

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

Carolyn R. Smith, PhD, RN

Donna S. Martsolf PhD, RN, FAAN

Claire Burke Draucker, PhD, RN, FAAN

Acknowledgements

This pilot study was supported by:

- International Association of Forensic Nurses/American Nurses Foundation Research Grant
- University of Cincinnati Faculty Research Support Grant

Objectives

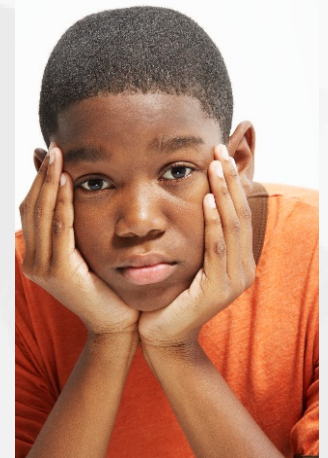
1. Describe the feasibility and satisfaction results of a pilot Time4U Teen Health (T4U) intervention with at-risk teens in shelters
2. Describe lessons learned from pilot T4U

Violence

- Violence is a global healthcare issue
- Intimate partner violence → physical, sexual, or psychological harm by a current or former partner or spouse
- Parental IPV is witnessed by approximately 5.5 million American adolescents

Parental IPV and Adolescent Health

- May be vulnerable to negative health behaviors
 - substance use
 - tobacco use
 - disordered eating
 - sexual risk-taking
 - teen dating violence



Resources

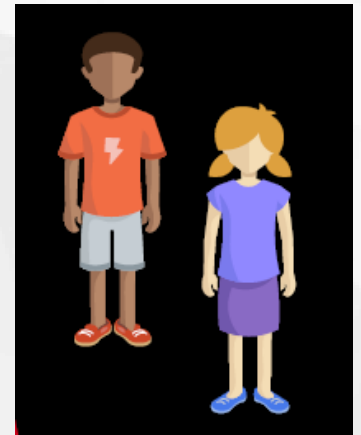
- IPV survivors seek help at domestic violence shelters (DVS)
- Many DVS offer peer or professional counseling to assist IPV survivor
- Counseling services for survivor's children often not offered due to limited resources

Purpose

Assess the feasibility and acceptability of the 4-week Time4U Teen Health intervention (T4U)

Design & Sample

- Quasi-experimental, cross-over design with 2 groups
- Adolescents ages 12-18 years
 - Exposed to parental IPV
 - Have 1+ of target risk behaviors



T4U components

- Four real-time motivational interviewing (MI) sessions delivered using FaceTime®
- Online written health messages
- Online daily tracking of health behaviors



Sample

- 28 adolescents (T4U=13; AC=15)
 - 61% female
 - 74% black, 15% white, 7% more than 1 race
 - Median age = 14 years

Feasibility

- 83% Recruitment
- Session attendance rate
 - 1=100% 2= 85.7% 3+ = 68%
- 64% Retention (post-intervention and follow-up)

T4U Satisfaction

- Session Satisfaction = 92.34 (out of 100)
- Messages = 27.17 (out of 32)
- Tracking system = 27.42 (out of 32)

Qualitative Interviews (4 T4U, 4 control)

- Participants in both groups like program
- Comfortable with sessions via FaceTime®
- Perceived benefits
 - T4U: “learn stuff” about target behavior, engage in behavior change
 - Control: opportunity to express themselves, learn “right from wrong,” and take their mind off being in the shelter

“[You] pick something that interests you, talk to someone about it, and learn how to fix or prevent it.”

FaceTime® sessions

- Praise for the lay health workers (i.e. counselors)
 - Fun and easy to talk to
 - “made me feel comfortable” (AC)
 - “like talking to a friend” (T4U)
- Most wanted more than 4 sessions

Suggested Improvements

- Messages/Tracking system
 - Remind teens daily to visit website
 - Allow teens to use own device
- Technology
 - Deal with “glitches” in FaceTime®

Discussion

- Recruitment rate acceptable but retention rate too high
- Overall adolescents satisfied
- Feedback from teens valuable to make improvements
 - Intervention
 - Mode of delivery

Limitations

- Small sample size
 - 28 enrolled, 18 completed
- Convenience sampling
- Only 2 urban-located shelters involved

Lessons

- Use multiple strategies to promote participant engagement and retention
- Gauge acceptability of all intervention components
- View study participants as experts when seeking feedback

QUESTIONS

References

American Nurses Association & International Association of Forensic Nurses (2015). *Forensic nursing: Scope and standards*. Retrieved from <http://www.forensicnurses.org/?page=ScopeAndStandards>

Boynton-Jarrett, R., Fagnoli, J., Suglia, S. F., Zuckerman, B., & Wright, R. J. (2010). Association between maternal intimate partner violence and incident obesity in preschool-aged children: Results from the fragile families and child well-being study. *Archives of Pediatric & Adolescent Medicine*, 164(6), 540-546.

Centers for Disease Control and Prevention (2017). Intimate partner violence: definitions. Retrieved from <http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html>.

Davies, P. T., Sturge-Apple, M. L., Cicchetti, D., & Cummings, E. M. (2008). Adrenocortical underpinnings of childrens psychological reactivity to interparental conflict. *Child Development*, 79(6), 1693-1706.

References

Hamby, S. (2011). *Children's exposure to intimate partner violence and other family violence*. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Jun, H., Corliss, H., Boynton-Jarrett, R., & Spiegelman, D. (2012). Growing up in a domestic violence environment: Relationship with developmental trajectories of body mass index during adolescence into young adulthood. *Journal of Epidemiology and Community Health*, 66(7), 629-635.

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning*, 2(3), 197-207.

Olofsson, N., Lindqvist, K., Gadin, K., Braback, L., & Danielsson, I. (2011). Physical and psychological symptoms and learning difficulties in children of women exposed and non-exposed to violence: A population-based study. *International Journal of Public Health*, 56(1), 89-96.

References

- Prochaska, J. O., & DiClemente, C. C. (1984). *The transtheoretical approach: Crossing the traditional boundaries of therapy*. Homewood, IL: Dow Jones-Irwin.
- Simon, V. A., & Furman, W. (2010). Interparental conflict and adolescents' romantic relationship conflict. *Journal of Research on Adolescence*, 20(1), 188-209.
- Turcotte-Seabury, C. A. (2010). Anger management and the process mediating the link between witnessing violence between parents and partner violence. *Violence and Victims*, 25(3), 306-18.
- US Census Bureau. 2010 US census: Age and sex composition. 2011.
- Voisin, D. R. (2005). The relationship between violence exposure and HIV sexual risk behavior: Does gender matter? *American Journal of Orthopsychiatry*, 75(4), 497-506.