direction for all outcomes (Table). Parent perceptions of adolescent behaviors indicated significant improvements in internalizing behaviors ($p < .001$), marginal improvements in externalizing behaviors ($p < .054$), and no change in substance use behaviors ($p = .532$).

Results of multiple regression models examining predictors for pretestposttest change scores after controlling for parent years of education, endorsement of traditional values, number of sessions attended, and adolescent gender and age revealed (1) a dosage effect (i.e., number of sessions attended) for positive attachment ($p = .024$), consistent discipline ($p = .020$), and parent personal involvement ($p = .019$); and (2) an effect of parents' traditional values for positive attachment ($p = .004$), consistent discipline ($p = .006$), parental acceptance ($p = .$

007), parent-child conflict ($p = .033$), and parent personal involvement ($p = .003$). The examination of traditional values (see Figure) suggests that, compared to those with high endorsement of traditional values, parents with lower endorsement showed greater mean pretest-posttest change scores in relational measures: positive attachment ($p = .011$), parental acceptance ($p = .045$), and parent personal involvement ($p = .019$, not shown).

DISCUSSION

Results indicate that this family-skills training intervention for immigrant Latino parents, designed using a CBPR approach, is feasible as indicated by high levels of program acceptability and retention through the majority of sessions. Preliminary outcomes suggest that the intervention may influence important parenting precursors to adolescent substance use. Importantly, it may have a greater effect on parent-youth relational outcomes for parents with low endorsement of traditional values, suggesting that traditional values should be examined in future randomized trials as a potential effect moderator or means for tailoring the intervention.

Though results are promising, our nonexperimental design, loss to follow-up, and missing data may limit the study's internal validity. Further, because of the small sample size, the study may have been underpowered for some analyses. Additional limitations include measurement of youth substance use through parent perception of youth behavior over a short follow-up period. Though the CBPR approach was a strength overall, the recruitment of parents through trusted organizations may have contributed to a positive response bias, and local results may not generalize to other Latino populations.

Finally, the traditional values scale developed for Mexican-American populations may not have been relevant for the minority of participants from other Latino subpopulations.

In summary, results suggest that this participatory research approach produced a feasible intervention. Anecdotally, participating representatives of community organizations have strongly supported the intervention and have sought opportunities to continue to participate in its evaluation. Study findings will contribute to implementation of a randomized, controlled trial examining the link between the parent intervention and adolescent self-report of substance use behaviors over a longer timeline.

Acknowledgments

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* Indicates significant group difference in pre-post change score between high and low endorsement of traditional values groups ($p = .011$ for positive attachment, $p = .045$ for parental acceptance).

Figure.

Pretest and Posttest Scores by Parental Endorsement of Traditional Latino Values

Table Comparison of Pretest and Posttest Scores on Program Outcomes and Parental Reported Youth Behaviors

	Possible Range	Cronbach α	Pretest Mean (SD)	Posttest Mean (SD)	Change Mean (SE)	<i>p</i> for Paired <i>t</i> -Test
Program outcomes						
Positive attachment	1–5	0.91	3.71(0.85)	4.11 (0.63)	0.40 (0.09)	<0.001
Consistent discipline	1–5	0.79	3.55 (0.67)	3.91 (0.54)	0.36 (0.07)	<0.001
Parental acceptance	1–5	0.89	3.90 (0.80)	4.28 (0.55)	0.38 (0.07)	<0.001
Harsh parenting	1–5	0.83	1.99 (0.74)	1.67 (0.64)	−0.33 (0.09)	<0.001
Parent monitoring	1–5	0.84	4.39 (0.62)	4.52 (0.53)	0.13 (0.06)	0.027
Parent-child conflict	1–5	0.91	2.12 (0.72)	1.93 (0.63)	−0.19 (0.07)	0.010
Parent involvement	1–5	0.80	3.59 (0.90)	4.05 (0.76)	0.45 (0.09)	<0.001
Parenting self-efficacy	1–5	0.93	3.90 (0.71)	4.28 (0.50)	0.38 (0.07)	<0.001
Secondary outcomes						
Internalizing	0–2	0.91	0.43 (0.32)	0.32 (0.24)	−0.11 (0.03)	<0.001
Externalizing	0–2	0.93	0.32 (0.31)	0.26 (0.26)	−0.06 (0.03)	0.054
Substance problems	0–2	0.90	0.05 (0.25)	0.03 (0.16)	−0.02 (0.03)	0.532