A Game-Based Intervention To Improve Youth Sexual And Reproductive Health In New Delhi, India

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INTRODUCTION

Games have been used to reach a variety of health topics in an array of settings (Badkin, Jagoda, Jonas, & Gilliam, 2018). Games are a useful learning tool because they engage learners in their own education (Jassem, K., 2018). Building on our previous experiences designing and studying board games for health education with adolescents in the United States (Melissa Gilliam et al., 2016a, 2016b), Gilliam, Jagoda, Hebert, & Siddiqui, 2014, McMillan et al., 2016), this project tested the feasibility, acceptability, and efficacy of two games on sexual and reproductive health (SRH) with Indian youth.

METHODS

Recruitment

Through community partnerships, we recruited youth ages 15-24 living in urban slums of New Delhi, India, to participate in a three-day SRH workshop. We included both storyboarding games as both control and one rice game about sexually transmitted infections (STI). The birth control game also had an associated curriculum-based component to ensure that desired messages were emphasized as the game-style was utilized in formal versus informal educational setting.

Games

The two were key translations of the games Clinic Quest and Hearsay, which were initially prototyped by Chicago high school students participating in Healthways Academy. A participatory design project that engaged adolescents on SRH issues through game design (Gilliam et al., 2013). These key prototypes were refined by professional game designers into Clinic Quest and Hearsay. Clinic Quest is a trivia-style game about common STIs and Hearsay is a story-telling game in which participants playing birth control (RC) information.

Measurements

Pre- and post-test instruments were created for both games to assess relevant knowledge, attitudes, and behavioral intentions before and after gaming (after gameplay + curriculum for learning). Analysis

Pre-post changes were assessed using appropriate nonparametric tests due to the sample size and normative sample selection (primarily Melissa Gilliam's normative tests for continuous variables and Mohrman's test for binary variables). Because pre and post surveys assessed a battery of constructs, Holm-Bonferroni corrections were also performed on non-index variables to control for multiple comparisons.

LIMITATIONS

Limitations include short follow-up time, small sample, and lack of control group. Additionally, as Hearsay was assessed with a self-report, the results may not be generalizable to the wider population.

RESULTS

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CONCLUSIONS

Results indicate effectiveness, as well as acceptability and feasibility of two sexual and reproductive health games as educational tools for Indian youth. Findings suggest the board games are particularly suited for the delivery of sexual health knowledge to young people.

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CITATIONS: