Usability and Navigability and Field Testing of an Internet-based HIV prevention program in Mbarara, Uganda

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Acknowledgments

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- Our Youth Advisory Council, comprising 20 youth from secondary schools in Mbarara
- Our Community Advisory Council, comprising adult professionals, parents, and persons living with HIV in Mbarara
- Our Secondary School partners

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Objectives

- To orient audience to current HIV trends among youth in southwestern Uganda
- To consider why the Internet may be a useful approach to reach youth with educational messages
- To introduce CyberSenga, an Internet-based HIV prevention curriculum
- To discuss field testing of CyberSenga
- To consider implications for using Internet-based prevention programs in other resource-poor settings

Background information on CyberSenga

- Sub-Saharan Africa remains the world’s region most heavily affected by HIV, accounting for 67% of all young people living with HIV and for 75% of AIDS deaths
- Among 15–24-year-olds in Uganda who were testing for the first time, HIV prevalence was 3% among young men and 10% among young women in 2002
- Uganda’s HIV prevalence rates are currently estimated to be between 6–7%; in Mbarara, 6%
Background information on CyberSenga

- CyberSenga is a research project that aims to develop and test an Internet program for adolescents in Uganda
- "Senga" is the Luganda term for Auntie, who is the father's sister and is expected to offer guidance to family as they mature
- The completed CyberSenga Program includes modules on:
  - Basic computer skills
  - Sexual Health information (STI, HIV, pregnancy)
  - Problem Solving
  - Communication
  - Motivation to be sexually active versus abstinent
  - Healthy Relationships
  - Condom Skills Building

Background information on CyberSenga

- CyberSenga was developed with input from our Youth and Community Advisory Councils
- In data presented at AIDS Impact in Botswana we reported audience preferences for interactive content with minimal reading; games; humor; and skills building.
Methods and Sample

- Computer skills assessment
- Focus groups for content comprehension
- Beta-testing for usability and navigability
  - These first three activities were carried out with our youth advisory council members
- Field testing of selected program modules
  - Implemented with selected secondary school students in partner schools

### Demographic

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Focus Group for Engagement Assessment

Game: Build a healthy relationship

Module 3: Motivations to be Healthy

Module 5: Forming healthy relationships

Game: Build a healthy relationship

Module 3: Motivations to be Healthy

Module 5: Forming healthy relationships
Focus Group for Engagement Assessment

- Youth found the scenarios realistic.
  - Problem solving module: "These problems are very common...adolescents [are shy] they find it hard to get these condoms".
  - Communication module: "It relates because most adolescents do not speak to the point...and it makes them have quarrels."

- Youth found the activities interesting.
  - Sexual health module: (re: puzzle on abstinence) "it is creative...a good way because teens do not like reading but it is in a game I think it could help them."

- Youth found the skills building activities useful.
  - Healthy Relationships module: "if you pick a solution that is good and you see the tree growing and if you pick the bad solution and see [it] shrinking it can make you choose the right thing."
Field Testing

- Program and assessments delivered all six modules over six weeks to a subset of students at three partner schools
- Brought netbooks into schools because of variability in access to and quality of computers
- Initial experiences with power outages, slow loading resulted in bringing a car battery to power the Internet router, and pre-loading content

Lessons learned

- While it is feasible to deliver an Internet-based comprehensive sexuality education program to secondary school youth in Uganda, there are several critical considerations
  - Computer skills training
  - Ensuring that program is easy to follow and navigate
  - Make sure it is fun and engaging—Before you program!!
  - Make sure it works in the field/setting you intend

Field Testing

- Once participants got through the initial assessments and module, capacity and ease with the program increased
- The average length of time to complete any module among participants was 54 minutes (range 28-71 minutes)
- Continually fluctuating school schedules made consistent delivery of program during field testing a challenge
Next steps

- We are finishing our randomized controlled trial of CyberSenga with 5 partner schools.
- Completed baseline assessments, program delivery, and initial follow-up. Long term follow-up occurring now.
- Data will help to establish the utility of using Internet-based comprehensive sexuality education in resource poor settings, or in settings where access to traditional information is limited or diminishing.