

ASSISTING IN REHABILITATING KIDS (ARK)

Good Evidence – Risk Reduction

INTERVENTION DESCRIPTION

Target Population

- Substance-dependent adolescents

Goals of Intervention

- Increase abstinence
- Increase safer sex behaviors
- Eliminate or reduce sex risk behaviors

Brief Description

Assisting in Rehabilitating Kids (ARK) is a small group, 12-session intervention consisting of educational, behavioral skills training, and motivational risk-sensitization manipulation components designed to reduce and maintain reductions of risky sexual behaviors among substance-dependent adolescents. The intervention is delivered to groups of 6-10 mixed-gender youth over a period of 28 days after their initial detoxification while the youth are still in the drug treatment program facility. The first 2 intervention sessions provide standard HIV/STD information. Five sessions addressing behavioral skills are based on the *Becoming a Responsible Teen (BART)* intervention and provide specific training and practice regarding correct condom use, partner negotiation, refusal of unwanted sex, and communicating this information and newly acquired skills to peers. Four other sessions are used to teach problem-solving skills and anger management skills important for drug-dependent adolescents. One additional session focuses on the motivational aspects of behavior change, particularly the level of perceived risk, by introducing an emotion-based risk-sensitization manipulation. A digital photograph of each adolescent is taken at baseline, downloaded into a computer, electronically transformed to visually depict how the adolescent might appear at end-stage AIDS. After adolescents complete their skills training sessions, the original and digitally transformed images are given to each adolescent. Next, discussion focuses on adolescents' emotional responses to the images, how these images may affect their willingness to engage in risky or safer sexual behaviors, and emphasizes that the adolescents already have the necessary skills to avoid HIV/STDs. This risk-sensitization manipulation is designed to increase awareness of personal vulnerability and, along with their improved self-efficacy, to motivate youth to adopt and be able to maintain risk reduction behaviors.

Theoretical Basis

- Information Motivation Behavior (IMB) Model
- Extended Parallel Process Model (EPPM)

Intervention Duration

- Twelve 90-minute sessions delivered over 28 days

Intervention Setting

- Off-site research office

Deliverer

- Two co-facilitators (one male, one female) with degrees in psychology

Delivery Methods

- Games
- Group discussion
- Lectures
- Practice
- Training

INTERVENTION PACKAGE INFORMATION

An intervention package is not available at this time. The lead researcher, Dr. Janet St. Lawrence has retired from Mississippi State University. There is no current contact for this intervention.

EVALUATION STUDY AND RESULTS

The original evaluation was conducted in Mississippi between 1995 and 1999.

Key Intervention Effects

- Increase abstinence
- Reduce unprotected sex
- Increased protected sex and condom use

Study Sample

The enrolled study sample of 161 adolescents is characterized by the following:

- 75% white, 22% black or African American, 2% Native American, 1% Hispanic/Latino
- 68% male, 32% female
- Mean age of 16 years
- Mean education of 10 years

Recruitment Settings

Two residential drug treatment programs in Mississippi serving adolescents

Eligibility Criteria

Adolescents were eligible for the study if they were admitted to one of the two youth residential drug treatment programs in Mississippi, completed the 3-week detoxification program, and had informed consent provided by the parent or guardian.

Assignment Method

Participants (N = 161) were grouped in 24 cohorts based on entry into drug treatment, where each cohort was randomly assigned to 1 of 3 groups: ARK Behavior Skills + Risk Sensitization intervention (n = 54), Behavior Skills only intervention (n = 54), or Health Education comparison (n = 53).

Comparison Group

The Health Education comparison consisted of 12 sessions, including 2 sessions of basic information on the epidemiology of HIV/STD and 10 sessions of standard health education curriculum. The curriculum included information on birth control, drinking, peer pressure, drug education, smoking, gangs, weapons, and handling stress. The curriculum was delivered in a developmentally appropriate format and included educational games and group discussions, changing the focus every 10 to 15 minutes.

Relevant Outcomes Measured and Follow-up Time

- Sex behaviors during past three months (including frequency of unprotected and condom-protected vaginal, oral, and anal sex; and number of sex partners) were measured at 6- and 12 -month follow-ups.
- Frequency of drug use during the past three months was measured for each of thirteen drugs (e.g., alcohol, marijuana, inhalants, crack cocaine, speed) at 6- and 12 -month follow-ups.

Participant Retention

- Overall Study sample
 - 97% retained at 6 months
 - 89% retained at 12 months
- ARK Intervention (retention not reported, but if all lost-to-follow-up participants were lost from this group, retention rates would be 93% and 83%, respectively)
 - ≥ 93% retained at 6 months
 - ≥ 83% retained at 12 months
- Behavioral skills training Intervention (retention not reported, but if all lost-to-follow-up participants were lost from this group, retention rates would be 93% and 83%, respectively)
 - ≥ 93% retained at 6 months
 - ≥ 83% retained at 12 months
- Health Education Comparison (retention not reported, but if all lost-to-follow-up participants were lost from this group, retention rates would be 91% and 81%, respectively)
 - ≥ 91% retained at 6 months
 - ≥ 81% retained at 12 months

Significant Findings

- A significantly greater percent of ARK intervention participants reported abstinence at the 6-month ($p < .05$) and 12-month ($p < .05$) follow-ups when compared to the health education participants and at the 12-month follow-up ($p < .05$) when compared to the behavioral skills training participants.
- ARK intervention participants reported a significantly lower frequency of unprotected vaginal sex and greater frequency of condom-protected sex than the health education participants at the 6-month and 12-month follow-ups (all p 's $< .05$).

COMPENDIUM OF EVIDENCE-BASED INTERVENTION AND BEST PRACTICES FOR HIV PREVENTION
ARCHIVED INTERVENTION

- ARK intervention participants also reported a significantly lower frequency of unprotected vaginal sex ($p < .05$) and greater frequency of condom-protected sex ($p < .05$) than participants in the behavioral skills training intervention at the 12-month follow-up.
- ARK intervention participants reported significantly greater percentages of condom-protected sex at the 6-month ($p < .05$) and 12-month ($p < .05$) follow-ups when compared to the health education participants and at the 12-month follow-up ($p < .05$) when compared to the behavioral skills training participants.

Considerations

- This intervention fails to meet the best-evidence criteria due to assigning groups of individuals to study condition while analyzing at the individual level and small analytical sample sizes.
- This intervention is based on the [Becoming a Responsible Teen \(BART\) intervention](#), which already has an intervention package available and is identified by PRS as a best-evidence intervention. BART is an 8-session small-group intervention that was originally tested with African American adolescents in family public health clinics. This intervention was designed for substance-dependent adolescents and included additional sessions focusing on problem-solving skills, anger management skills, and motivating youth to change behavior.
- All participants in this study received the standard 3-week detoxification program provided by the drug treatment facilities and remained in the facility for 30 days after initial detoxification. Drug treatment programs were based on the 12-step Alcoholics Anonymous program and involved group sessions around substance abuse, educational classes, and recreational activities.

REFERENCES AND CONTACT INFORMATION

St. Lawrence, J. S., Crosby, R. A., Brasfield, T. L., & O'Bannon III, R. E. (2002). [Reducing STD and HIV risk behavior of substance-dependent adolescents: A randomized controlled trial](#). *Journal of Consulting and Clinical Psychology, 70*, 1010–1021.

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