



# Project TLC

# 1

Teens Linked to Care: A Prevention Intervention for Youth Living with HIV

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## Acknowledgements

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For more information, please contact Patricia Jones, MPH, Project Director at 310-794-3612

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## ABOUT THE STUDY

Teens Linked to Care (TLC) is a five year study funded by the National Institute of Drug Abuse that was designed to enhance health behaviors, to reduce transmission acts and to increase coping skills among young people living with HIV. TLC was based on a year's qualitative study that looked at both youth practicing sexual and drug risk behaviors in Los Angeles, San Francisco, and New York City. The TLC study began prior to the HARRT therapies becoming standard protocol for treating people living with HIV.

The intervention used a three module curriculum to improve skills and ultimately change risk behaviors. The goals of the intervention were to:

- **Improve health status;**
- **Change transmission behaviors;**
- **Maintain high quality of life on an ongoing basis.**



In 1999, the Centers for Disease Control and Prevention **Replicating Effective Programs** recognized TLC as a model program, indicating that the program could be replicated in other settings and have similar successful health gains.

## WHY DO WE NEED INTERVENTIONS FOR YOUTH LIVING WITH HIV (YLH)?

Nearly half of the 40,000 new HIV infections occur among youth under 25 years old who engage in unprotected sex acts. Of these new infections, most are young African-American and Latino men (CDC, 2002). HIV transmission risk behaviors vary by gender, as well as by ethnicity. In 2000, data from 34 areas where HIV confidential reporting is conducted indicate that young women 13-19 years old represent nearly 2/3 of the reported HIV infections.

While prevention efforts are aimed at increasing access to care and other supportive services, the efforts are primarily focused on adults living with HIV. The TLC study designed innovative prevention programs and services for young people living with HIV.

### The purpose of this study was:

- to reduce substance use that encourages HIV transmission.
- to evaluate the effectiveness of an intervention to eliminate and/or reduce transmission behaviors, as well as increasing health care practices and quality of life for young people living with HIV.
- to document the physical, social, and interpersonal factors characterizing the lives of young people living with HIV.
- to evaluate factors that may influence the effectiveness of the intervention such as the youth's background, the skills and beliefs taught in the interventions; and site from which the youth were recruited.
- to evaluate the impact of reducing HIV transmission acts on reducing other problem behaviors (i.e. trouble with the law and/or school).

## TLC Intervention

The intervention consisted of 31-sessions within three Modules; each Module had specific themes. The intervention condition received the curriculum over a 15-month period while the control condition simultaneously received the standard care from their health care providers. Six months later, after the intervention group finished all three Modules, the control condition participants received the same intervention.

Each session began with a review of goals set in the previous session, followed by an introduction of new material; new skills were then practiced and new goals set for the next week. A Feeling Thermometer was used in each session to help participants recognize and practice controlling negative emotional states. Group members were encouraged to compliment each other; tokens (small squares of construction paper) accompanied these compliments as a tangible cue of a social reward. Group members received a companion workbook where they kept records of their individual goals and accomplishments toward reaching those goals.

## Example of an Intervention Exercise

Feelings fluctuate constantly as we move from activity to activity. In some situations, we feel very comfortable. In other situations, there is likely to be a great deal of discomfort. The Feeling Thermometer is a method of helping young people recognize their feelings throughout the day. Youth rate their feelings of discomfort to common situations on a scale from 100 (very uncomfortable) to 0 (very comfortable). For each situation and each level of the Feeling Thermometer, the youth identify their physical reaction (tight stomach, fast heart beat, sweating) and their internal dialog (“I can’t do this”; “I can tell them how I feel”). Meeting someone to whom you are attracted may be a relatively comfortable situation for some people (e.g., a 30 on the Feeling Thermometer scale); asking a partner to use a condom may be highly uncomfortable (an 80 on the Feeling Thermometer). Participants are taught to anticipate their feelings of discomfort in a range of situations and how to relax when discomfort arises.

When young people need to practice new behaviors in situations (e.g., refusing a sexual encounter), they practice the situation in the group by roleplaying. Prior to and following each roleplay situation, the youth rate their Feeling Thermometer. If the Feeling Thermometer indicates that the youth is highly uncomfortable (i.e., Feeling Thermometer > 50), the youth utilize relaxation prior to the roleplay.

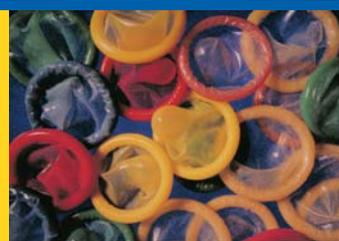
**The First Module, “Stay Healthy”**, is a 12-session curriculum that focuses on teens using health services. Topics covered in this module are:

- Coping with learning one’s serostatus
- Carrying out daily routines to stay healthy
- Disclosure of serostatus and sexual orientation
- Participating in health care decisions
- Seeking drug and alcohol treatment



**The Second Module, “Act Safe”**, is an 11-session curriculum that focuses on teens using health services. Topics covered in this module are:

- Reducing sexual risk acts
- Reducing substance abuse risk acts
- Identifying personal triggers that lead to risky behaviors

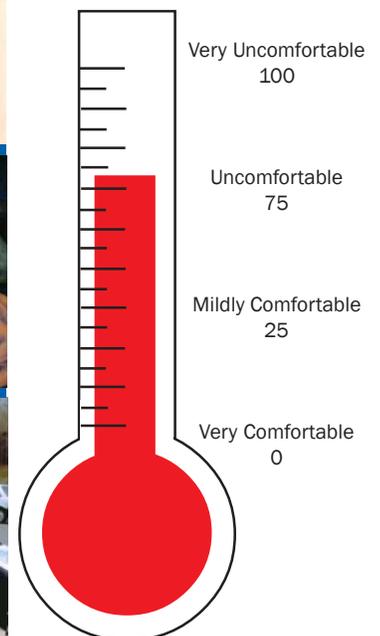


**The Third Module, “Being Together”**, is an 8-session curriculum focusing on the youth’s quality of life. The topics covered:

- How to have a better quality of life
- How to reduce self-destructive thoughts and feelings
- How to care for other people
- Increasing perceptions of self-control
- Living fully in the present moment



## Feeling Thermometer



**A second generation of this study called Choosing Life, Empowerment, Action, Results (CLEAR), focused on reducing substance abuse among youth living with HIV. CLEAR was carried out over a 4 year period using an 18-session curriculum. For more information about this project, contact Dallas Swendeman at 310-794-6144.**

## Research Methods

From 1991–1996, 310 eligible youth were recruited from nine community health clinics in Miami, New York, San Francisco, and Los Angeles. Of these youth, 208 were in the intervention condition and 102 were in the standard care condition. Data were collected from 1994–1996 over a 21-month period.

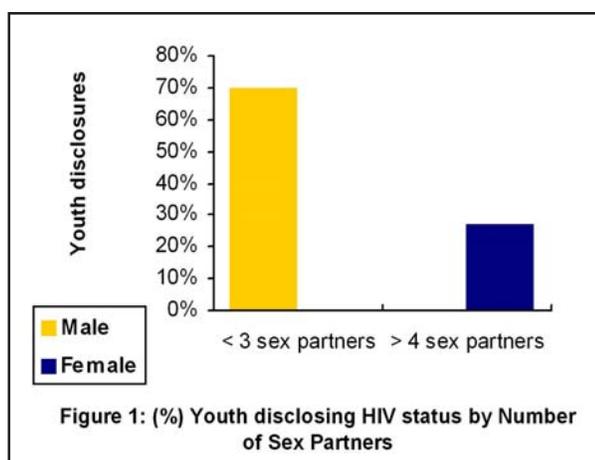
Youth were primarily Latino (37%) and African American (27%), male (72%), either completed high school or were in school at the time of the study, employed (84%), and ranged in ages 13–24 years old, with an average age of about 21 years old. Most youth were gay or bisexual males (88%), knew their HIV status about 2 years prior to the study and did not show symptoms of HIV (59%). One-quarter of the youth reported using condoms with a 100% of their partners at all times, almost half reported sexual risk behavior and 9% injected drugs.

### Disclosure of HIV Status

- Youth disclosed their HIV status to almost all of their friends and family.
- Most gay and lesbian youth disclosed their sexual orientation to their friends and their family.
- African-Americans and Latinos disclosed less to their families than youth of other ethnicities.
- The more sex partners youth reported, the less likely youth were to disclose their HIV serostatus to their partners (shown in Figure 1).

#### Youth disclosed to their family more if:

- They had an HIV positive family member.
- They were more advanced in their disease status.
- They were diagnosed longer and at an earlier age.
- They were African-American and Latino males.



## Behavior Change Over Time:

### Module 1: Improving Health Behaviors

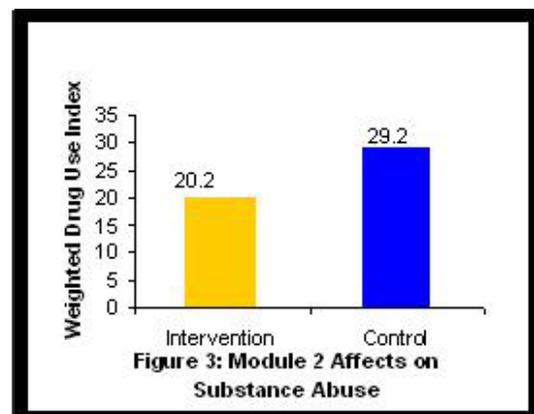
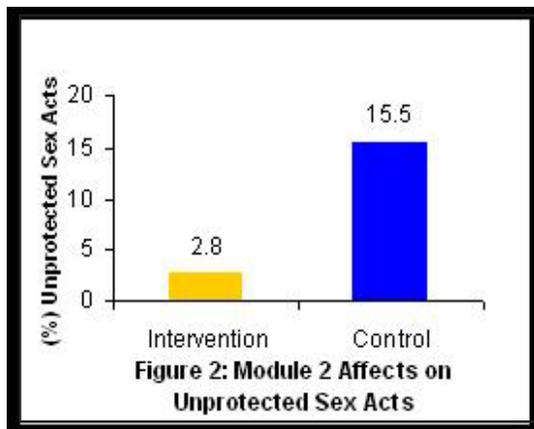
Female youth in the intervention condition reported more positive lifestyle changes and took a more positive coping style when compared to young women in the control condition. The youth in the intervention condition reported more social support than youth in the control condition. Most youth kept their scheduled medical appointments regardless of their stage of illness, missing an average of one appointment over three months.

### Module 2: Reducing Transmission Acts

Youth in the intervention condition reported 45% fewer sex partners, 50% fewer HIV-negative sex partners, an 82% decrease in unprotected sexual acts, and a 31% decrease in a weighted score for substance use when compared to youth in the control condition. When looking at specific drug use practices, youth in the intervention reported a 6% decrease in marijuana use, a 22% decrease in hard drug use, and a 6% decrease in the total number of drugs used when compared to youth in the control condition. The prevalence of alcohol and marijuana use and hard drug use was significantly lower among youth in the intervention condition than those in the control condition.

### Module 3: Improving Quality of Life

Youth assigned to the intervention condition reported fewer mental health symptoms and fewer reports of physical symptoms compared to young people living with HIV in the control condition. The youth participating in this module were relatively healthy and there were no differences in the intervention groups' energy/vitality, level of physical limitation, and health when compared to their control condition.



### Implications for Service Delivery for Young People Living with HIV

- Small group interventions are not necessarily the best delivery setting for youth for the following reasons:
  - > Confidentiality is potentially compromised
  - > Coordination of schedules for both youth and the staff is costly and time-consuming
- Skills and norms taught in each module impacted the targeted behavior only and did not reduce other problem behaviors experienced by youth.
- Manuals on how to deliver intervention either in a traditional group format or over the telephone are easily accessible to the public at <http://chipts.ucla.edu>.
- Youth maintained new skills and practices over the 21-month period of the study.
- Preventive interventions may be more effective in attracting HIV positive persons if they are integrated into a treatment setting.
- Routine rapid HIV testing in medical settings will be crucial in identifying and linking HIV positive people into care.

## Project's Selected Publications

1. Lee, M.B. & Leibowitz, A., Rotheram-Borus, M.J. (in submission). Cost-effectiveness of an intervention for Youth Living with HIV.
2. Song, J., Lee, M. & Rotheram-Borus, M.J. (in submission) Factors attributed to intervention adherence among young people living with HIV.
3. Lightfoot, M.A., Swedeman, D., Rotheram-Borus, M.J. (in submission). Variation in the risk behaviors of youth living with HIV: pre- and post-HAART.
4. Swendeman, D., Rotheram-Borus, M. J., Comulada, W. S., Weiss, R. E., Ramos, M.E. (in submission). HIV-related stigma among substance using young people living with HIV.
5. Comulada, W. S., Swendeman, D. T., Rotheram-Borus, M. J., Mattes, K. M., & Weiss, R. E. (in press). Utilization of HAART among young people living with HIV. American Journal of Health Behavior.
6. Stein, J.A., & Rotheram-Borus, M.J. (invited). Cross-sectional and longitudinal Associations in Coping Strategies and Physical Health Outcomes among HIV Positive Youth. Psychology and Health.
7. Rotheram-Borus, M.J., Lee, M.B., Murphy, D.A., Futterman, D., Duan, N., Birnbaum, J., & the Teens Linked to Care Consortium. (2001). Efficacy of a preventive intervention for youth living with HIV. American Journal of Public Health, 91, 400-405.
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17. Rotheram-Borus, M.J., Murphy, D.A., Swendeman, D., Chao, B. Chabon, B. Zhou, S., & Birnbaum, J. (2000). Substance use and its relationship to depression, anxiety, and isolation among youth living with HIV. International Journal of Behavioral Medicine, 6, 293-311.
18. Murphy, D.A., Rotheram-Borus, M.J., & Joshi, V. (2000). HIV infected adolescent and adult perceptions of tuberculosis testing, knowledge, and medication adherence in the USA. AIDS Care, 12, 59-63.
19. Rotheram-Borus, M.J., Mann, T. & Chabon, B. (1999). Amphetamine use and its correlates among youths living with HIV. AIDS Education and Prevention, 11, 232-242.
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21. Luna, G.C., & Rotheram-Borus, M.J. (1999). Youth Living with HIV as peer leaders. American Journal of Community Psychology, 27, 1-23.
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