

POPULATIONS AT RISK ACROSS THE LIFESPAN: POPULATION STUDIES

Factors Related to Sexual Practices and Successful Sexually Transmitted Infection/HIV Intervention Programs for Latino Adolescents

Young-Me Lee, Ph.D., R.N.,¹ Barbara Dancy, Ph.D., R.N., F.A.A.N.,² Elizabeth Florez, M.S., R.N.,¹ and Karyn Holm, Ph.D., R.N., F.A.A.N., F.A.H.A.¹

¹School of Nursing, DePaul University, Chicago, Illinois; and ²Department of Health Systems Science, College of Nursing, University of Illinois, Chicago, Illinois

Correspondence to:

Young-Me Lee, School of Nursing, DePaul University, 990 W. Fullerton Ave, Chicago, IL 60614. E-mail: Ylee23@depaul.edu

ABSTRACT *Objective:* The purpose of this integrative literature review was to explore factors that are related to sexual practices among Latino adolescents and identify which of those factors are common across successful sexually transmitted infection (STI)/HIV intervention programs for Latino adolescents. *Design:* An integrative literature review was conducted. Search terms included Latino, Hispanic, education, intervention/prevention programs, sex, sexuality, reproductive health, health risk behaviors, multiple sex partners, contraception, STI/HIV/AIDS, sexually transmitted diseases, delay in initiation of sexual intercourse, consistent use of birth control, avoidance of STI/HIV infections, unintended pregnancy, cultural factors, and gender roles. *Results:* Findings revealed from the review of 17 articles addressing factors related to sexual practices among Latino adolescents included familialism, religion, gender roles, level of knowledge/information, and privacy/confidentiality. Five successful STI/HIV intervention programs, that incorporated those factors to effectively reduce risky sexual behaviors were identified. STI/HIV knowledge and gender roles were recognized as common factors integrated into and across successful intervention programs for this population. *Conclusion:* Only STI/HIV knowledge and gender roles were found as common factors across the five successful STI/HIV intervention programs and should be incorporated into future intervention programs that are culturally and gender specific. Therefore, health care providers need to understand culturally related gender roles and their impact on sexual practices to provide culturally sensitive and appropriate sex education about STIs and HIV for Latino adolescents to increase the program potential for reducing STI/HIV.

Key words: intervention programs, Latino adolescents, sexual practice, sexually transmitted infections.

Background

There are 48.4 million people of Latino origin living in the United States, representing the nation's largest ethnic or racial minority (Center for Disease Control [CDC], 2009a; U.S. Census Bureau, 2010). Mexicans are the largest ethnic subgroup of Latinos (64%), followed by Puerto Ricans (9%), Central and South Americans (7.7% and 5%), Cubans (3.5%),

and others (10.3%) (CDC, 2009a). In addition, there was a 3.1% increase in the Latino population between July 1, 2008 and July 1, 2009 making Latinos the fastest-growing minority group. This number is projected to grow to 102.6 million by 2050 and 25% of the U.S. population will be Latino (CDC, 2009a). With the growing number of Latino Americans, comes a variety of health concerns,

including low infant birth weight and infant mortality, diabetes, hypertension, alcoholism, and sexually transmitted infections (STIs) (Biggs, Brindis, Driscoll, & Yankah, 2001).

In the United States, there are 2.9 million Latino adolescents and one in five adolescents will be Latino by 2020 (Brindis, Driscoll, Biggs, & Valderrama, 2002). Of the health concerns that face Latino adolescents, STI contraction and spread is the most epidemic (CDC, 2009b). While STI rates have leveled off or declined in other racial/ethnic groups, particularly Caucasian adolescents, the prevalence continues at alarming rates among Latino adolescents; 24% of newly diagnosed cases of HIV are among Latino youth. It has been reported, that people under age 25 make up half of the new reported cases of HIV infection; this represents a large percentage of overall HIV infections (CDC, 2009b). These statistics imply that Latino adolescents are engaging in risky behaviors and increasing their vulnerability to STIs. Thus, the prevalence of sexually transmitted infections will continue plague Latino adolescents if the issue does not receive further attention (Brindis et al., 2002).

In response to the increased rates of STIs, numerous STI intervention programs involving sex education have been developed to target adolescents. Nearly all public secondary schools in the United States, provide sex education to students and almost all U.S. students receive some form of sex education at least once between grades 7 and 12 (Landry, Darroch, Singh, & Higgins, 2003). Many of the intervention programs, aimed at preventing STIs and HIV among teenagers have been developed over the last 50 years. Despite the intervention, STIs and HIV rates among this population have increased, whereas rates continue to decrease among Caucasian adolescents. The differential rates suggest that the programs targeting Latinos fail in addressing components that are essential for understanding sexual behavior among Latino population. Against this backdrop, literature describes sixteen effective STIs/HIV programs developed to target Latino youth (Advocates for Youth, 2008; Givaudan, Leenen, Van De Vijver, Poortinga, & Pick, 2008). These programs focused on self-esteem, self-efficacy in condom use, decision-making, and changes in risky sexual behaviors and resulted in postponing sexual intercourse, increased condom use, and overall decreased rates of STI contraction.

Despite research on adolescent sexual behaviors and programs developed to address these behaviors, there have been few attempts to compile and synthesize essential components of the STI/HIV intervention programs for Latino adolescents. Within the context of an integrative literature review, this study was designed to identify the essential intervention program components related to sexual practices by analyzing successful STI/HIV intervention programs implemented in the Latino adolescents. It is anticipated that findings can be foundational for developing comprehensive intervention programs for Latino adolescents.

Research questions

While much has been published addressing Latino adolescents' sexual health, there is limited synthesis of published data describing factors influencing sexual practices among Latino adolescents and the common factors across successful intervention programs for reducing STI/HIV risk for this population. The goal was to promote understanding of behaviors related to sexual practices among Latino adolescents and subsequently identify culturally appropriate intervention program factors to reduce STI/HIV rates among Latino adolescents.

The purpose of this integrative literature review was to explore factors that are related to sexual practices in Latino adolescents and to identify which of the factors are common across successful STI/HIV intervention programs for Latino adolescents. The research questions were:

1. What factors are related to sexual practices among Latino adolescents?
2. Which of the factors are common across successful STI/HIV intervention programs that effectively reduce risky sexual behaviors among Latino adolescents?

Methods

Design

An integrative literature review was conducted to explore influencing factors on Latino adolescents' sexual behavior practices and identify those common factors across successful STI/HIV intervention programs for Latino adolescents. An integrative literature review is the broadest type of research review method for the simultaneous inclusion of

experimental and nonexperimental research to understand a phenomenon of concern (Whittemore & Knafl, 2005). It provides an accurate summary of previously conducted research and plays an important role in finding fundamental information to enhance the understanding of certain study phenomenon; in this research the phenomenon includes factors that influence sexual behavior of Latino adolescents and an evaluation of the STI/HIV intervention programs that have been developed for this population. As outlined by Whittemore and Knafl (2005), the integrative literature review process for this study included search methods, establishment of criteria for inclusion and exclusion of the studies, search outcomes, and data synthesis.

Procedure

Electronic databases including PubMed, Cochrane, CINAHL, and PsychINFO were searched to identify studies related to Latino adolescent sexual behavior. The search terms included: Latino, Hispanic, education, intervention/prevention programs, sex, sexuality, reproductive health, health risk behaviors, multiple sex partners, contraception, STI/HIV/AIDS, sexually transmitted disease, delay in initiation of sexual intercourse, consistent use of birth control, avoidance of STI/HIV infections, unintended pregnancy, cultural factors, and gender roles.

Analytic strategy

To address research question one, published articles were searched from 2002 to 2012 to find relevant studies, that investigated factors related to sexual behaviors among Latino adolescents. The following criteria for studies used in this search included: Latino adolescent sample, investigation of Latino cultural values to understand sexual behaviors, and findings related to Latino adolescent sexual behavior. After careful review of the retrieved articles, 91 relevant articles were grouped into categories in a search chart based on the search criteria (Latino adolescent sample, cultural values, and other findings related to Latino adolescent sexual behavior).

Of the 91 articles, addressing factors related to sexual practices of Latino adolescents, 17 articles reporting unique findings that enhance understanding of sexual behaviors among Latino adolescents were

selected to answer research question one. These 17 articles were compiled into a data extraction matrix including study population (Latino youth), research design, findings related to sexual practices, and discussion including Latino cultural values. The major findings, addressed in the studies reported in each of the 17 articles selected were highlighted in an initial sorting process to create a list of factors that would aid in understanding sexual practices among Latino adolescents. Through this analysis and synthesis, the researchers first grouped similar factors into a preliminary list, then into a final list.

To address the second research question, regarding common factors across STI/HIV intervention programs for reducing risky sexual behavior among Latino adolescents, articles published between 1990 and 2012 were reviewed. The year 1990 was chosen, because few published reports of intervention programs exist between 2000 and 2012. The following inclusion criteria were used to select the STI/HIV intervention programs:

- 1 STI/HIV intervention programs that targeted Latino adolescents ages 10-20 that reported promoting positive behavioral changes such as postponing sexual intercourse as an effective outcome.
- 2 Use of an experimental or quasi-experimental evaluation design, with treatment and control groups.
- 3 Recruited at least 100 Latino youth in both treatment and control/comparison groups.
- 4 Collected follow-up data from both treatment and control groups at 3 months or later after intervention.
- 5 Addressed at least one factor related to sexual practices among Latino adolescents.

Studies excluded from the review were those that evaluated prevention programs offered in colleges or universities and those that evaluated only knowledge, perception, attitudes, or condom use.

Through an extensive review of existing research, a total of 16 STI/HIV/AIDS prevention programs developed for Latino young adults were found (Advocates for Youth, 2008; Givaudan et al., 2008). Of the 16 programs, five STI/HIV/AIDS intervention programs meeting the inclusion criteria above were selected to address the second research

question. The information from those five selected programs was compiled into a matrix, that recorded the purpose of the program, research design/sample/setting, theoretical framework, description of the interventions, program outcomes on behavior changes, and factors related to sexual practice (Table 1).

Results

Factors related to sexual practices among Latino adolescents

Five factors were identified that can promote understanding of sexual practices among Latino adolescents: familialism; religion; gender roles;

TABLE 1. Summary of the sexually transmitted infection (STI)/HIV Prevention Programs Selected for this Review

Program & purpose	Design/sample/setting	Theoretical framework	Description of program	Program outcomes on behavior changes	Factors related to sexual practice
<i>Cuidate</i> To test the efficacy of a culture and theory based intervention designed to reduce HIV sexual risk behaviors	Randomized controlled trial (experimental design) Latino aged 13–18 years Recruited <i>n</i> = 553 at baseline, divided into treatment (<i>n</i> = 263) and control conditions (<i>n</i> = 287) Recruited from three high schools and community-based organizations	Social Cognitive Theory and The Theory of Reasoned Action and Planned Behavior [seems unnecessary to capitalize theory]	Six 50-min modules for 2 days delivered by adult facilitators in English and Spanish Interventions provided by Latino facilitators Incorporated salient aspects of Latino culture (familialism, gender-role expectations, abstinence, and condom use) to reduce HIV and sexual risk behaviors among Latino youth by describing abstinence and condom use as culturally acceptable Pre and posttests; and follow-up at three, six, and 12 months post-intervention	Reduced frequency of sexual intercourse Reduced number of sexual partners Reduced incidence of unprotected sex Increased use of condoms	Addressed Latino culture on familialism and gender-roles related to sexual behavior Provided information to increase knowledge on sex and STI/HIV
A Team Against AIDS To implement a school-based HIV/AIDS program for Mexican adolescents	A quasi-experimental pre post design Targeting Mexican teens in 10th grade Recruited <i>n</i> = 2,064 at baseline; <i>n</i> = 946 at final School-based program	Social Learning Theory and Theory of Reasoned Action	School-based; trained teachers delivered the intervention program to change knowledge, attitudes, and behavior across time Four 30-min sessions per week during one school semester Baseline data and follow-up at 12 months after the intervention	Increased self-efficacy in condom use and knowledge Reduced number of sexual partners Increased use of condoms Reduced incidence of STI/HIV	Addressed Latino culture on gender roles related to sexual behavior Provided information to increase knowledge on sex and STI/HIV

TABLE 1. (Continued)

Program & purpose	Design/sample/ setting	Theoretical framework	Description of program	Program outcomes on behavior changes	Factors related to sexual practice
HIV risk reduction To implement a culturally specific program for African Americans and Latino teens	Experimental evaluation design with two randomized treatment conditions and one control condition Recruited sexually active African American females and adolescent Latinas ($n = 682$) at an adolescent medicine clinic randomly assigned to skills-based treatment ($n = 235$), information-based treatment ($n = 228$), and health-promotion control ($n = 219$) Clinic-based program	Cognitive-Behavioral Theories	Single 250-min (4.25 hr) group session delivered by trained facilitators Provided information and taught skills to young women regarding correct condom use, condom use negotiation with sexual partners, and provided confidential and free family planning services Baseline data and follow-up at 3, 6, and 12 months after the intervention	Reduced number of sex partners Increased use of condoms Reduced incidence of unprotected sex Reduced incidence of STIs	Addressed Latino culture, gender role related to sexual behavior Addressed the importance of confidentiality Provided information to increase knowledge on sex and STI/HIV
Poder Latino To implement HIV/AIDS prevention, to increase HIV/AIDS awareness, and to reduce the risk of HIV infection by increasing condom use among sexually experienced Latino Teens	Quasi-experimental design including treatment and comparison conditions Recruited Latino teens aged 14–19 ($n = 586$) Community-based program	No report	Included peer education workshops and peer-led discussion in various settings in the community Presentations at community events and making condoms available Radio and television public service announcements, posters in local business and public transit, and newsletters Pretest and follow-up at 18-months after the intervention	Delayed initiation of sexual intercourse (males) Reduced number of sex partners (females)	Provided information to increase knowledge on sex and STI/HIV

TABLE 1. (Continued)

Program & purpose	Design/sample/ setting	Theoretical framework	Description of program	Program outcomes on behavior changes	Factors related to sexual practice
Safer Choices To implement HIV/STI and teen pregnancy prevention program	Experimental design including treatment and control groups in 20 schools Recruited 9th and 10th grade youth <i>n</i> = 3,869 at baseline; <i>n</i> = 3,058 at final follow-up Recruited multiethnic populations including White, Hispanic, African American, and Asian youth. School-based program	Social Learning theory, Social Influence theory, and Models of school changes	Twenty sessions, each lasting one class period, divided over 2 years Program aimed at reducing HIV/STI and teen pregnancy by increasing knowledge, attitudes, and perceptions about abstinence and condom use Pre and posttests and follow-up at 7 months, 19 months, at 31 months after the intervention	Delayed initiation of sexual intercourse among Hispanic youth only Increased use of effective contraception and increased condom use Reduced incidence of unprotected sex and reduced number of sexual partners without the use of condoms Increased HIV testing among students who heard an HIV-positive speaker	Addressed personal vulnerability relevant to sexual practice among young Latinas women Provided information to increase knowledge on sex and STI/HIV

level of knowledge and information on sex and STIs; and protection of privacy and confidentiality.

Familialism. Familialism is an important Latino cultural value that involves strong closeness and connectedness with family; attachment to the family; and feelings of loyalty, reciprocity, and solidarity with family members (Guilamo-Ramos, Bouri, Jaccard, Lesesne, & Ballan, 2009; Larson, 2009; Sterling & Sadler, 2009). However, in this literature review researchers disagree about the extent to which parents can improve adolescents' sexual knowledge and behavior.

On the one hand, research across disciplines supports the notion that parents are still the most important prevention strategy. While condom use was low among Latino adolescents, research supports that parent-child communication is positively related to consistent condom use, sexual knowledge, and sexual activity, further supporting the notion that parents are influential in adolescents' sexual behavior (Fasula & Miller, 2006). Guilamo-Ramos et al. (2009), report that Latino adolescents

indicated that they preferred to receive sexual education information from their parents.

Contrary to the findings that favor parental role in sex education of Latino adolescents, cited above, Aarons and Jenkins (2002) conducted a focus group with Latino and African-American youths. They found that Latino youths viewed their parents as unapproachable, too strict, out of touch with adolescents' reality, or more apt to scold rather than counsel and advise. Lee, Horwitz, and Waters (2008) also reported that both Latino male and female adolescents were opposed to openly discuss sex with their parents and would rather have a close relative or friend to answer questions about sexual health, because it would be too uncomfortable and awkward having these kinds of discussions with their parents. Furthermore, in Lee et al. (2008), the adolescents were strongly opposed to involve their parents in a sexual health education program at school.

In conclusion, while the family is important culturally in the Latino population, the results from these studies do not support the direct involvement

of parents in providing sex education. Parental involvement based on the studies reviewed may not be effective in providing sex education for this population and should be considered when designing future intervention programs.

Role of religion. When Latin America was conquered by Spain and Portugal, Roman Catholicism arrived in Latin America, significantly influencing Latino culture and religion (Sterling & Sadler, 2009). For many Latinos in the United States, religion plays a vital role in shaping their core cultural and belief systems. Roman Catholicism influences the values and choices, including decisions about sexual behavior (Biggs et al., 2001). The Roman Catholic Church does not approve of sexual intercourse before marriage and promotes abstinence. Strong Roman Catholic roots may deter many Latino adolescents from protecting themselves if they are sexually active, because they may think that they are doing less wrong in the eyes of the church if they do not use contraception while engaging in premarital sex (Au, Lefkowitz, Romo, & Sigman, 2002). In the 2004 nationally representative survey of 1,027 U.S. students in grades 7–12, 31.2% of Latino teens never used contraception during their sexual relationships, whereas 23.3% of Black teens and 17% of White teens reported no contraception use (Child Trends, 2004). Additionally, Latino teens reported the lowest levels of consistent contraception use compared with Black and White teens as related to religious beliefs (Child Trends, 2004). From this review, it appears that religion is a major factor influencing sexual behavior among Latino adolescents.

Gender roles. Latinos commonly share views on distinct gender roles that lead to different expectations for male and female adolescents, especially with respect to sexual behaviors (Larson, 2009; Villarruel, Jemmott, Jemmott, & Ronis, 2007). Latinas are highly aware of the traditional views of women, or *Marianismo*. It is a core traditional view of gender roles for Latinas, which is a word that comes from the word *Maria* as in the Virgin Mary. It includes expectations of abstinence until marriage; of bearing children; of devotion and duty to the family; and of deferring decision-making, including condom use decisions to men (Villarruel et al., 2007). In this expectation, Latinas are often too

shy to talk about contraception with their male partners. Latino culture is important, when Latinas decide to have sex and reflect on their need to behave according to family and friends' expectations, as well as the pressure of conforming to cultural gender roles (Flores, Tschann, & VanOss-Marin, 2002).

For males, *machismo* is an important cultural value that influences many aspects of family and sexual relationships (Rhodes, Hergenrath, Wilkin, Alegría-Ortega, & Montaña, 2006; Rio-Ellis et al., 2008). Machismo promotes early sexual behavior, displays strength and aggression, and protective behaviors as related to family. In this traditional gender role, sex is seen as a place for men to prove their masculinity (Rhodes et al., 2006). Machismo is strongly associated with early initiation of sexual intercourse and multiple partners, and is negatively associated with condom use among Latino men (Rhodes et al., 2006; Rio-Ellis et al., 2008). The principal role of machismo, in the Latino culture, has been cited as a major barrier in condom negotiation and its uses (Rio-Ellis et al., 2008). As Larson (2009) suggested, the aforementioned findings support the idea that cultural values of gender roles strongly influence sexual behaviors among Latino adolescents.

Lack of knowledge and information on sex and STIs/HIV. Latino adolescents have relatively fewer reliable sources of information on sexuality and contraception than any other populations. Lee, Poslusny, Anderson, and Rosing (2009), conducted a community-based STI screening study and found that a majority of the Latino adolescents reported that they never had any STI/HIV related education in school and that they did not know how to protect themselves from STIs and HIV. The most significant issues identified were Latino adolescents' lack of knowledge about safe sex and health behaviors (Lee et al., 2009). Latino adolescents did not know where to buy contraceptives, and/or they did not have money to buy contraceptives. Focus group studies with Latino adolescents found that the more information they had, the more questions they raised about sex and STIs (Aarons & Jenkins, 2002; Lee et al., 2008). Getting the information Latino adolescents needed, helped them overcome fear, make healthier choices for themselves, and avoid negative choices (Aarons &

Jenkins, 2002; Lee et al., 2008). Adolescents and young adults are at a high-risk population because they are more likely to have more than one sex partner, engage in an unprotected sex, or have sex with partners who have STIs (Gilliland & Scully, 2005). Therefore, ensuring that at-risk Latino adolescents have appropriate information regarding sex and STIs/HIV is essential to reduce risky sexual behavior.

Protection of privacy and confidentiality.

Another key factor, discovered through this integrative literature review is the importance of protecting privacy and confidentiality for Latino adolescents. Sex is a very sensitive topic for adolescents, especially for Latino teens who have come to realize that sex is a taboo subject in Latino culture. Lee et al. (2009), found that Latino adolescents preferred to have sex education and STI screening services in a private location, where they could have easy access to services that would promote and maintain trust, and ensure confidentiality of STI test results. In addition, many participants stated they did not want their parents to know they had sex and/or participated in STI screenings. Aarons and Jenkins (2002), also revealed in their focus group study that Latino teens viewed sex education in the school setting as untrustworthy, because most participants believed that there was no anonymity for students seeking sex-related information and services in school. It is apparent that ensuring protection of privacy and confidentiality of adolescents seeking STI/HIV education and resources is necessary and may enhance the use of STI/HIV prevention services.

Common factors identified in STIs/HIV intervention programs

The following is a brief description of the five STI/HIV intervention programs meeting the inclusion criteria: *Cuidate*, A Team Against AIDS, HIV Risk

Reduction, Poder Latino, and Safer Choices. Table 2 indicates the factors that each STI/HIV intervention program employed to promote healthy sexual behaviors. The common factors across the five successful STI/HIV intervention programs were STI/HIV knowledge, reported by all five programs, and gender roles, reported by four of the five programs.

Cuidate. *Cuidate* is a culture- and theory-based intervention designed to reduce HIV sexual risk behaviors among Latino youth (Villarruel, Jemmott, & Jemmott, 2006). *Cuidate* means “Take care of yourself.” The *Cuidate* program frames interventions in terms of cultural beliefs of the importance of family and gender roles, including *machismo*, which are believed to be central to the understanding of sexual behaviors in Latino culture. *Cuidate* describes abstinence, refusal of sex, and condom use as culturally acceptable in preventing and reducing STIs for Latino adolescents. Villarruel et al.’s (2006) study, provided the *Cuidate* program to an experimental group and a health-related intervention to a control group. Both interventions consisted of six 50-min modules presented to Latino youth, delivered by adult facilitators in English and Spanish over 2 days. Positive outcomes were reported for the Latino teens, who received information via the *Cuidate* program. Compared with the control group, the adolescents in the experimental group who received the *Cuidate* program reported less sexual intercourse and fewer sexual partners. They also reported an increase in consistent condom use and frequency of condom use. The program highlighted STI/HIV related knowledge/information and gender roles (Table 2).

A Team Against AIDS. A Team Against AIDS is a comprehensive interactive, sex educational school-based AIDS-focused program aimed at developing life skills (decision-making skills, partner

TABLE 2. Factors: Sexually Transmitted Infection/HIV Intervention Programs

Program name	Familialism	Religion	Gender roles	Knowledge/information	Privacy/confidentiality
<i>Cuidate</i>	X		X	X	
A team against AIDS			X	X	
HIV risk reduction			X	X	X
Poder Latino				X	
Safer choices			X	X	

communication skills, and individual responsibility for AIDS prevention) through practice, increasing knowledge and self-efficacy, and changing norms and attitudes toward safe-sex behaviors (Givaudan et al., 2008). A Team Against AIDS, was administered in four 30-min sessions per week during one school semester. All students beginning tenth grade in four schools located in Toluca, Mexico, were invited to participate in this study. Before the implementation of the program, teachers were trained to deliver the program information. The students in the control group received traditional sexuality education course. Compared with the students in the control group, the students in the experimental group had a greater increase in knowledge on sexuality and AIDS and self-efficacy in condom use. Givaudan et al., also found that girls reported significantly higher scores than boys on partner communication, self-efficacy about the use of condoms, and intentions to use condoms whereas boys showed significantly higher scores on self-esteem and norms about the use of condoms than girls. Overall, this program reported that the students in the experimental group were found to reduce the number of the sex partners, to increase condom use, and to lower incidence of STIs and HIV/AIDS. This program incorporated gender roles and AIDS knowledge, to reduce risky sexual behaviors among Mexican adolescents (Table 2).

HIV risk reduction. The HIV Risk Reduction intervention is a clinic-based HIV risk reduction program designed for African American and Latino female adolescents aged 12–19 (Jemmott, Jemmott, Braverman, & Fong, 2005). The program was designed to incorporate factors relevant to HIV knowledge/information, confidentiality, and gender roles. It is a single-session, group intervention delivered by trained facilitators in about 4.25 hr. The program was developed to provide information and teach young women skills necessary for correct condom use, enhance condom use negotiation with sexual partners, and to provide confidential and free family planning services. The young women who participated in the randomized treatment condition reported a reduced number of sex partners, reduced incidence of unprotected sexual intercourse, and reduced incidence of STIs. This program addressed the importance of confidentiality

and privacy, knowledge, and gender roles for young women to enhance the positive outcomes (Table 2).

Poder Latino. Poder Latino is a 18-month community-based intervention program, designed to increase HIV/AIDS awareness and reduce the risk of HIV infection among inner city Latino youth aged 14–19 (Sellers, McGraw, & McKinlay, 1994). It was led by specially trained peer leaders and held workshops in various settings, including schools, community organizations, health centers, group discussions in teens' homes, presentations at large community centers, and door-to-door canvassing to provide condoms and pamphlets on how to use them. In addition, radio and television public service announcements and quarterly newsletters were included to promote condom use. The study found that Latino adolescents in the intervention group reported a reduction in incidence of multiple sexual partners among females and delayed the onset of sexual activity among males (Sellers et al., 1994). This program incorporated knowledge and information about HIV/AIDS (Table 2).

Safer Choices. Safer Choices, a 2-year high school-based program designed to reduce STI/HIV and teen pregnancy by increasing knowledge, attitudes, and perceptions of abstinence and condom use; by reducing barriers to condom use, and by encouraging condom use among White, African American, Asian, and Latino teens (Coyle et al., 1999). It was composed of 20 sessions; each session was one class period with 10 sessions taught in the 9th grade and 10 sessions in the 10th grade. Students learned about support services available in their community and planned school-wide events designed to alter the normative culture of the school. Additionally, activities for parents were included and parents were encouraged to talk to their children about the Safer Choices message. Ten high schools were randomly assigned to receive Safer Choices (Coyle et al., 1999, 2004) and 10 high schools served as the control group to receive a knowledge-based HIV prevention curriculum. The study found that the students in the experimental group reported delayed initiation of sexual intercourse, increased use of condoms and contraception, reduced incidence of unprotected sex and sexual partners, and increased HIV testing among students. Furthermore, the study also revealed that

Hispanic teens improved in knowledge about HIV/STIs, and reduced risk by delaying sex, increasing condom use, and increasing contraceptive use, thereby reducing frequency of unprotected sex (Kirby et al., 2004). Finally, the program reported a greater number of positive behavioral changes in Latino young women such as increasing condom use. This STI/HIV program focused on gender roles and HIV/STI knowledge (Table 2).

Discussion

Through this extensive integrative literature review, five major factors related to sexual behaviors among Latino adolescents were identified that may increase their risk of STI/HIV: familialism, role of religion, gender roles, lack of knowledge and information on sex and STI/HIV, and protection of privacy and confidentiality. Two of those factors were consistently found within the five STI/HIV intervention programs reviewed: STI/HIV knowledge was a factor in all five programs; and gender roles were a factor in four out of the five programs.

All five programs included STI/HIV related knowledge/information and reported that Latino adolescents who participated in the intervention program increased their knowledge regarding sex and STI/HIV. As a result, there was a healthy change in sexual behaviors, such as an increase in consistent condom use and fewer sexual partners among this population. Therefore, educating this population is necessary to enhance safe sexual practices. Currently, U.S. health education programs receiving federal funding are mandated by law to provide sex educational curriculum (Lindberg, Santelli, & Singh, 2006). Despite these requirements and the efforts made to date, to increase knowledge and reduce risky behaviors, Latino teens seemed less exposed to sex education in schools and community-based settings (Lee et al., 2009).

While numerous studies have determined that familialism is essential for enhancing discussions about sex, increasing safe sex practices, and reducing STI/HIV rates for Latino adolescents (Guilamo-Ramos et al., 2009; Larson, 2009; Sterling & Sadler, 2009), this integrative literature review noted that for Latino adolescent, familialism is not a common factor in STI/HIV intervention programs. Latino adolescents may not feel comfortable

having discussions about sex with their parents and preferred to have a conversation about sexual health with their friends or health care providers rather than their parents. (Aarons & Jenkins, 2002; Lee et al., 2008, 2009). Additionally, Aarons and Jenkins (2002) and Lee et al. (2009), revealed that Latino teens want to receive sex education and related services at a place that is easily accessible and without parental interference.

Four of the five STI/HIV intervention programs focused on gender roles. Gender role within the Latin culture make Latinas vulnerable to increased risk of STI/HIV. Latina adolescents may be less likely to feel comfortable in negotiating and using condoms than African Americans and non-Latino White adolescent females (Rhodes et al., 2006; Villarruel et al., 2007). Flores et al. (2002) suggested that Latinas must be more assertive, enhance their communication with their sexual partners about condom use, and increase partner support of consistent condom use instead of keeping silent. Enhancing communication with sexual partners about condom use and consistent use of condoms should also be encouraged among male Latinos. Therefore, sex education must incorporate both culturally appropriate and gender-relevant activities to empower Latinos to make healthy life choices and to change risky behavioral patterns.

The major concern discovered in this review is that only one program, HIV Risk Reduction Program, addressed the importance of privacy and confidentiality in the STI/HIV prevention programs. Lee et al. (2009), found that loss of privacy and confidentiality were barriers to receiving STI/HIV education for Latino teens. Furthermore, religion was identified a factor influencing sexual practices among Latino adolescents, however, none of the STI/HIV intervention programs incorporated this factor into their programs.

This study focused broadly on Latino adolescents rather than identifying specific Latino subgroups such as Mexican Americans, Puerto Ricans, Cubans, etc. Therefore, it is not clear whether factors differ among subgroups and whether programs effectiveness would differ among subgroups. It is acknowledged that the role of acculturation may impact Latinos traditional cultural values such as gender roles, familialism, and religion. Therefore, future investigations should include examining the impact of acculturation on these cultural values.

Suggestions for future research

Even though strong evidence indicates a separation of gender roles in Latino culture, none of the programs incorporated gender specific activities such as separate sex education for males and females. Thus, future research should focus on developing and evaluating intervention programs that separate sex education for males and females and address the privacy and confidentiality issues to enhance the participation of the Latino adolescents in the STI/HIV prevention programs.

Implications for public health nursing

Health care providers need to understand culturally related gender roles and their relationships with sexual practices among Latino men and women, to provide culturally sensitive and appropriate sex education to Latino adolescents. Because gender roles and beliefs are so strong in the Latino culture, it would seem to be more appropriate to provide sex education separately for each gender. Health care providers should try to create an open environment that allows and encourages Latino adolescents to honestly discuss sex, provides resources for STI/HIV testing and protection, and offers culturally appropriate STI/HIV information.

In summary, this integrative literature review revealed that factors impacting risky sexual behaviors are familialism, religion, gender roles, lack of knowledge about sex and STIs/HIV, and concerns about protection of confidentiality and privacy. However, only knowledge and gender roles were common factors across the five successful STI/HIV intervention programs and should be incorporated into future intervention programs to make them culturally and gender specific, so as to increase their positive impact on sexual practices among Latino adolescents.

References

Aarons, S. J., & Jenkins, R. (2002). Sex, pregnancy, and contraception-related motivators and barriers among Latino and African-American youth in Washington. *Sex Education, 2*(1), 5–30.

Advocates for Youth. (2008). *Programs that work to Prevent Teen Pregnancy, HIV/STIs among Hispanics/Latinos: Introduction*. Retrieved from <http://www.advocatesforyouth.org/publications/1506?task-view>

Au, T., Lefkowitz, E., Romo, L., & Sigman, M. (2002). A longitudinal study of maternal messages about dating and sexuality and their influence on Latino adolescents. *Journal of Adolescent Health, 31*(1), 59–69.

Biggs, A., Brindis, C., Driscoll, A., & Yankah, E. (2001). Adolescent Latino reproductive health: A review of the literature. *Hispanic Journal of Behavioral Sciences, 23*(3), 255–326.

Brindis, C. D., Driscoll, A. L., Biggs, M. A., & Valderama, L. T. (2002). Fact sheet on Latino youth: STIs & HIV/AIDS. San Francisco, CA: University of California, San Francisco, Center for Reproductive Health Research and Policy, Department of Obstetrics, Gynecology and Reproductive Health Sciences and the Institute for Health Policy Studies.

Center for Disease Control. (2009a). *Hispanic or Latino populations*. Retrieved from www.cdc.gov/minorityhealth/.../hispanic.html

Center for Disease Control. (2009b). *Trends in reportable sexually transmitted diseases in the United States. National surveillance data for Chlamydia, Gonorrhea, and Syphilis*. Retrieved from www.cdc.gov/std/statso9/trends2009.pdf

Child Trends. (2004). *Child Trends' analyses of Vital and Health Statistics 2002 Natality Data Set*. Retrieved from <http://www.childtrends.org/files/contraceptivesrb.pdf>

Coyle, K., Basen-Engquist, K., Kirby, D., Parcel, G., Banspach, S., Collins, J., et al. (2004). Safer choices: Reducing teen pregnancy, HIV, and STDs. *Public Health Reports, 116*, 82–93.

Coyle, K., Basen-Engquist, K., Kirby, D., Parcel, G., Banspach, S., Harris, t. R., et al. (1999). Short-term impact of Safer Choices: A multi-component, school-based HIV, other STD, and pregnancy prevention program. *Journal of School Health, 69*, 181–188.

Fasula, A., & Miller, K. (2006). African American and Hispanic adolescents' intentions to delay first intercourse: Parental communication as a buffer for sexually active peers. *Journal of Adolescent Health, 38*, 193–200.

Flores, E., Tschann, J., & VanOss-Marin, B. (2002). Latina adolescents: Predicting intentions to Have Sex. *Adolescence, 37*, 659–687.

Gilliland, L., & Scully, J. (2005). STI-HIV prevention: A model program in a school-based health center. *Nursing Clinic North America, 40*(4), 681–688.

- Givaudan, M., Leenen, I., Van De Vijver, F., Poortinga, H., & Pick, S. (2008). Longitudinal study of a school-based HIV/AIDS early prevention program for Mexican adolescents. *Psychology, Health & Medicine, 13*(10), 98–110.
- Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lese-sne, C., & Ballan, M. (2009). Familial and cultural influences on sexual risk behaviors among Mexican, Puerto Rican, and Dominican youth. *ADIS Education and Prevention, 21* (Suppl. B), 61–79.
- Jemmott, J. B., Jemmott, L. S., Braverman, P. K., & Fong, G. T. (2005). HIV/STD riskreduction interventions for African American and Latino adolescent girls at an adolescent medicine clinic. *Archives of Pediatrics & Adolescent Medicine, 159*, 440–449.
- Kirby, D., Baumler, E., Coyle, K., Basen-Enquist, K., Parcel, G., Harrist, R., et al. (2004). The Safer Choices intervention: Its impact on the sexual behaviors of different subgroups of high school students. *Journal of Adolescent Health, 35*, 442–452.
- Landry, D. J., Darroch, J. E., Singh, S., & Higgins, J. (2003). Factors associated with the content of sex education in U.S. Public Secondary Schools. *Perspective on Sexual and Reproductive Health, 35*(6), 261–269.
- Larson, K. (2009). An ethnographic study of sexual risk among Latino adolescents in North Carolina. *Hispanic Health Care International, 7* (3), 160–169.
- Lee, Y., Horwitz, J., & Waters, R. (2008). *Hispanic adolescent perspectives toward sexual activity and sexually transmitted diseases*. Chicago, IL: DePaul University. Unpublished Master Project.
- Lee, Y., Poslusny, S., Anderson, S., & Rosing, H. (2009). Sexually transmitted infection prevention project as community-engaged scholarship. *Journal of Community Engagement and Higher Education, 1*(1), 1–9.
- Lindberg, L., Santelli, J., & Singh, S. (2006). Changes in formal sex education: 1995–2002. *Perspectives on Sexual and Reproductive Health, 38*(4), 182–189.
- Rhodes, S. D., Hergenrather, K. C., Wilkin, A., Alegría-Ortega, J., & Montañó, J. (2006). Preventing HIV infection among young immigrant Latino men: Results from focus groups using community-based participatory research. *Journal of the National Medical Association, 98*(4), 564–573.
- Rio-Ellis, B., Frates, J., D'Anna, L., Dwyer, M., Lopez-Zetina, J., & Ugarte, C. (2008). Addressing the need for access to culturally and linguistically appropriate HIV/AIDS prevention for Latinos. *Journal of Minority Health, 10*, 445–460.
- Sellers, D., McGraw, S., & McKinlay, J. (1994). Does the promotion and distribution of condoms increase teen sexual activity? Evidence from an HIV prevention program for Latino youth. *American Journal of Public Health, 84*(12), 1952–1959.
- Sterling, S., & Sadler, L. (2009). Contraceptive use among adolescents Latinas living in the United States: The impact of culture and acculturation. *Journal of Pediatric Health Care, 23*(1), 19–28.
- U.S. Census Bureau. (2010). *U.S. Hispanic population surpasses 45 million: Now 15 percent of total*. Retrieved from <http://www.census.gov/Press-Release/www/releases/archives/population/011910.html>
- Villarruel, A. M., Jemmott, J. B. III., & Jemmott, L. S. (2006). A randomized controlled trial testing an HIV prevention intervention for Latino youth. *Archives of Pediatrics & Adolescent Medicine, 160*, 772–777.
- Villarruel, A., Jemmott, J., Jemmott, L., & Ronis, D. (2007). Predicting condom use among sexually experienced Latino adolescents. *Western Journal of Nursing Research, 29* (6), 724–738.
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52*(5), 546–553.