Advancements in the Field of Behavioral and Social Sciences through the Lens of HIV Research

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Integration of Behavioral and Social Science in HIV/AIDS Research

• Behavioral and Social Science Framework
• Stigma: Components, Pathways and Targets for Intervention
• Social Networks: Strengths and Strategies
• Implications Beyond HIV/AIDS
Behavioral and Social Science Research in HIV/AIDS
A Functional Framework

Gaist & Stirratt, JAIDS, 2017
Multi-level Factors Influencing HIV Risk and Care Across the Lifespan

**Sociocultural**
- HIV-related stigma
- Gendered sexual scripts
- Policies/Laws

**Community**
- Access to friendly HIV services
- Condom and PrEP Availability
- Community Awareness
- Social/sexual networks

**Interpersonal** (family, peers, partners)
- Power dynamics
- Intimate partner violence
- Parental monitoring

**Individual**
- Physiological factors
- Substance use
- Mental health
- Knowledge
Behavioral and Social Science Research
Current Priorities

HIV Prevention

Uptake of PrEP
Behavior Modification
Routine HIV Testing

Psychological Processes
- Mental Health (e.g., Depression)
- Comorbidities
- Stigma
- Resiliency
- Social Support

Linkage to HIV Care

Adherence Treatment as Prevention (TasP)

Key Populations

HIV Testing

Policy
- Financial Assistance
- Food Security
- Violence
- Social Networks

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What is stigma?
- Stigma is a perceived negative attribute that causes someone to devalue or think less of the whole person*

What are the types of stigma?
- Experienced
- Perceived
- Internalized

How does stigma affect health outcomes?
- Barrier to testing
- Challenge to treatment initiation
- Interferes with adherence and retention and care
- Can lead to increased morbidity and mortality

*Healthy Place (https://www.healthyplace.com/stigma/)
Understanding the Role of Stigma

If you invest in stigma reduction…

...the ripple effect will impact all HIV and AIDS programs and services, reaching more people in a single community

Coverage across community served

If you invest in stigma reduction…

Stigma-reduction intervention

- Provision of healthcare
- Palliative care
- Family support
- Community support

Care and Support

- PMTCT
- VCT
- Disclosure
- Risk behaviors

Prevention

- Timely uptake
- Adherence

Treatment

NIH National Institute of Mental Health
Components of Stigma

Factors that can be intervened on with a goal of reducing stigma as a barrier to care and overall health outcomes.

Turan, 2017
Mechanisms for the Negative Effects of Internalized HIV-Related Stigma on ART Adherence in Women: The Mediating roles of Social Isolation and Depression
• Common stigma dimensions allow for advancements in **measurement and monitoring**

• Estimating the **prevalence** and **burden** of stigma will enable examination of relative contribution of multiple social influences

• Understanding the **mechanisms and pathways** of how stigma differently affects behavior and health outcomes will advance intervention development and programming

• Identifying **barriers** (e.g., intersectional stigma) in the uptake of efficacious interventions allows for development of strategies to reach disadvantaged populations
What is a social network?

- A network of social interactions and personal relationships*

What is social networking?

- The use of dedicated websites and applications to interact with other users, or to find people with similar interests to oneself*.

Why are social networks important?

- How an individual lives depends in large part on how he or she is tied into the larger web of social connections**.
- A focus on networks helps us understand people’s behavior, motivation, etc.

*Dictionary.com; **Cornell Univ. (www.soc.cornell.edu/about/social-networks/)
• Innovation:
  ▪ Used the event-based approach (EBA) to collect sociometric network data over time on an unbounded population of youth at risk for HIV/AIDS.

• Findings:
  ▪ Position in a network affects HIV risk-taking: peripheral youth less engaged in HIV risk behaviors.
  ▪ Young women were more likely to be at the core of the street-based network where HIV risk was elevated.
  ▪ Highest-risk youth were also the most frequently nominated which has implications for social network interventions.

Rice, E. 2012, Am J Public Health; R01MH093336
Can social media be used to increase HIV prevention, testing, and retention in care?

- Randomized controlled trial with 6-month and 1-year follow-up
- Peer leaders deliver the intervention on social media communities. Goal is for participants to disseminate behavior change within the group and in their own networks
The HOPE Study: Main Outcomes

- Among US-based African American and Latino MSM, 44% of intervention group participants requested an HIV self-test compared to 20% of control participants (Young et al., 2013)

- Among Peruvian MSM, 17% tested for HIV at a local CBO in the intervention group, compared with 7% of control participants (Young et al., 2014)

- The more friends a participant made in the study, the more likely they were to test for HIV, follow-up for test results, and participate in the groups (Young et al., 2014)

- High retention: 94% at 12-week follow-up and more than 82% at 15-month follow-up (Young et al., 2014)


• Expands our understanding of factors beyond the individual that influence health behavior

• Understanding the influence of social network characteristics and functions on behavior and health outcomes will advance intervention development and programming

• Leveraging new social network approaches will identify the role of peers, norms, and community patterns in explaining negative attitudes toward stigmatized communities and related outcomes
Model of peer influence linking social networks, HIV stigma, and health outcomes

- Perceived Norm (anticipated stigma)
- Own Attitudes (Internalized Stigma)
- Social Norms conveyed through Social Networks
- Health Outcome Access to Care

The influence of social networks has a causal effect on one’s own beliefs (internalized stigma), and the effect is mediated by anticipated stigma. Social norms, anticipated stigma, and one’s own beliefs exert independent causal effects on behavior, prevention and treatment outcomes.

Adapted from Perkins (1997)
Thank You

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