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Technology-Based Health Intervention With At-Risk Teens in Domestic Violence Shelters: A Pilot Study

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Purpose: Violence is a global healthcare issue affecting individual, families, groups, communities, and systems (American Nurses Association & International Association of Forensic Nurses, 2015). One issue of concern is intimate partner violence (IPV). IPV is defined by the Centers for Disease Control and Prevention as "physical, sexual, or psychological harm by a current or former partner or spouse" (2017, para 1). Parental IPV is witnessed by approximately 5.5 million American adolescents (Hambly, 2011; US Census Bureau, 2011). These teens are particularly vulnerable to negative health behaviors such as substance or tobacco use, unhealthy eating, sexual risk-taking, and teen dating violence (Boynton-Jarrett, Fargnoli, Suglia, Zuckerman, & Wright, 2010; Davies, Sturge-Apple, Cicchetti, & Cummings, 2008; Jun, Corliss, Boynton-Jarrett, & Spiegelman, 2012; Olofsson, Lindqvist, Gadin, Braback, & Danielsson, 2011; Simon, & Furman, 2010; Turcotte-Seabury, 2010; Voisin, 2005). Women who experience IPV and their children often seek help at domestic violence shelters (DVS). Many DVS offer peer or professional counseling to assist women to deal with the consequences of IPV, but counseling services for children are often not offered due to limited resources. The purpose of this pilot study was to assess the feasibility and acceptability of the 4-week Time4U Teen Health Intervention (T4U) that was developed to improve the health of teens that live in families experiencing IPV. The specific aims were to (a) assess the feasibility of delivering the T4U intervention in shelters and (b) obtain qualitative post-intervention feedback on the components of the T4U intervention and the attention control (AC) activities.

Methods: Using a quasi-experimental design, 28 teens between the ages of 13-18 who were living with their mothers in DVS and who screened positive for at least one health risk behavior were recruited from one of two participating DVS in a Midwestern US state. Fourteen teens were assigned to the T4U condition and 14 to the AC condition. The T4U intervention consisted of three components: (a) four real-time motivational interviewing (MI) sessions with a lay health worker (LHW) delivered using FaceTime®; (b) online written health messages; and (c) online daily tracking of health behaviors. The AC condition consisted of three components that mirrored the T4U condition, except the AC condition focused on the teen's favorite leisure time activity (i.e., watching sports, watching TV/movies, reading books, listening to music). The Transtheoretical Model (Prochaska & DiClementi, 1984) served as the theoretical framework for the T4U intervention. Feasibility and acceptability were assessed by calculations of recruitment, attendance, and retention rates for the four computer-based T4U or AC sessions and the 8-item Client Satisfaction Questionnaire (CSQ-8) (Larsen, Attkissen, Hargreaves, & Nguyen, 1979), qualitative interviews were conducted to gather feedback about the T4U and AC intervention components and suggestions for change in both T4U and AC.

Results: Twenty-eight teens residing in the two DVSs were enrolled during a 10-month period. Most participants self-identified as African-American and female and ranged in age from 12 to 18 years (median = 14 years). Approximately 80% of eligible teens at the DVS were enrolled. Of those enrolled, 70% of participants completed all four MI or AC sessions. Overall satisfaction ratings for sessions were high for both groups indicating high levels of acceptability. Participant interviews revealed the teens were satisfied with the T4U and AC real-time sessions delivered using FaceTime and were comfortable talking with the lay health worker using FaceTime. The teens provided ideas related to the duration and frequency of FaceTime sessions and recommended changes to the online messages and tracking system.

Conclusion: When testing health interventions, researchers must assess levels of feasibility and acceptability with the target population before conducting larger scale studies. Lessons learned from this pilot study included the following: using multiple strategies of communication promotes participant engagement and retention, gauging participants' acceptability of all intervention components is critical, and viewing study participants as experts fosters gathering of genuine feedback.

Title:

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References:

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Abstract Summary:

Teens who witness parental intimate partner violence often adopt negative health behaviors. This pilot study examined the feasibility and acceptability of Time4U Teen Health -- an intervention to promote positive health. Lessons learned related to retention and intervention acceptability are described and implications for researchers are discussed.

Content Outline:

- I. Background of risky health behaviors and teens exposed to parental intimate partner violence
 - A. Scope of the problem
 - B. Current focus of interventions
 - C. Availability of resources/interventions at domestic violence shelters
 - D. Use of technology to deliver intervention
- II. Purpose of Pilot
 - A. Purpose and Specific Aims
 - B. Theoretical Framework
 - C. Methods Used
 - i. Quantitative measure
 - ii. Qualitative measures
- III. Results
 - A. Intervention Feasibility
 - i. Recruitment rates
 - ii. Retention rates
 - B. Intervention Acceptability
 - i. Attendance at sessions
 - ii. Satisfaction with intervention components
 - C. Qualitative Participant Feedback
- IV. Lessons Learned
 - A. Using multiple strategies of communication promotes participant engagement and retention
 - B. Gauging participants' acceptability of all intervention components is critical
 - C. Viewing study participants as experts fosters gathering of genuine feedback

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Professional Experience: Dr. Smith is an expert in mixed method research. Her training occurred over 5 years of doctoral study. Dr. Smith's line of research focuses on violence against women. Previous studies have examined workplace violence in adolescent workers, teen dating violence, and workplace violence and bullying experienced by student and newly-licensed nurses. Her studies have been funded by the National Institutes of Health, the American Nurses Foundation, and the National Institute for Occupational Safety and Health.

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