

Acceptability of a SBI Approach to Reduce Alcohol/Drug Use and Risky Sex During Pregnancy



Golfo Tzilos, Ph.D.^{1,2}, Christopher Kahler, Ph.D.³, Caron Zlotnick, Ph.D.^{2,4}



¹Department of Family Medicine, University of Michigan, Ann Arbor, MI

²Department of Psychiatry and Human Behavior, ³Center for Alcohol and Addiction Studies, Alpert Medical School of Brown University,

⁴Women & Infants Hospital, Providence, RI

Interconnected Risks and Public Health Concern

- Sexually transmitted infections (STIs) and alcohol/drug use during pregnancy lead to poor fetal outcomes.
- STIs are on the rise in the US. Pregnant women who abuse substances (15%; National Survey on Drug Use and Health) are more likely to engage in STI risk behavior.
- Computer-based screening can overcome a number of obstacles and may identify a higher proportion of at-risk pregnant women.
- We examined the use of a Tablet PC-delivered brief screening and intervention (single session plus booster), the **Health Check-Up for Expectant Moms (HCEM)**, to determine feasibility and self-reported acceptability across several domains.



High Mean Ratings of Acceptability for the Health Check-Up for Expectant Moms (HCEM)

- Women rated their acceptability of the HCEM across several domains (see Fig. 2, below).

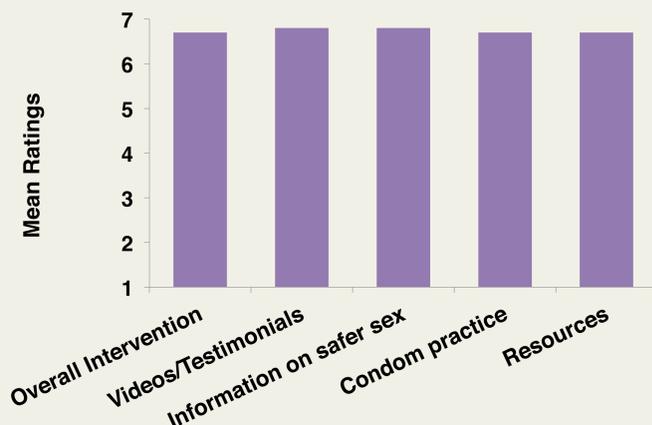


Figure 2. Mean ratings on satisfaction questions, 1 = Very harmful, to 7 = Very helpful

34% of Pregnant Women Eligible

- Eligibility criteria included:
 - unplanned pregnancy at the gestational age of 5 months or less;
 - at least one unprotected sex occasion with a male partner in the past 30 days;
 - risk for prenatal alcohol/drug use.
- 401 women were screened for the study; 135 (34%) were eligible. Of the 50 enrolled, 31 (62%) were randomized to the HCEM condition and 19 (38%) to the time and attention-matched control condition.
- All 50 women (100%) completed the baseline assessment and intervention session, 41 women (82%) completed the booster session within one month after baseline. Forty-nine women (98%) completed the follow up assessment 4 months later.
- Participant characteristics: mean age 24 years (SD = 5.8), 32% Latina, 26% Black or African American. The average number of weeks of gestation was 13 weeks; 52% reported being single; 68% reported receiving public assistance in past year.

- Women rated their experience using the computer software (Figure 3, below). The scale reported participant satisfaction with themes of likeability, ease of use, level of interest, and respectfulness (Ondersma et al., 2005).

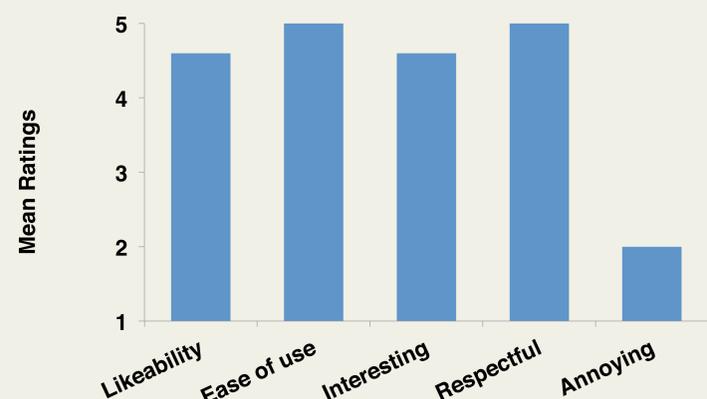


Figure 3. Mean ratings on satisfaction with CIAS, 1 = Low, and 5 = High

Methods and Procedures

- Study procedures took place at the Women's Primary Care Center (WPCC), of Women and Infants Hospital (WIH), in Providence, RI. The RA approached potential participants who were at the clinic for their prenatal visit.
- ACASI (audio computer-assisted self-interviewing) software (Computerized Intervention Authoring Software; CIAS; Ondersma et al., 2007) was used for the screener, assessment, and intervention/booster session.
- The HCEM intervention is theoretically-driven, consistent with motivational interviewing and informed by the IBM (information, motivation, and behavioral skills) model of HIV/STI risk behavior, which links sexual health information and motivation to reduce risk with the development of behavioral skills needed to reduce sexual risk behavior (see Fig. 1, below).

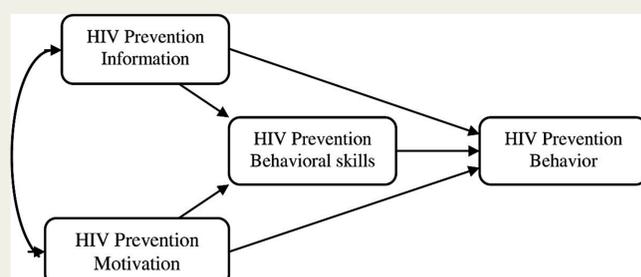


Figure 1. Information-Motivation-Behavior Skills Model. J. Fisher & Fisher, 1992; *Psychological Bulletin*.

Conclusions and Future Direction

- The HCEM is a brief intervention (one session plus a booster session) that is theory-driven, adapted from a previously tested and acceptable brief intervention for at risk women, and targets alcohol/drug use and sex risk reduction during pregnancy.
- Results are very encouraging with respect to the feasibility and acceptability of the computer-delivered HCEM. The completion rate for the 4-month follow up assessment was 98%, and 100% of the women reported feeling respected, and not judged, by the intervention.
- Efforts are underway to test the preliminary efficacy of the HCEM in reducing alcohol/drug use and sexual health risk (e.g., unprotected sex and STIs) during pregnancy.

Acknowledgements

This research was supported by R21 HD075658 (PIs: Tzilos, Zlotnick; Co-I: Kahler). The investigators gratefully acknowledge the research staff at WIH (Cheryl Santos, Kristen DeLayo, and Michelle Scully) for their assistance with data collection and computer programming, and the ongoing mentorship of Dr. Steven Ondersma.