Fidelity Testing of an HIV Prevention Intervention: An Opportunity to Enhance Nursing Students’ Research Experience
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Disclosure

• Conflict of Interest
  ▪ The authors declare that there are no relationships, conditions, or circumstances that present a conflict of interest relevant to the content of this presentation.

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Objectives

1. Establish fidelity for an Motivational Interviewing (MI) – Behavioral Skills Building (BSB) prevention intervention
2. Determine training needs of health care providers delivering the HIV prevention intervention
3. Enhance nursing students’ research experience

Great learning starts with the end results in mind
Background & Significance - HIV/AIDS

• Leading cause of death globally among women of reproductive age.
• Primary mode of infection in women: heterosexual transmission
• Adolescent young women particularly vulnerable – age & gender power differentials
• Pharmacological prevention - targeted toward high risk individuals, limited access
• Consequently, must rely on behavioral interventions to prevent HIV
Motivational Interviewing (MI) Behavioral Skills Building (BSB)

• MI & BSB - behavioral interventions proven to be efficacious
• Dynamic & flexible enough to address cultural inclusiveness and differences in adolescent & adult development
• MI & BSB HIV prevention interventions: delay & reduce intercourse, ↑ condom use, ↓ number of sexual partners, ↓ sexually transmitted infections
MI & BSB

• Strengths
  ▪ Dynamic & flexible
  ▪ Can tailor interventions to individual needs

• Challenges
  ▪ Fluidity of MI & BSB poses threat to intervention fidelity
  ▪ Fidelity - degree to which intervention is delivered as intended

• To address threat, fidelity testing is imperative
Nursing Students as Research Team Members

• Graduate nurse practitioners students
  ▪ Ideal individuals for MI/BSB training & fidelity testing
  ▪ Similar in MI/BSB knowledge to other primary care health care providers

• Hands-on participation in faculty research endeavors may serve as motivator for students to pursue research career

• Given nursing faculty and nurse scientist shortage, important to foster next generation of nurse researchers
Site & Sample

Site: Massachusetts General Hospital (MGH) Institute of Health Professions

Sample: 3 Research Assistants (RA) - Graduate Nursing Students
Methods

Measures of Fidelity

• Fidelity
  ▪ Degree to which intervention is delivered as intended

• Measures
  ▪ MITI
  ▪ BECCI
Measure of Training Needs

• Determined by length of time for Research Assistants to achieve fidelity in intervention delivery
Measures of Students’ Research Experience

• Students’ self-report
• Faculty member/principal investigator’s observations
Procedures

• 3 graduate nursing students hired as RAs
• Interactive training sessions with RAs
  ▪ Seven sessions, 3 hours in length
  ▪ Content – HIV/STIs, Adolescent Health, MI & BSB
  ▪ Didactic information, discussion & clinical simulation
• Fidelity testing of MI/BSB intervention
  ▪ Iterative process
Results

Objective 1 — Fidelity of Intervention

• Use of MITI & BECA was both instructive & evaluative of motivation interviewing & behavioral skills building techniques

• 15 hours of training to attain fidelity in MI/BSB intervention delivery
Results

Objective 2 — Training Needs of Health Care Providers Delivering MI/BSB Intervention

• Length of time for training determined by iterative process of fidelity testing that guided training session content
Results

Objective 3 — Research Experience for Nursing Students

• Students self-report
  ▪ Increased understanding & interest in research process
  ▪ Opportunity to be part of a research team
  ▪ Knowledge & skill development in topics & methods relevant to clinical practice

• Faculty/PI observations
  ▪ Active engagement in research process
  ▪ Development of teamwork skills
  ▪ Apparent enjoyment of experience
Discussion – Intervention Fidelity

• Achieving intervention fidelity among RAs required intensive MI & BSB training
• Took longer than anticipated
• Implications for health care provider training in behavioral interventions
Discussion — Research Experience for Nursing Students

Challenges

• Lower pay as RA than RN
• Complex work schedules to coordinate
• Time limited experience
• Funding necessary
Discussion — Research Experience for Nursing Students

Benefits
• Hands-on learning
• Connections made: Research of discovery → evidence-based practice
• Research knowledge & methods applied to clinical practice
• Teamwork learning
Conclusions

• Intensive MI-BSB training needed to achieve fidelity of HIV prevention intervention
• Nursing students incorporated effectively into research team with benefits for both students & faculty