It’s a “Love/Hate Relationship”: Developing Research Affinity for the Non-Researcher

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Objectives

1. Describe the development of a successful program of research
2. Review key research findings to date
3. Develop motivation for active engagement in research processes
My Journey
Background

Thanksgiving Dinner at Haven Youth Center, Inc., Philadelphia, PA

HIV Prevention with Batswana Adolescents in Gaborone, Botswana

Community Health Assessment in Batey Libertad, DR

Youth Steppers at Sharon Baptist Church, Philadelphia, PA
Progression of Inquiry

**BSN**
- Psych MH
- Research

**CHOP NICU**
- Teen moms
- Interest in psychology of sexual risk
- Central line infection research coordinator

**MSN**
- Child & adolescent therapy
- Interest in program development & evaluation

**Pre-doc**
- Mentored research in social & behavioral sciences
- Intervention Development
- International capacity building (Penn-Botswana)

**Post-doc**
- Independent research
- Training in multi-method health equity research

**Assistant Professor**
- High priority area of science
- Expanded network of collaborators
My Program of Research

- **Research Activities**
  - Community-based participatory research (CBPR)
  - Concurrent and sequential mixed methods approaches
  - Disentanglement of the brain-behavior relationship through biobehavioral research

- **Research Activities**
  - Randomized control trials
  - Translational research
  - Policy and clinical practice guideline development

- **Research Activities**
  - Historical analysis
  - Geographic information systems (GIS) and social mapping
  - Management of large datasets

- **Research Activities**
  - Key stakeholder and community expert involvement
  - Member checking
  - Advocacy

**Sexual Health Promotion in Disenfranchised Populations**

- **Individual-level Factors**
- **Social and Structural Context**
- **Intervention Development, Testing, & Dissemination**
- **Community Mobilization**
Significance

- Women, racial and ethnic minorities, and youth are disproportionately affected by adverse sexual health outcomes.
- This bears significant implications for public health, and the health of future generations.
- Social and structural factors must be explored as they intersect with individual behaviors, driving health inequities.
Impact

• Sexual health is a high priority area for the National Institutes of Health, the Centers for Disease Control and Prevention and Healthy People 2020

• Innovative research methodologies can be used to understand the decisions people make regarding their sexual health

• The development, testing and dissemination of comprehensive, evidence-based sexual health promotion strategies is essential for improved health outcomes
Elucidate salient individual-level factors that protect against or increase risk for HIV/STIs

Sexual Health Promotion in Disenfranchised Populations
What are the underlying attitudes and beliefs?

Funding: Hampton-Penn Center for Health Disparities Research (NIH/NINR P20NR008361 [PI: Jemmott, L., Pilot Project PI: Brawner, B.])
Type of Study: Pilot Study

Purpose: To elucidate attitudes and beliefs regarding depression, HIV/AIDS and HIV risk-related sexual behaviors

Design: Descriptive qualitative; semi-structured face-to-face interviews

Convenience Sample (N = 24): Clinically depressed African American adolescent females (13 to 19 years old; $M = 16$) currently receiving outpatient mental health treatment

Measures
- Semi-structured interview guide
- Background information questionnaire (demographics, sexual behaviors, condom use beliefs and intentions, substance use, protective factors, and AIDS knowledge; Cronbach’s $\alpha$ ranged from .61 to .98)
- Patient Health Questionnaire-9 (PHQ-9; Cronbach’s $\alpha = .89$)
Notable Findings/Contributions

• Mental illness and HIV/AIDS are highly stigmatized—people who need help may not feel comfortable seeking services

  • “…It’s just you and this dark room, nobody else. Your family is having a good time, they’re outside the walls. But also you have family…that’s near the walls…trying to open up but instead of you lettin’ them in, you’re keeping them out”

• Low AIDS knowledge (57%), 75% were sexually active, average of 2 sexual partners/year

• Given the overlap in depression and risk for HIV/STIs, it is important to understand attitudes and beliefs toward these factors in clinically depressed populations

Elucidate salient individual-level factors that protect against or increase risk for HIV/STIs

Explore the social and structural context in which relationships develop and sexual behaviors occur

Sexual Health Promotion in Disenfranchised Populations
What is the context of sexual relationships?

Funding: Substance Abuse and Mental Health Services Administration at the American Nurses Association Minority Fellowship Program (S SM058566-02), Hampton-Penn Center for Health Disparities Research (NIH/NINR P20NR008361 [PI: Jemmott, L., Pilot Project PI: Brawner, B]), and Fontaine Society Fellowship
Type of Study: Dissertation Research

Purpose: To better understand the context of sexual risk for HIV, drawing comparisons between depressed and non-depressed participants.

Design: Sequential exploratory mixed methods research (QUAL → QUAN)

Convenience Sample (N = 128): Clinically depressed (n = 64) and non-depressed (n = 64) African American adolescent females (13 to 19 years old; M = 15)

Measures

- Background information questionnaire (demographics, sexual behaviors, condom use beliefs and intentions, substance use, protective factors, and AIDS knowledge; Cronbach’s α ranged from .69 to .86)
- Patient Health Questionnaire-9 (PHQ-9; Cronbach’s α = .89)
Notable Findings/Contributions

• Depressed participants reported:
  • Higher frequency of having ever had sex (78% vs. 59%, $X^2 = 5.236$, $p = .022$)
  • Higher $M$ of sexual partners (2 vs. 1, $t = -2.023$, $p = .048$)
  • Higher $M$ of sexual encounters under the influence of drugs and alcohol (8 vs. 2, $t = -3.078$, $p = .005$)

• Non-depressed participants used condoms more frequently ($U = 356.5$, $p = .037$); however, there were no statistically significant differences in condom use attitudes and beliefs

• Clinical depression was a moderator between an adolescent females’ hedonistic beliefs and condom use at last sex ($X^2 = 37.038$, $p < .001$)
Notable Findings/Contributions

- Fear of abandonment, search for attention and emotional release, and resultant inclination to acquiesce to one's partners demands, such noncondom use and engaging in undesired sexual activity, may explain increased risk

- “... it’s like you wanna give your feelings up to somebody, you just don’t know who to give ‘em to so you’ll just do anything that’ll make your feeling more better...you’ll try anything”

- Sex provides validation, acceptance and comfort

- Strategies are needed to encourage other means to meet these needs, or to facilitate the enactment of safer sexual practices


Elucidate salient individual-level factors that protect against or increase risk for HIV/STIs

Explore the social and structural context in which relationships develop and sexual behaviors occur

Mobilize communities and integrate findings to identify modifiable factors

Sexual Health Promotion in Disenfranchised Populations
Is there a biological susceptibility to sexual risk?

Funding: Distinguished Postdoctoral Fellowship (Offices of the University Provost and School of Nursing Dean [PI: Brawner, B.])
Type of Study: Preliminary work to support a K99/R00

Purpose: To explore attitudes and beliefs among urban adolescent females, and parents/guardians of urban adolescent females, about participating in biobehavioral research

Design: Concurrent nested mixed methods study (QUAN + QUAL)

Convenience Sample (N = 60): Urban adolescent females currently receiving outpatient mental health treatment (n = 37) and parents/guardians (n = 23)

Measures

- Semi-structured focus group guide
- Background information questionnaire (demographics and research attitudes and beliefs)
Notable Findings/Contributions

• A large degree of skepticism and mistrust for research exists, with particular concern for “guinea pig” studies that involve the collection of blood and genetic information
  • “You don’t know what that person might do with your information” (adolescent)
  • “it’s like a guinea pig type thing as far as me because you’re experimenting on my body” (parent)

• Some, however, viewed participation as a way to learn new information about their health, or to help someone else
  • “They may find out something and it gives you a fighting chance at that point” (parent)
  • “How you can, like, help with a cure for something” (adolescent)
Notable Findings/Contributions

- We must acknowledge and validate the community’s fears, skepticism and concerns upfront

- Positive research attitudes should be bolstered to facilitate participation

- A K99/R00 application was submitted to explore neurobiological influences on sexual risk behaviors in clinically depressed adolescent females
  - The grant was scored and is currently in revision as a small R01


Gomes, M. M. and Brawner, B. M. Perspectives from parents/guardians on biobehavioral research with urban adolescent females with mental illnesses (manuscript under review)
The REAL DEAL with RESEARCH

[Real] answers to questions you might have about research and what you should know before you participate.
What individual, social and structural factors shape the risk context?

Funding: Community-Based HIV Education Research Program for Diverse Scholars (NIH/NIMH 5 R25 MH087217 [PI: Guthrie, B., Pilot Project PI: Brawner, B])
Type of Study: Preliminary work to support a R01 application

Purpose: To conduct a multi-method, multi-level investigation of factors that contribute to the HIV/AIDS epidemic among Black Philadelphians

Design: Formative, comparative neighborhood-based study

Sample: Black Philadelphians 18+ from four census tracts

Methods
- Team-building and elicitation research (focus group and surveys)
- Secondary data analyses (HLM, Bayesian Simulation)
- Neighborhood ethnography with GIS mapping
- Data integration and member checking
Figure 3: HIV Prevalence and Vacant Parcels in Philadelphia

Legend:
- Vacant Parcels 2010
  - 1 foot = 1
  - vacant parcel

HIV Prevalence
- Not available
- Less than 5 cases
- 35 or more cases
Notable Findings/Contributions

• Social and structural factors affect health above and beyond individual behaviors

• Complex, multi-level prevention systems are required to address the HIV epidemic

• Certain environments appear to be “brooding grounds” for HIV transmission
  • This is particularly salient when sexual networks are geographically and/or socially constrained

Elucidate salient individual-level factors that protect against or increase risk for HIV/STIs

Explore the social and structural context in which relationships develop and sexual behaviors occur

Develop, test and disseminate multi-level sexual health promotion interventions

Mobilize communities and integrate findings to identify modifiable factors

**Sexual Health Promotion in Disenfranchised Populations**
How can we effectively intervene?
Type of Study: Intervention Development

Purpose: To develop and test a theoretically-driven, gender and culturally relevant, developmentally and psychologically appropriate HIV/STI risk reduction intervention for Black adolescents with mental illnesses in partnership with the community.

Design: Randomized Control Trial

Sample (N = 128): Heterosexually-active Black adolescents (ages 14 to 17) currently receiving outpatient mental health treatment

Methods
- Team-building and elicitation research (focus group and surveys)
- Behavioral intervention trial
Notable Findings/Contributions

• Emotional regulation is a key factor in sexual risk taking among Black adolescents with mental illnesses

• Gender double standards are prevalent

• Interventions solely based in cognitive/rationale strategies may not be effective for this group

• Synergistically merging advances in mental health treatment and HIV prevention may be most efficacious

How will this program of research benefit the public?
Direct and Sustainable Research Implications

- Community Members
- Clinicians
- Policy Makers
- Administrators
- Educators
- Researchers

Health Equity Promotion through Biobehavioral Research
Take Home Message

• Every aspect of our practice is driven by research
  • Scales & inventories for patient assessments
  • Medication dosing and administration
  • Nursing care protocols
  • Documentation standards
What will you do with your love for research?
Thank you!

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