The Role of Affect Management for HIV Risk Reduction for Youth in Alternative Schools

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Objective: Adolescents in alternative schools for behavioral and emotional problems have an earlier sexual onset and higher rates of sexual risk than their peers. They also often have difficulty managing strong emotions, which can impair sexual decision making. Human immunodeficiency virus (HIV) prevention programs for these adolescents may be most effective if skills for coping with strong emotions during sexual situations are included.

Method: This article reports the 6-month outcomes of a three-arm randomized controlled trial comparing an HIV prevention intervention with affect management (AM) to a standard, skills-based HIV prevention intervention (SB), and a general health promotion intervention (HP). HP was similar to a general health class, and SB was based on previous effective HIV prevention programs used with community adolescents, whereas AM included affect management skills in addition to effective HIV prevention skills. Youth (N = 377) in two US cities were 13 to 19 years of age and attending alternative schools for behavioral and emotional problems.

Results: Multiple logistic regression analyses, adjusted for the baseline scores, age, and gender, found that adolescents in AM were significantly less likely to report being sexually active at follow-up (80% versus 91%, adjusted odds ratio = 0.28, 95% CI = 0.08−0.96) and more consistently using condoms than those in HP at follow-up (62%, versus 39%, adjusted odds ratio = 3.42, CI = 1.10−10.63).

Conclusion: Affect management techniques tested in this project, focused on sexual situations, are similar to those that are used in dialectical behavioral therapy (DBT) and in clinical practice. These data suggest that these techniques might decrease risk behaviors and improve the health of adolescents with emotional/behavioral problems.

Clinical trial registration information—Therapeutic Schools: Affect Management and HIV Prevention; http://clinicaltrials.gov/; NCT00500487.

Key words: alternative schools, HIV, affect management

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As of 2014, adolescents and young adults between the ages of 13 and 24 years accounted for nearly 20% of new human immunodeficiency virus (HIV) infections in the United States.[1] Adolescence is a developmental stage that is typically characterized by social exploration, experimentation, and increase in risky behavior such as substance use and unprotected sex.[2] National data indicate that 41% of high school students report having had sexual intercourse, 43% of those have had sex without a condom, and 21% have used alcohol or drugs before having sex.[1] Although there are no HIV seroprevalence studies conducted with alternative school students with mental health issues, HIV risk behaviors such as unprotected sex, substance and alcohol use, and self-destructive tendencies occur at higher rates among adolescents with psychiatric disorders (especially those with bipolar and externalizing disorders), compared to those without disorders.[3] Dealing with emotionally charged situations may prove to be difficult for adolescents due to incomplete development of cognitive and planning capacities.[4] In addition, deficits in emotion regulation and affect management among adolescents with psychiatric disorders make navigating this stage more difficult. Adolescents who lack skills to effectively manage and express their emotions are more likely to engage in risky sexual behavior to cope with stressful and negative emotions.[4,5]

CG Clinical guidance is available at the end of this article.

Adolescents in Alternative School Settings: Risk Behavior and Affect Dysregulation

Adolescents who are unable to successfully function in a traditional school setting attend alternative or therapeutic schools that better address their educational, behavioral, and emotional needs. Youth in alternative schools have emotional and behavioral disorders, are more likely to be sexually active, and are less likely to use condoms relative to students in traditional schools.[6] For example, one study found that nearly 60% of youth reported having had sex in the past 6 months.[4] Alternative school students are also more likely to smoke cigarettes, to binge drink, and to use marijuana as well as other drugs in comparison to youth in regular schools.[6] Affect dysregulation has been found to be highly prevalent in adolescents, many of whom have psychiatric disorders, who attend alternative schools for behavioral disorders.[7] Affect dysregulation, in general,

may underlie these behaviors, although specific types of dysregulation have not been studied. It could be useful for prevention to address the role that emotion regulation plays in consistently enacting safe behaviors.

HIV Prevention Interventions for Adolescents in Alternative Schools

Traditional HIV prevention interventions have been effective in reducing HIV risk behaviors in several groups of adolescents (e.g., community, homeless, racial minorities),[5] but there is limited research to evaluate the efficacy of traditional HIV prevention interventions in alternative or behavioral school settings. Two studies have demonstrated some significant intervention effects for safer sex behaviors among youth in alternative schools. One study used cognitive and emotional monitoring skills with standard skills-based techniques based on Social Learning Theory (SLT) to increase motivation and to improve safer sexual skills for youth in alternative schools in Rhode Island.[8] Adolescents in the intervention group demonstrated a significant decrease in their sexual risk index (decrease in sexual activity or an increase in consistent condom use) compared to those in the control group at 3- and 6-month follow-ups. The second study, for youth in alternative schools in urban northern California,[9] was a randomized controlled trial that compared, to the standard school curriculum, a skills-based HIV, sexually transmitted infection (STI), and pregnancy prevention intervention based on theories compatible with SLT that also had a service-learning component (e.g., volunteering at a senior center). At the 6-month follow-up, adolescents in the intervention group were less likely to report having sex without a condom and were more likely to have used a condom at last sexual encounter. The current study addressed three gaps in the designs of the earlier projects. Despite the prevalence of affect dysregulation[4,7] and its association with risk behavior, the additional impact of targeting affect dysregulation in sexual situations when combined with standard skills-based SLT HIV prevention interventions was not examined. Affect management skills address the awareness of emotional states and distress tolerance practices such as deep breathing, distraction, and emotional expression. Neither study compared an affect management intervention to a standard HIV prevention program. In addition, the prior studies lacked an active control condition, making it difficult to determine the impact of experimental effects of time and attention. Also, the studies were conducted in only one location, limiting the generalizability of the results.

Project Balance

This project, Project Balance, used the Social Personal Framework (SPF), which is compatible with SLT, to inform the important constructs and target of the study. SPF posits that HIV risk for youth is attributed to multiple, co-occurring risk factors (e.g., mental health issues, low socioeconomic status (SES), peers who use substances or engage in delinquent behaviors, and decreased parental support).[10] Project Balance was a three-arm randomized controlled trial comparing the relative efficacy of an HIV prevention intervention targeting affect management (AM), a standard HIV knowledge and skills intervention (SB), and a time- and attention-matched general health promotion intervention (HP), as previously described.[4] The AM condition addressed the connection between feelings and HIV risk behavior and the interpersonal skills needed to translate personalized knowledge into behavior change. Affect management is informed by dialectical behavior therapy (DBT).[6,11] In the AM condition, adolescents learned to identify and to monitor their emotions. To manage feelings in sexual risk situations, youth practiced DBT techniques such as deep breathing, distraction, positive thinking, remembering support, and emotional expression. Sessions included development of a personal affect management plan (e.g., remembering advice from a friend when pressured), as well as content on personal relevance of HIV, assertiveness, and condom use, similar to SB. The SB condition, based on principles of SLT, used HIV prevention strategies shown to be effective in past research with adolescents.[12] Session topics included consideration of life goals, HIV risk and triggers to risk behavior, assertiveness, and condom use. The HP condition, similar to school general health class, included topics such as nutrition, exercise, diet, sleep, smoking, drugs/alcohol, and violence. Teens in the HP also received information on HIV and sexual health. Neither SB nor HP conditions discussed regulating emotions. Table 1 summarizes differences between interventions examples of AM techniques.

The immediate (1-month posttest) intervention impacts of Project Balance have been reported.[4] Adolescents in the affect management intervention (AM) were found to be more likely to use a condom at last sexual encounter, and those in the AM and skills-based (SB) interventions were shown to have greater HIV knowledge compared to HP. Although immediate outcomes were positive, there were no differences in recent sexual activity, alcohol use in the past month, or affect dysregulation, perhaps because youth did not have time to practice new skills.

The current analyses aim to examine the longer-term intervention effects of Project Balance at 6 months, when opportunity to use and to practice skills may have occurred. It was hypothesized that adolescents in AM would demonstrate increased rates of consistent condom use, decreased rates of recent sexual activity, and decreased rates of sex while using drugs and/or alcohol compared to those in HP, and that the improvements would be greater than at 6 months compared to those in the non–affect management interventions (i.e., SB and HP). We expected that adolescents in all groups would show less impairment over time due to their enrollment in the alternative school setting, which is tailored to meet the specific needs of adolescents with mental health issues. Finally, although the current intervention did not directly target substance use, we sought to explore the outcomes.