Building Sustainable Networks to Provide Preconception Care and Reduce Health Disparity:

# **Strategies to Prevent HIV/STDs**

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# A Program of Research That Seeks To:

- Elucidate the social and psychological factors that underlie HIV/STD and risk-associated sexual behavior.
- Identify the particular conceptual variables that are most important to achieving intervention-induced sexual behavior change.
- Identify theory-based, culture-sensitive, developmentally appropriate strategies to reduce HIV/STD and risk-associated sexual behaviors

# A Program of Research That Seeks To: (cont'd)

- Answer practical questions about the most effective way to implement HIV/STD and risk-reduction interventions with ethnic minority youth
- Test the effectiveness of such interventions using scientifically rigorous methodologies and experimental designs
- Tailor and disseminate effective research-based behavioral interventions to nongovernmental organizations, schools, churches, clinics, etc

# **CO-INVESTIGATORS**

- John B. Jemmott III, Ph.D. Annenberg School of Communication
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   Addiction

#### **FUNDING SOURCES**

#### **National Institute of Nursing Research**

# **National Institute of Mental Health**

National Institute of Child Health and Human Development

# What are Examples Health Disparities Issues?

- HIV/AIDS & STDs
- Low birth weight, pre-term birth, & other negative pregnancy outcomes
- Cardiovascular disease
- Obesity
- Cancer
- Diabetes
- Lack of breast feeding

- Chronic health problems
- Poor mental health
- Immunizations
- Asthma
- Abuse & neglect
- Violence & violencerelated injury
- Higher morbidity/mortality

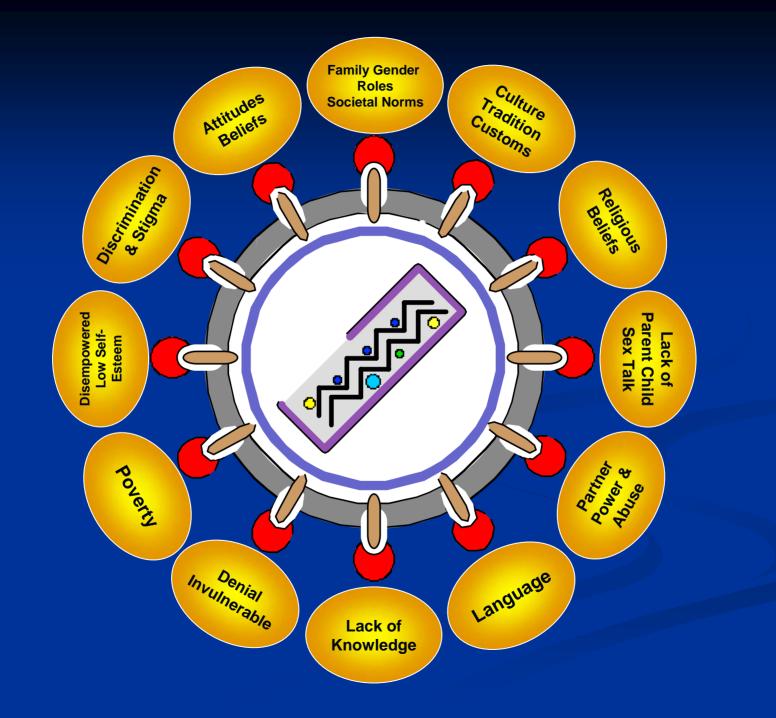
# Health Disparities Are Related To...

- Lifestyle issues/Behaviors People Do
- Immigration and acculturation issues
- Poverty/Environment
- Poor family comm.
- Language/reading
- Heavy family and caregiver burden
- Lack of education
- Lack of trust

- Poor provider patient relationships
- Lack of culturally competent treatment
- Access to care
- Healthcare treatment issues
- Insurance issues
- Bias, racism & marginalization

# What Do We Know about HIV/STDs?

- HIV/STD incidence is a national concern and teens have high rates of sexually transmitted diseases.
- AIDS cases are increasing among young adults 20 to 29 years of age.
- HIV infection is increasing among people 13 to 24 years of age.
- Adolescents feel invulnerable, are resistance to abstinence messages, have negative beliefs about safer-sex practices, and inadequate confidence to negotiate safer sex.
- Adolescents have sporadic sex and fail to use condoms



# What Can We Do About It?

We Can Design Theory-Based, **Culturally Specific, Developmentally Appropriate HIV/STD Risk-Reduction** Interventions

# Who Has the Answers? .....the community

We Can Partner with the Community to Design, Evaluate and Translate Culturally Appropriate Evidenced-Based HIV/STD and Risk Reduction Interventions

#### WE CAN ANSWER KEY RESEARCH QUESTIONS FOR ADOLESCENTS

- Can the behavior of high-risk youth be changed?
- Can culture-sensitive programs be effective when implemented by facilitators who do not share the ethnicity of participants?
- Can abstinence-based interventions be effective?
- How effective are peer educators?
- Can evidenced-based practices be disseminated and evaluated when implemented by end users?

# HOW DO WE CONDUCT OUR RESEARCH?

# THE SIX PHASES OF RESEARCH

- **1. Elicitation** (Focus Groups ... Code of the Street)
- 2. Questionnaire Development
- 3. Design Culturally Appropriate Intervention
- 4. Pilot Intervention
- 5. Evaluation
- 6. Dissemination

# **THEORETICAL MODELS**

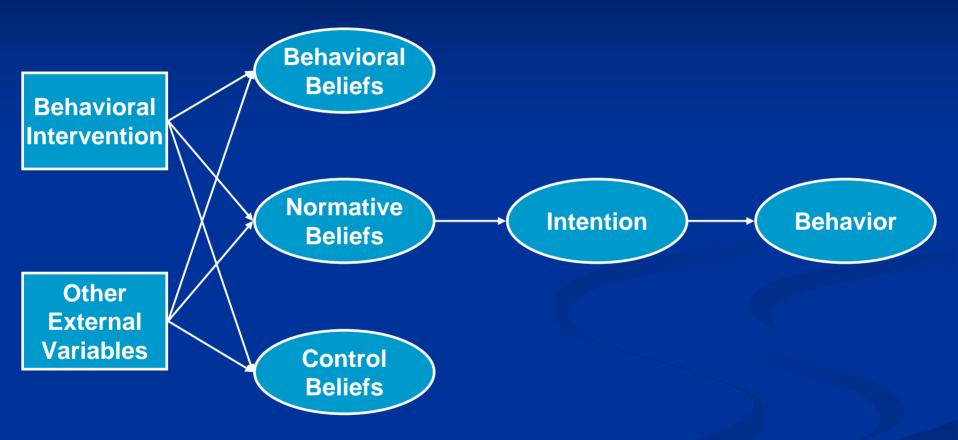
#### Social Cognitive Theory

Self-efficacy, Outcome Expectancy, (Hedonistic, Partner Reaction, Prevention Beliefs) and Skills.

• **Theory of Reasoned Action** Attitudes, Beliefs, Subjective Norms and Intentions.

Theory of Planned Behavior
 Perceived Behavioral Control and Control Beliefs

# **The Theory of Planned Behavior**



Ajzen I. From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.). *Action control: From cognition to behavior.* Berlin, Germany: Springer-Verlag. 1985;11-39. Ajzen I, Fishbein M. *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall. 1980.

# **THEMES:**

(FAMILY, COMMUNITY, CULTURE & PRIDE)

- "Respect Yourself, Protect Yourself...Because You Are Worth It"
- "Let's Work Together to Save Our People & Community."
- "Be Proud, Be Responsible...Respect Yourself, Protect Yourself!"

# WHAT DO OUR INTERVENTIONS INVOLVE?

- Small Group
   Discussion
- Culturally Appropriate
   Themes & Strategies
- Developmentally
   Appropriate Strategies
- Interactive Activities
- Audiovisuals

- Knowledge
- Self-efficacy
- Attitudes/Beliefs
- Goals & Dreams
- Technical Skill Building
- Role Playing
- Practice and Feedback

We Partnered With The **Community to Design & Implement Interventions On Three Levels:** Individual Family/Community International

# Individual Level Interventions:

# Adolescents in School and Community Settings

# JEMMOTT, JEMMOTT, & FONG (1992, AJPH)--DESIGN

- Randomized controlled trial
- 157 African American male adolescents at a weekend program
- Mean age was 14.6 years
- 83% reported ever having sexual intercourse

- Five hour cognitive behavioral small group
   intervention
- Facilitator gender
- 96% 3-month follow-up return rate

# JEMMOTT, JEMMOTT, & FONG (1992, AJPH)--RESULTS

- Reduced HIV/STD and risk-associated sexual behavior
- Reduced frequency of sexual intercourse
- Reduced unprotected sexual intercourse
- Fewer sexual partners
- No consistent effect of gender of facilitator
- Self-reported sexual behavior change unrelated to social desirability bias

# JEMMOTT, JEMMOTT, FONG & MCCAFFREE (1999 AJCP) -- DESIGN

- Randomized controlled trial
- 496 African American adolescents at a weekend program
- Mean age was 13.1 years
- 54% were female
- 55% reported ever having sexual intercourse

- 5-hour cognitivebehavioral small group intervention
- Facilitator race, facilitator gender, and group gender composition
- 96% 3-month follow-up return rate; 93% 6-month follow-up return rate

# JEMMOTT, JEMMOTT, FONG & MCCAFFREE (1999 AJCP) -- RESULTS

- Reduced HIV/STD and risk-associated sexual behavior
- Reduced unprotected sexual intercourse
- Self-reported sexual behavior change unrelated to social desirability bias
- Intervention effects were the same irrespective of race of facilitator, gender of facilitator, and the gender composition of the group

## JEMMOTT, JEMMOTT, & FONG (1998, JAMA)--DESIGN

- Randomized controlled trial
- 659 African American adolescents at a weekend program
- Mean age was 11.8 years
- 53% were female
- 25% reported ever having sexual intercourse

- 8-hour abstinence-based, safer-sex, or general health promotion intervention
- Adult facilitator or peer co-facilitators
- 96% 3-month follow-up return rate

# JEMMOTT, JEMMOTT, & FONG (1998, JAMA)-- RESULTS

- Abstinence intervention reduced the frequency of coitus and, in virgins, delayed initiation of coitus.
- Safer-sex intervention increased condom use.
- Safer-sex intervention reduced unprotected coitus.
- Adult and peer facilitators equally effective.
- Self-reported sexual behavior change unrelated to social desirability bias.

HOW DO EFFECTIVE **INTERVENTIONS GET** DISSEMINATED TO END USERS, SUCH AS SCHOOLS, **COMMUNITY BASED ORGANIZATIONS, OR HEALTH CLINICS**?

# CDC'S DISSEMINATION PROJECT "RESEARCH TO CLASSROOMS: PROGRAMS THAT WORK"

- Scientifically valid evidence of effectiveness
- User-friendly
- Dissemination to educators and other advocates for youth across the nation
- "Be Proud! Be Responsible! Strategies to Empower Youth to Prevent AIDS" (Jemmott, et al, 1994)

# THE JEMMOTT INTERVENTION BE PROUD! BE RESPONSBILE!

# The JEMMOTT INTERVENTION

In the absence of a vaccine or a cure for AIDS, the only effective weapon against this invariably fatal disease is prevention. But knowledge alone is not enough to change a risky behavior — witness the tens of millions who continue to smoke despite the overwhelming link to lung cancer and heart disease. People must be persuaded and empowered to change. Evidence suggests that the Jemmott Intervention, a multidimensional educational and skill-building curriculum, can do just that. This innovative intervention was recently selected as a nationwide model by the Centers for Disease Control and Prevention.

ast February, on the day health officials announced some encour aging news about AUSS — the number of new cases among hemosexuals in San Francisco is finally leveling off — Loretta Jeumott, PhD, was unexpectedly glum.

"It's great news," explained Dr. lemmott, director of the School of Nursing's new Center for AIDS Research (see box, p. 10). "There's hope. But these are mostly middleclass gay white males who are changing their behavior. They are the ones who fought hard to get America's attention about the epidemic, who pushed for AIDS education, prevention, and treatment, who have lost a for of friends and don't want to lose any more. Now, I'm worried about the younger homosexuals, who weren't there at the begininng, who haven't lost friends to the disease. They don't believe it will happen to

them or they don't care." Dr. Jemmott is also worried about young urban minorities, particularly black women of childbearing age, who are now the likeliest to become infected with HW and who have neither the resources nor political savey to mobiline a response to the epidemic. "There are so many other issues social and economic — that are driving the epidemic in this group and impeding changes in HIV-risk behaviors," says Dr. Jemurot, a leading expert on AIDS and minorities. "Most members of this population don't see themselves

at risk yet." But there is hope. One of the most promising solutions to the AIDS crisis in urban America is the Jemmott Intervention, an educational and skillbuilding rechroique for changing highrisk sexual behaviors. The intervention is the creation of not one but two Jemmotrs, Lorerta and her husbandcolleague, John, a social psychologist at Princeton.

Based on three theories of social psychology (social cognitive theory, the theory of reasoned action, and the theory of planned behavior), the Jemmon Intervention holds that knowledge isn't necessarily enough to change behavior. People must be confident they can change, and they must perceive those changes as advantageous. Finally, they must have the skills and resources for implementing change.

Though the Jemmotts did not formulate these concepts, they are the first to incorporate them into an educational model with demonstrable results. Earlier this year, the Centers for Disease Control and Prevention (CDC) Division of Adolescent Health and School Health (DASH) edetected the Jemmott Intervention as a national model for AIDS prevention among inner-city adolescents (see box, p. 8).

#### No data on black adolescents

The roots of the Jermitor Intervention go back to 1981, a time when the AIDS epidemic was as yet unnamed and largely confined to gay enclaves in San Francisco and New York City. Dr. Jermitor was working with young blacks as a nurse in an inner-city famitip planning Citinic. Eager to learn more



#### Be Proud! Be Responsible!

Schools and community-based organizations throughout the country will soon be implementing the Jenmott Intervention, which has been selected for inclusion in "Research to Classroom," a new CDC project that identifies and disseminates curricula that reduce health risk behaviors among youth.

The Jemmotts' curriculum, to be disseminated under the name, "Be Proud! Be Responsible! Strategies to Empower Youth to Reduce Risk for AIDS," is intended for inner-city schools and community-based programs that serve minorities between the ages of 13 and 18.

The five-hour curriculum, which can be delivered in one day or in five to six sessions, is divided into three components. The first, "Knowledge," addresses the toilogy, transmission, and prevention of HUVAIDS. "Artitudes and Beliefs" covers personal risk, responsibility for safer sex, prevention beliefs, partner reaction, and hedoninic beliefs labout the advess effects of safer sex on sexual enjoyment). Finally, "Skills and Self-efficacy" gives students the skills (negotiation skills, refusai skills, and condom-use skills in ad confidence they need to practice safer sex.

One reason the intervention works is that it is fun. Messages are delivered through a variety of interactive activities, including videos, role playing and condom demonstrations. Most are brief, lasting no more than 20 minutes. One particularly effective activity, a card game of sorts called "Don't Pass it Along," gives students an unmistakable lesson about how easily HIV is transmitted sexually. By and large, students have been enthusiastic about the curriculum and would recommend it to friends.

Teachers can learn how to present the curriculum through 16 to 24 hours of training.



about black adolescent sexuality, she consulted the literature but came up almost empty-handed. The research on males was especially slim. If she wanted to know more, she would have to generate her own data. She eventually did, conducting a study of black males enrolled in an urban junior and senior high school.

In the study, the subject of her 1987 doctoral dissertation at the University of Pennsylvania, Dr. Jemmott found that virtually all of the boys were having sex, typically starting as young as age 11. Most were not using contraceptives. The findings were chilling, foretelling large numbers of unwanted pregnancies and sexually transmitted diseases. AIDS had not yet made siginficant incoads into the black community, but with behaviors like these, it inevitably would.

Amidst the disturbing data was a glimmer of hope, the germ of an idea, The boys were avoiding condoms, the young researcher realized, not because they didn't know about the contraceptives, but because they believed condoms weren't pleasurable. From a prevention standpoint, this was a critical revelation. It meant that to change the risk-taking behavior of these young men, one would have to do more than impart fasty one would also have to change their attitudes toward condoms and sex.

Dr. Jemmott continued her research at Rungers University with a series of studies, designing and testing AIDSprevention interventions that went beyond a mere recitation of the facts. In an early study, a followup to her

In an early data, a toknowly a toknowly of takdissertation, she and her husband (by this time a regular team) demonstrated that by focusing on artitudes, beliefs, and skills one could reduce risky sexual behaviors of black male teens. It was the first time an intervention had been able to reach this population. The landmark study, funded by the American Foundation for AIDS Research (AmFAR) and published in the American Journal of Public Health, put Team Jermontt on the AIDS-prevention map.

Loretta Jemmott followed up the study with practical advice for nurses who work with adolescents, noting in CDC'S DISSEMINATION PROJECT "RESEARCH TO CLASSROOMS: PROGRAMS THAT WORK"

- "Making A Difference! An Abstinence Based Approach to Prevent HIV/STD Incidence." (Jemmott, et al., 2001).
- "Making Proud Choices! A Safer Sex Approach to Prevent HIV/STD." (Jemmott, et al., 2001)

#### **CDC DISSEMINATION**

- CDC selected 7 HIV/STD risk reduction curricula for dissemination and translation to schools and CBOs across the nation.
- 3 of the 7 were designed by my team, the only nurse-led research team.

# WHY DOES OUR INTERVENTIONS WORK?

- Teaches skills
- Emphasizes hedonistic beliefs
- Holds their attention
- Very interactive & fun
- Non judgmental, caring
   & supportive
- Culturally sensitive

- Videos are appropriate
- Excellent teacherstudent interaction
- Age specific
- Good discussions
- Credible
- Promotes confidence
- Build pride/ responsibility

Clinic-Based Interventions:

**Reducing HIV Risk Behaviors Among African** American Women in a Women's Health Clinic

# Sisters Saving Sisters: The Adolescent Female Health Promotion Project

- Is skills practice necessary to achieve behavior change?
- Can behavioral interventions reduce STD incidence among adolescent women?

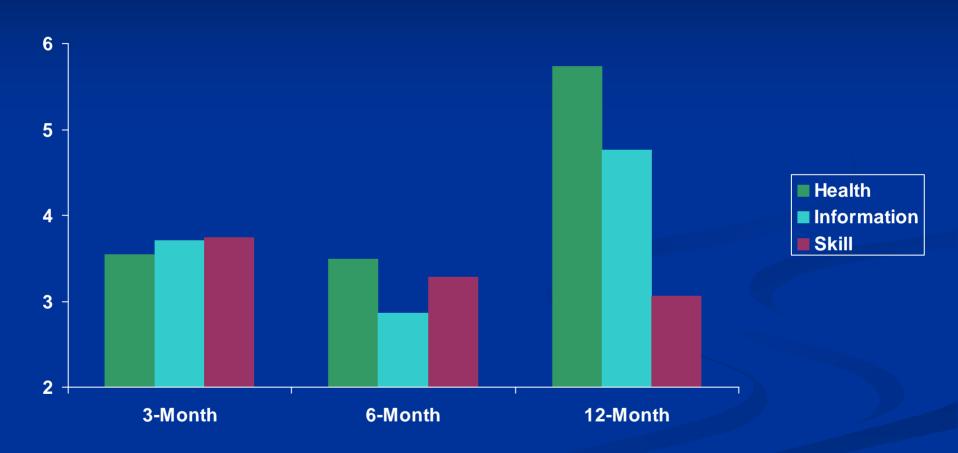


# Design

- Randomized controlled trial
- Adolescent medicine clinic
- 682 adolescent girls
- 68% Black
- 32% Latino
- 22% STD positive

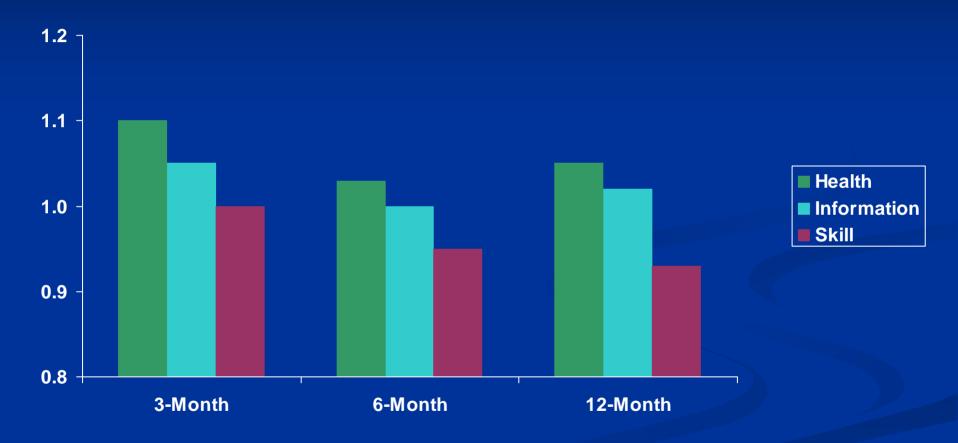
- Skill-based intervention
- Information-based
- Health promotion
- 89% 12-month followup retention

#### Adjusted Mean Frequency of Unprotected Intercourse in the Previous 3 Months



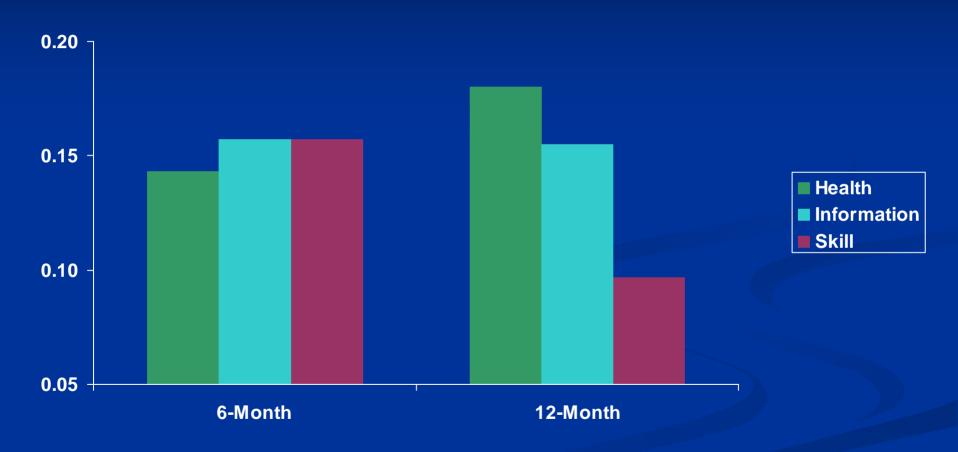
Jemmott JB, et al. Arch Pediatr Adolesc Med. 2005;159(5):440-449.

# Adjusted Mean Number of Sexual Partners in Previous 3 Months



Jemmott JB, et al. Arch Pediatr Adolesc Med. 2005;159(5):440-449.

#### **Adjusted STD Incidence**



Jemmott JB, et al. Arch Pediatr Adolesc Med. 2005;159(5):440-449.

# Sister to Sister: The Black Young Women's Health Promotion Project

- What type of HIV risk reduction intervention is best for AA women in a primary care setting? Group vs. individual? Information alone vs. skill based?
- Can a single, 20 minute, 1-on-1, skill-based intervention session reduce HIV risk-associated sexual behavior and the incidence of STDs?



# Jemmott, Jemmott, & O'Leary Design

- Nurse-led randomized controlled trial
- 564 AA women attending a primary care clinic
- Mean age, 27 years
- Facilitators: 27 AA nurses

- 1 of 5 conditions
- 3-, 6-, 12-month follow-up
- Self-reported sexual behavior
- STD clinical examination
- 86.9% retained at 12-month follow-up

#### **The 5 Interventions**

- Contrasted 2 methods of delivery: group vs. individual
- Two kinds of intervention content: information vs. skill-building
- Health promotion control group



#### **Did It Work?**

- Did it work?
- Was it effective in changing behavior?
- Did it reduce STD incidence?

#### Results

#### • Women in the skill building interventions

- Reduced HIV risk-associated sexual behavior
- Reduced frequency of sexual intercourse
- Reduced unprotected sexual intercourse
- Fewer sex partners
- Used condoms more often
- Less unprotected sex
- No effects on social desirability

# Results (cont'd)

 Women in the skill-building interventions were less likely to have an STD at the 12-month follow-up than were those in the control group

# Conclusion: The Results Suggest That

- Relatively brief but intensive culturally sensitive and developmentally appropriate HIV risk-reduction interventions can have significant impact on HIV risk behavior among AA women
- 1-to-1 and group skill-building interventions were equally effective in changing risk behavior and STD incidence.
- Nurses and other primary care providers can implement both types of interventions

# Why Do Our Interventions Work?

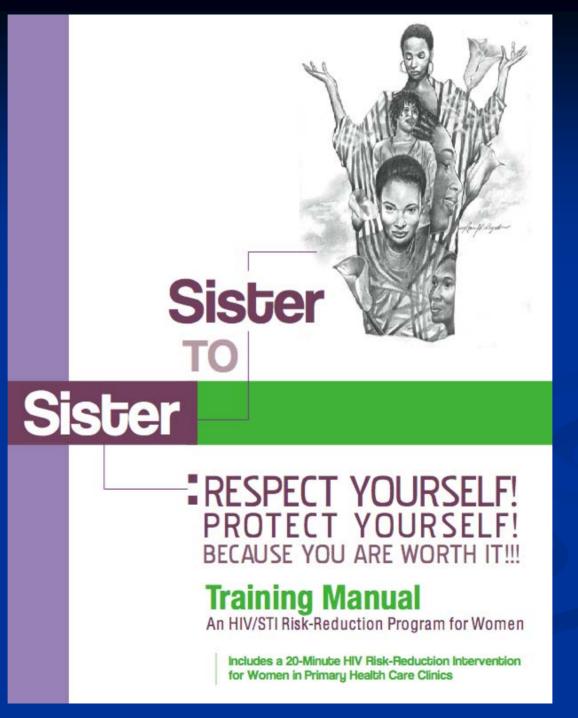
- Teach skills
- Emphasize hedonistic beliefs
- Hold their attention
- Very interactive and fun
- Nonjudgmental, caring, and supportive
- Culturally sensitive
- Developed based on hearing their voices and the context of their lives

- Videos are appropriate
- Excellent teacher-student interaction
- Age specific
- Good discussions
- Credible
- Use culturally appropriate strategies (ie.., storytelling)
- Promote confidence
- Build pride/responsibility

# Dissemination and Translation of Sister to Sister

- CDC selected Sister to Sister for replication, dissemination, and translation to clinics in its program entitled, "Replication of Evidenced-Based Projects"
- CDC funded us to examine the feasibility of translating and tailoring this intervention for implementation in various
   Family Planning Clinics



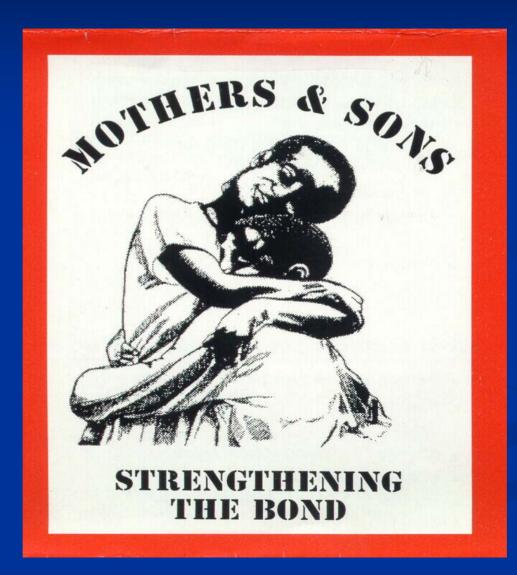


# Family/Community Level Interventions

Philadelphia Housing Development Intervention

Trained Housing Development Community Leaders to Train and Empower Single Mothers To Reduce HIV /STD Risk Behaviors Among Their Sons... Building on Their Strengths!

# MOTHERS AND SONS HEALTH PROMOTION PROJECT

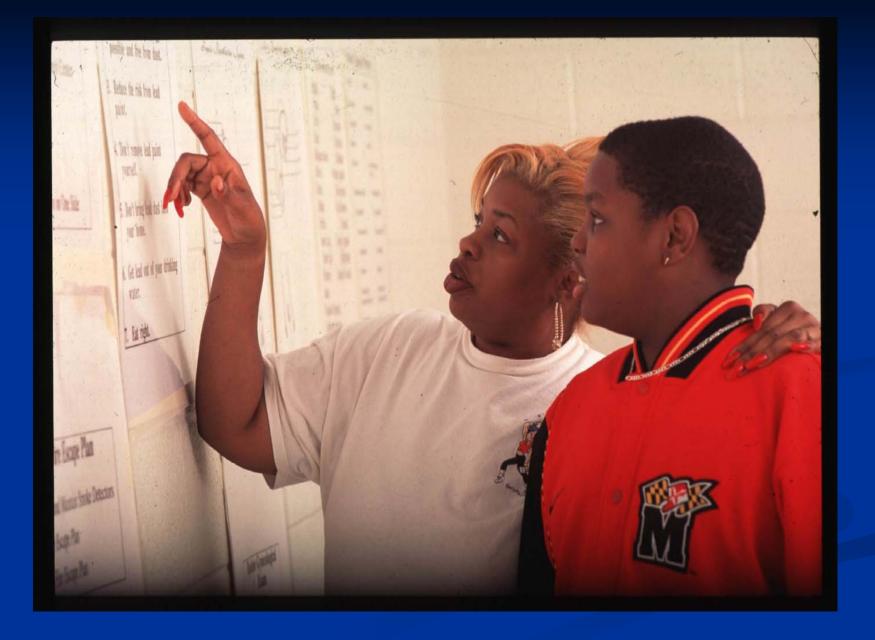


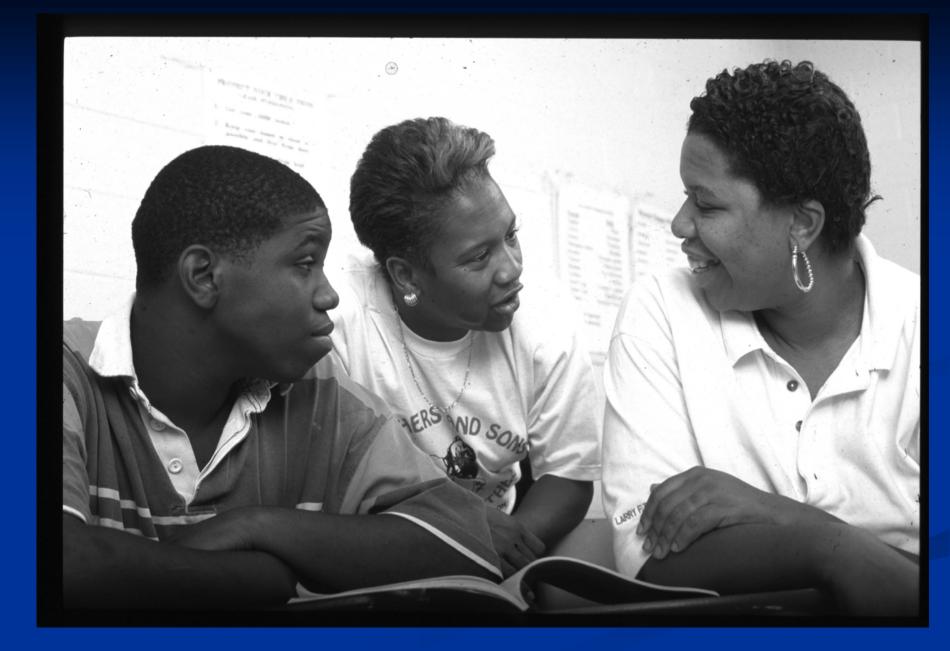
# MOTHERS AND SONS HEALTH PROMOTION PROJECT

- Randomized controlled trial
- 42 housing developments in Philadelphia
- 16-hour cognitivebehavioral small group intervention over 4 Saturdays
- Homework assignments

- 630 single African
   American mothers and their sons ages 11-15
- Facilitators 84 women residing in the housing developments
- Mother's sexual behavior
- Son's sexual behavior
- 24-month follow-up





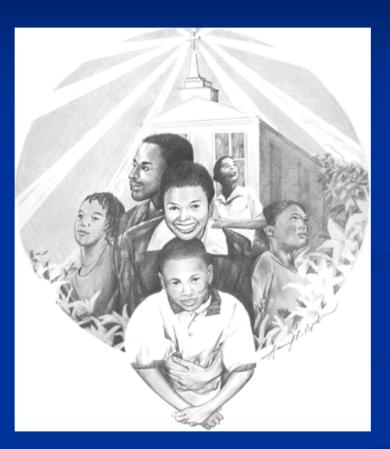




# **Church-Based Interventions**

Trained and Empowered Churches to Reduce HIV /STD Risk Behavior Among Their Members and Their Community... Focusing on Abstinence

#### CHURCH & FAMILY HEALTH PROMOTION PROGRAM



#### **TOGETHER WE CAN DO ALL THINGS**

# HOW DO WE DISSEMINATE INFORMATION TO TEENS NATIONALLY?

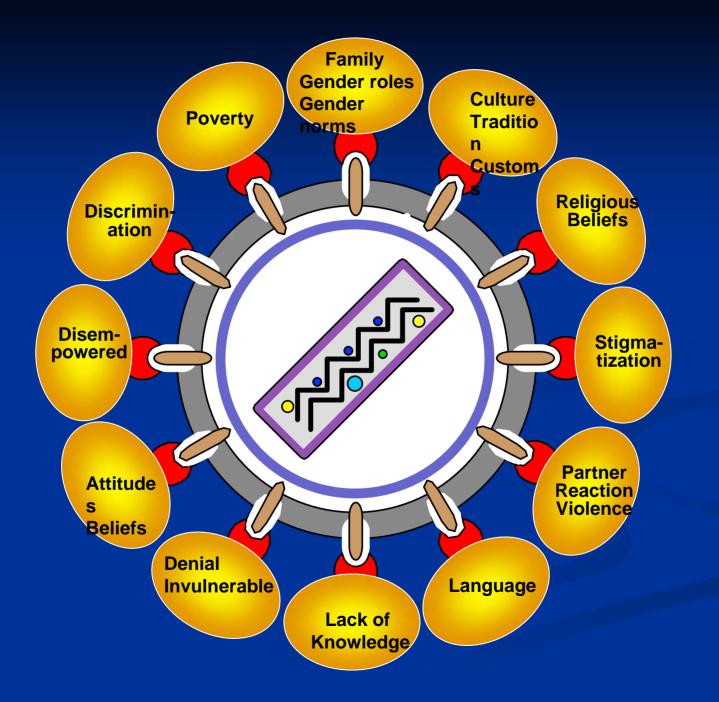


#### 2005 – POSITIVELYNEGATIVE HEAR ME PROJECT - MTV & SELECT MEDIA



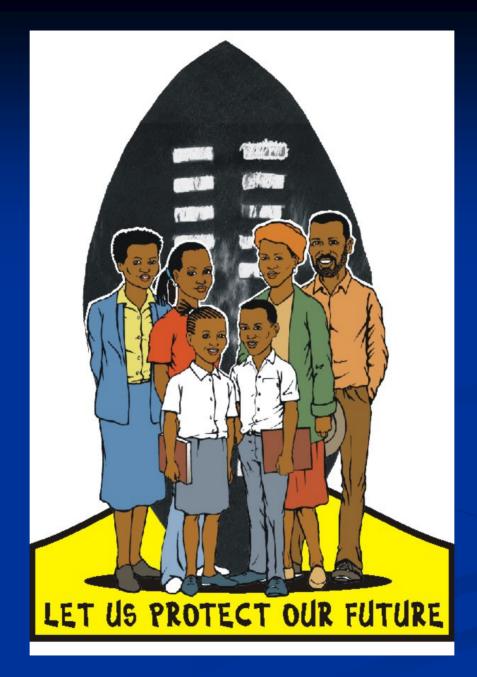
HOW DO WE CONDUCT OUR RESEARCH CROSS CULTURALLY AND INTERNATIONALLY? STRATEGIES FOR TAILORING AND TRANSLATING EFFECTIVE PROGRAMS: WE DO NOT HAVE TO RE-INVENT EVERYTHING

- 1. Elicitation (Focus Groups)
  - Learn the code of their streets!!!
- 2. Questionnaire Development
- 3. Re-design & Tailor the Intervention *Keeping key components intact.*
- 4. Pilot Intervention
- 5. Evaluation
- 6. Dissemination



#### THE 3 T's of Effective Capacity Building and Designing Effective Interventions

Time Trust Team Building





- Cluster Randomized Controlled Trial
- School as the unit of randomization
- 18 senior primary schools
- Urban and rural schools
- 1,057 or 94.5% of 1,118 eligible Grade 6 learners were enrolled

#### **Structure of the Interventions**

- Twelve 1-hour modules implemented over six 2module sessions
- Extracurricular period
- Implemented in Xhosa
- Male and female adult co-facilitator pairs.









#### "PROTECT OUR FUTURE" The South Africa Health Promotion Project



MYTEN **COMMANDMENTS**... FOR BUILDING SUSTAINABLE NETWORKS IN COMMUNITIES TO PROVIDE PRECONCEPTON CARE AND REDUCE HEALTH DISPARITY IN MATERNAL CHILD HEALTH

#### THE TEN COMMANDMENTS FOR EFFECTIVE COMMUNITY BASED RESEARCH

- Thou must be truly committed to the community and committed to doing work that will make a difference for the residents of the community.
- Thou realize that the residents of the various urban communities have many burdens, yet are very resilient.

#### THE TEN COMMANDMENTS FOR EFFECTIVE COMMUNITY BASED RESEARCH (CONTINUED)

- Thou must respect various traditions and cultures of the various populations within thy community.
- Thou must know thy community and remember to give and take...not just take and treat them like thy truly care.
- Thou must listen to the voices of thy community...*Listen and learn the code of their streets*

#### THE TEN COMMANDMENTS FOR EFFECTIVE COMMUNITY BASED RESEARCH (CONTINUED)

 Thou must disseminate findings and material back to the community in a way that is understandable to them making sure that it culturally appropriate, gender specific, and reflects the learning needs, language, and style of the population.

Thou must be committed to doing the 3 T's of building community partnerships and translating research into practice
Time, Trust, and Team Building. We, researchers and clinicians, do not have all of the answers. ...Together we do.

#### THE TEN COMMANDMENTS FOR EFFECTIVE COMMUNITY BASED RESEARCH (CONTINUED)

- Thou must partner with the community to design, evaluate, tailor, and disseminate evidence-based strategies to save the lives of the children and tailor the messages to empower them not hurt them.
- Thou must develop linkages and partnerships with community leaders, organizations, and residents to build community capacity for sustaining effective research programs once the funding is over.

#### THE TEN COMMANDMENTS FOR DESIGING AND TRANSLATING EFFECTIVE COMMUNITY BASED RESEARCH (CONTINUED)

#### Thou shall not get discouraged. Be "the little red engine that could!"



#### Thou shall have fun.

### Remember

As we travel this road of trying to promote the health of women in the context of their daily lives....



## It is Important to Remember...

## Our Long term Goal is...

To save the lives of the the young ladies...because they are our future.

Save her and we save our future!!!



#### "DIVIDED WE FAIL UNITED WE FLOURISH"

So... Work Together...

Build New Partnerships,

•Listen to the Voices...

Stay Focused

•Mentor & Value Each Other

•Design Culturally Competent, Collaborative, Compassionate Strategies to Promote Healthy Behaviors!!!



# THANK YOU