

Abstract

Development of a Digital Game Intervention Targeting Suicide Prevention in Adolescents Who Misuse Opioids

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Abstract

Background: Suicide is the second leading cause of death in adolescents aged 14-18 years. Adolescents who misused prescription opioids are more likely to experience suicidal thoughts and behaviors than adolescents who did not. Compelling evidence shows “serious games” (ie, games for a purpose other than solely entertainment) can promote healthy behaviors, reduce risk factors, enhance protective factors through skill-building, and target prevention.

Objective: Our primary objective was to design and develop a digital game intervention that models the process of a safety planning intervention. We explored peer and student perceptions around potential warning signs, coping strategies, and seeking help among youth who may be at greater risk of suicide due to misuse of opioids.

Methods: We conducted 8 focus groups with a total of 30 participants, including 9 high school-aged adolescents (aged 16-18 years), 8 college-aged youth (aged 18-21 years), and 13 providers, as well as 5 interviews with adults who had experience with opioids in their youth (aged 40-47 years) to inform the content of the digital game intervention. Focus groups and interviews were conducted via Zoom between February 2022 and April 2022. A semistructured focus group/interview guide was developed, pilot tested, and used in focus groups and interviews. The guides align constructs from the intersectional ecological model to better identify how to help students cope with social and cultural stressors and how to strengthen individual and community assets. Using this lens, questions were related to potential warning signs of emotional distress, coping strategies, and seeking help to prevent suicidal thoughts and behaviors among youth who misuse opioids. Focus groups and interviews were approximately 60-90 minutes. Debrief summaries were completed after each one. Participants received a \$25 gift card and additional mental health and opioid misuse resources following the session. Focus groups and interviews were audiotaped and then transcribed.

Results: Findings will inform the development of a digital game intervention to prevent suicide among adolescents who misuse opioids. Salient themes were extracted from the focus groups and interviews. They include themes related to previous substance misuse, later diagnosis of a mental health disorder, grief, bullying, stigma, family dynamics, and the role of identity. Potential story lines will focus on improving one’s self-esteem, managing conflict at home, navigating peer influence, addressing concerns about seeking help, and increasing access to resources for seeking help based on identity. Gameplay will incorporate techniques that enhance mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance from dialectical behavioral therapy for adolescents.

Conclusions: Digital game interventions may play a critical role in preventing suicide among youth who misuse opioids. Next steps include a pilot randomized controlled trial to evaluate the user experience, acceptability, and feasibility of the intervention in fall 2022.

Conflicts of Interest: None declared.

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KEYWORDS

suicide prevention; opioid misuse; digital game interventions

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