Make It Like the Real World:
Adolescents' Recommendations for the Design of a Digital HIV Prevention Game

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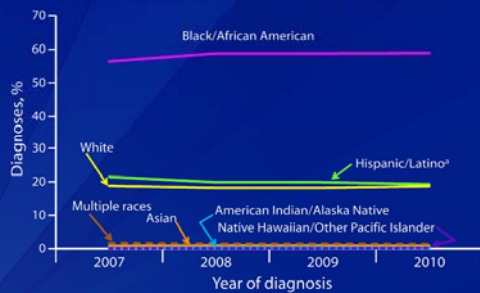Bharat Soni, PhD

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Purpose

- Elicit rural adolescent perceptions of the use of digital gaming in HIV prevention; and essential game content and design features
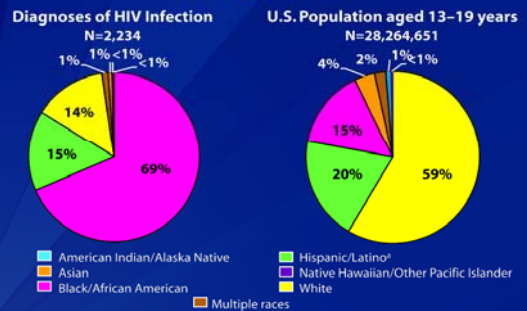
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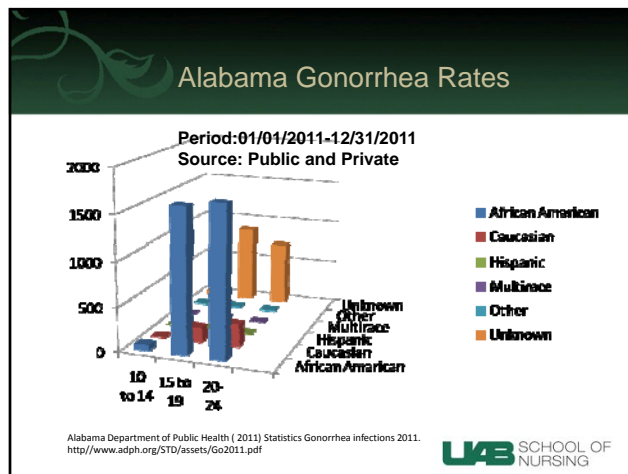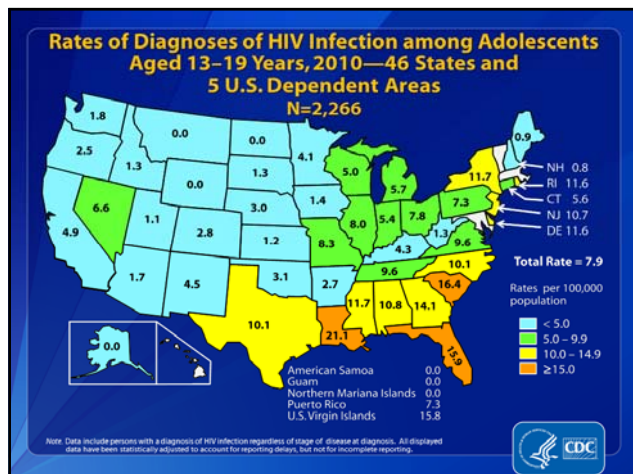Diagnoses of HIV Infection among Adolescents and Young Adults Aged 13–24 Years, by Race/Ethnicity, 2007–2010—46 States and 5 U.S. Dependent Areas

Diagnoses of HIV Infection and Population among Adolescents Aged 13–19 Years, by Race/Ethnicity, 2010—46 States

Rates of Diagnoses of HIV Infection among Adolescents Aged 13–19 Years, 2010—46 States and 5 U.S. Dependent Areas N=2,266

Alabama Gonorrhea Rates

Period:01/01/2011-12/31/2011
Source: Public and Private

Alabama Department of Public Health (2011) Statistics Gonorrhea infections 2011.
http//www.adph.org/STD/assets/Go2011.pdf

HIV Related Risk Behavior

- Progress in reducing HIV related risk behaviors among high school students did not change significantly in the past decade*
- New calls for renewed prevention efforts that seek to delay onset of sexual activity, increase condom use among those who are sexually active*

*Kann, Lowry, Eaton & Wechsler (2012) MMWR 61(29), 556-560

Background

- Existing evidence based interventions developed and tested in other populations
- Need to explore innovative approaches in the rural South

Background

- Neuroscience
  - Maturational processes occurring during adolescence offer opportunities that can be tapped in a digital game to shape judgments and behaviors that have long-term consequences

- Gaming has shown promise in
  - Health risk reduction*
  - Behavioral interventions**
  - Disease self-management***

*DeShazo, J., Harris, L., & Pratt, W. (2010). *Diabetes Technology and Therapeutics*
** Baranowski, T., Buday, R., Thompson, D., & Baranowski, J. (2008). *American Journal of Preventive Medicine, 34*(1), 74-82
*** Peng, W., & Liu, M. (2009). In R. Ferdig (Ed.), *Handbook of research on effective electronic gaming in education (pp. 388-401).* Hershey, PA: IGI Global

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Methodology

- Descriptive qualitative inquiry using focus groups
- Participants were recruited from the service area of a collaborating community-based HIV/Service organization
- Rural adolescent participants, ages 12-16 participated in one of four focus groups.
- Groups segmented by age (12-14, 15-16) and gender (male, female)

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Sample

- Mean age: 14.2 ($\pm$1.5) years
- 55% female
- 7- 11 per group
- 52%) lived with both parents
- 76% of reported household incomes were below $30,000 per year.

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Findings: HIV Prevention Knowledge

- Only 30% accurately responded to all questions
- Accuracy of knowledge questions increased with age
- Areas of lack of knowledge included:
  - Manifestations of HIV
  - Possibility of transmission

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Findings: Major Themes

- Player Control
- Immersive Action
- Virtual Reward Systems
- Tailoring

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Themes: Player Control

- Across all focus groups, participants identified several areas of content and design in which players should have control
  - "How about if you could create your own person. Yeah like an avatar. Yeah, like they have certain clothes to wear."
  - "Could it be like part of the game where we have a child our age and they'll be faced with peer pressure to have sex and drugs and all that...Where you get to choose whether you say no or yes."

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Findings: Themes

- Immersive Action reflecting real life
  - "I think just basically having things that happen in everyday life would make it fun. Like, ah, if a teenager gets drunk and they have a[n] accident, they will probably not want to drink again, if somebody was in the car with them and they got hurt,"
  - "Yeah, show them how they can definitely get HIV...and make sure they know they actually see the effect, make it more realistic and like have them where they've got to go to the doctor for their check-ups and stuff like that right there. And if they don't do that [miss doctor appointments], then what will start happening..."

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Findings: Themes

- Virtual Reward System
  - "It should be like, money like, they do missions (scenarios), like ah, go meet a girl at a club and try not to have sex with her, like don't give in to what she wants to. Like the mission you get like say 50 dollars."
  - "There is like one game I know...like racing cars to earn money for a new car, then exchange the cars and stuff."

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Findings: Themes

- Need for Tailoring
  - "I think boys are way different than girls. They, ah, for real, that's all they think about, see they are talking about drugs, going to jail, crack heads or whatever, alley stuff, that thing [game scenario] will be way deeper than most of us I feel like. We want relationships, stuff like that. I feel like…we are more emotional than boys."

  - "And it should be different, like a practice, then arcade where you can pick what you want to do, or it could be like sceneries[scenarios] like, well it should be sceneries [scenarios]"

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Conclusions

- Summary of Findings
- Implications
  - Practice
    - Comprehensive assessments
    - Counseling and Education
      - include environmental/societal influences,
      - format that allow for some perceptions of control
  - Research
    - Intervention Development
      - Engage target communities early in the process
      - Allow for tailoring
    - Comparative effectiveness of games

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Questions

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