

Mother-son communication: A theory-based behavioral intervention to reduce sexual behaviors among inner-city African American adolescents

Julie A. Cederbaum, Ph.D., MSW, MPH, University of Southern California

Jingwen Zhang, Ph.D., University of California, Davis

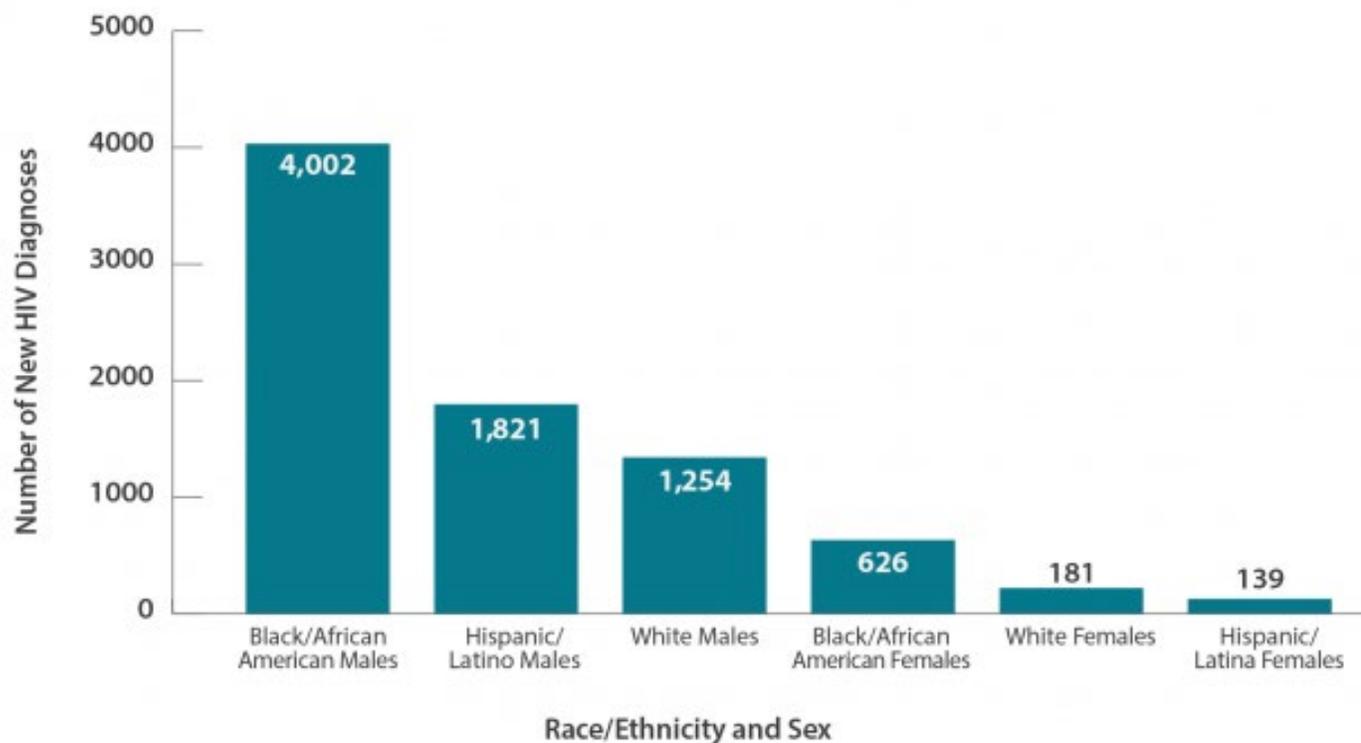
John B. Jemmott III, Ph.D., University of Pennsylvania

Loretta Sweet Jemmott, Ph.D., FAAN, Drexel University

*Work was supported by a grant R01MH055742 from the **National Institute of Mental Health**.

*Zhang, J., Cederbaum, J.A., Jemmott, J. J., & Jemmott, L. S. (2018). Theory-based behavioral intervention increases mother-son communication about sexual risk reduction among inner-city African Americans. *Journal of Adolescent Health*, 63, 497-502.

HIV RISK FOR AFRICAN AMERICAN ADOLESCENT MALES



Subpopulations representing 2% or less of all people who received an HIV diagnosis in 2016 are not represented in this chart.

Among 9-12th graders, African American adolescent males are more likely to report two behaviors that place them at increased risk for sexually transmitted infections (STIs), including HIV:

- vaginal sex before the age of 13 years (12.1% vs 3.5% of White males)
- vaginal sex with 4 or more partners (28.2% vs. 15.3% of White males).

INTERVENTION STRATEGIES

- Parent-child communication is one of several family processes that decrease sexual risk behaviors in adolescents
- Communication by African American mothers is associated with fewer sexual risk behaviors, more consistent condom use, and greater condom use intentions among adolescents
- We report a randomized controlled trial that tested the efficacy of an intervention targeting low-income African American mothers to increase sexual risk communication with their adolescent sons over a 24-month follow-up period.



INTERVENTION



- **Recruitment setting:** Philadelphia Housing Authority
- **Intervention participants:** African American women with a son (10 to 15 years of age)
- **Intervention implementation:** Trained facilitators from implemented structurally identical the group interventions (6–9 mothers) at the public housing communities.

(Mother and Son Dyads, N=525)

Randomization

The HIV/STI risk-reduction intervention

- Theory: SCT& TPB
- Focus: *knowledge, motivation, comfort, and skills necessary to change mothers' own sexual behaviors and their sons' sexual behaviors*

Health promotion control intervention

- Focus: *knowledge, motivation, comfort, and skills necessary to change mothers' own health behaviors (e.g. physical activity /eating habits, smoking, and substance use)*

DATA COLLECTION



- Data on mother-son sexual health communication were collected from both mothers and son *pre-intervention, and 3-, 6-, 12-, 18- and 24-months post-intervention.*
- We tested the intervention's efficacy (vs. control) using linear or logistic generalized-estimating-equation (GEE) models.
- Sex communication – At baseline and each follow-up, mothers and sons were asked whether they had communicated about sexual health in the past 3 months (yes/no).
- We used 6 binary questions: Communications about sexual health were assessed with 6 binary questions: *“Have you and your son talked about (1) sexual intercourse, (2) birth control, (3) AIDS and HIV Prevention, (4) condoms?”, (5) “Have you asked your son if he has a condom before he goes out?” and (6) “Have you given your son a condom?”*

SAMPLE



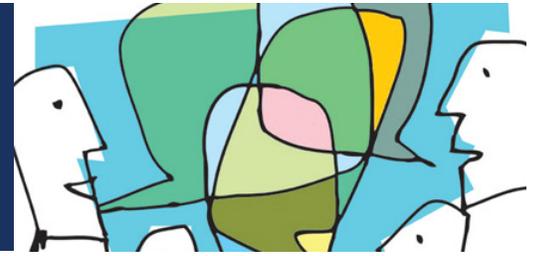
Characteristic	Total	Intervention	Control
N of the mother-son dyad	525	252	273
Mothers			
Age	37.3 (6.9)	37.7 (6.6)	37.0 (7.1)
African American	460/493 (93.3)	221/238 (92.9)	239/255 (93.7)
Married	90/524 (17.2)	49/251 (19.5)	41/273 (15.0)
Employed	202/525 (38.5)	100/252 (39.7)	102/273 (37.4)
Sons			
Age	13.0 (1.3)	13.0 (1.3)	12.9 (1.4)
African American	482/521 (92.5)	230/250 (92.0)	252/271 (93.0)
Ever had vaginal intercourse	240/511 (47.0)	110/244 (45.1)	130/267 (48.0)
Had vaginal intercourse past 3 months	137/492 (27.8)	67/238 (28.1)	70/254 (27.6)

RESULTS



Outcome	Unadjusted for BL		Adjusted for BL	
	Estimate (95% CI)	P value	Estimate (95% CI)	P value
Communication about sexual health^a	0.13 (-0.04, 0.31)	.138	0.22 (0.06, 0.37)	.006
Talked about sexual intercourse^b	1.09 (0.89, 1.33)	.405	1.23 (1.00, 1.50)	.046
Talked about birth control^b	1.09 (0.87, 1.35)	.404	1.25 (1.01, 1.56)	.038
Talked about AIDS and HIV Prevention^b	1.18 (0.96, 1.46)	.109	1.31 (1.06, 1.63)	.013
Talked about condoms^b	1.25 (1.01, 1.56)	.038	1.30 (1.05, 1.61)	.017
Asked if son had a condom when son went out^b	1.03 (0.81, 1.31)	.805	1.11 (0.88, 1.41)	.381
Gave son a condom^b	1.42 (1.11, 1.83)	.006	1.64 (1.27, 2.10)	<.001

DISCUSSION



- This study suggests new directions for communication intervention strategies and the importance and value of mother-son sexual health communication.
- Targeting mothers for interventions should be considered a critically important approach for African American sons.
- Future research should test whether, and to what extent, improved mother-son communication can lead to reduced risky sexual behaviors among the sons.
- With extensive community involvement in the initial design of the intervention, all intervention materials can be readily adapted for dissemination through local community-based organizations and churches. However, program adaptation and sustainability need to account for organizational constraints.

QUESTIONS



1. What can we do to facilitate dissemination to more quickly diffuse the intervention?
2. What other factors might further support young African American men to increase safer sex behaviors?