Designing an Instrument to Assess School-Based Peer-to-Peer Heroin and Opioid Prevention Program Outcomes

Katherine Newbegin & Rachel M. Stanton
Project Advisor: Robin Haushner, EdD, NCC, LPC (ID)
Counselor Education and School Psychology Department: Plymouth State University

Abstract

This study examines the issue of adolescent heroin and opioid use in New Hampshire and reviews interventions that positively change adolescent knowledge and perception of use. Prior studies indicate that peer-to-peer storytelling formats have a positive impact on adolescent knowledge and perception of substance use. We identified the Communities for Alcohol and Drug-free Youth’s (CADY) Alex’s Story, a school-based peer-to-peer storytelling prevention program addressing adolescent heroin and opioid use. To assist and improve on providing independent variable – viewing “Alex’s Story” – we designed a survey instrument to assess students’ beliefs and perception of harm. It is hypothesized that by doing so, students who view Alex’s Story will have a) an increased understanding about substance use and addiction, and 2) an increase in perception of harm related to heroin and opioid use when compared to students who do not view Alex’s Story. The implementation process for the survey instrument will be discussed.

Introduction

The National Survey of Drug Use and Health (2011) found that between 2009 and 2013, about 12.7% of all adolescents in New Hampshire reported illicit drug use within the previous month. According to the National Center on Substance Abuse and Addiction (2011), nine out of 10 individuals struggling with addiction began drinking, smoking, and using drugs before age 18. The Center for Excellence (2017) revealed that people had a greater likelihood of experiencing alcohol dependence, drug addiction, injuries, and fatalities if they began using drugs during their adolescence, thus substantiating the need for effective prevention strategies focusing on changing adolescent perceptions and increasing knowledge.

Literature Review

Studies regarding changing youth perceptions around drugs and alcohol have focused primarily on school-administered curriculum and its impacts on alcohol, tobacco, and marijuana use and attitudes. Clark, Ringwalt, Schamblen, and Hanley (2010), studied a schoolwide substance use prevention program (Project SUCCESS) for at-risk students at an alternative high school to build rapport, discuss myths, identify norms, provide support, and address coping. The study positive impacts on students’ perceptions of harm from alcohol and marijuana use and perceptions and acceptability of marijuana use, although heroin and opioid use were not addressed. Take-Charge-of-Your-Life (TCYL) program, a CADDY in analyzing the programmatic impact of “Alex’s Story” on students, we designed a survey instrument to assess students’ beliefs and perception of substance use and addiction, and perception of harm associated with heroin and opioid use. We propose CADDY use the designed instrument as a pre- and post-survey to measure students’ beliefs and perception of harm. It is hypothesized that by doing so, students who view Alex’s Story will have an increased understanding about substance use and addiction, and 2) an increase in perception of harm related to heroin and opioid use when compared to students who do not view Alex’s Story. The implementation process for the survey instrument will be discussed.

CADY’s Alex’s Story Program

While previous studies have focused on instructor perception, peer led interventions, and substance use, there remains a lack of research focusing on peer led interventions and their impact on youth perceptions of heroin and opioid use. “Alex’s Story,” is currently serving as a primary substance use prevention agent in school communities around New Hampshire and is a collaborative project of CADY (Communities for Alcohol and Drug Free Youth) and TIGER (Theatre Integrating Guidance Education & Responsibility).

“Alex’s Story” begins with a dramatic re-telling of Alex’s experience—what lead to his addiction, his influences, and his difficult journey toward recovery, which began with admittance into a residential treatment facility on his 18th birthday. “Alex’s Story” is Alex’s own dialogue, but is retold by a professional actress, in hopes that both men and women could relate. Alex then leads a powerful candid question and answer session about his path toward addiction and recovery. “Alex’s Story” aims to emphasize the reality that any youth could find him/herself on the path toward heroin addiction. Furthermore, they are more likely to become addicted through the use of other drugs, such as: Cocaine, Heroin, and prescription medications. Through the telling of “Alex’s Story,” CADDY endeavors to prevent students from ever misusing opiates in the first place by increasing knowledge and changing perceptions.

Methodology

Sample

This research design aims to evaluate the impact of peer-to-peer storytelling on adolescent perceptions of risk associated with heroin and opioid use. The targeted population includes adolescent students in grades nine through 12. The treatment group consists of students at the school who will view “Alex’s Story.”

As a convenient opportunity sampling, treatment schools will be limited to schools scheduled to view “Alex’s Story” with parental permission for students to take the surveys. The control school will be identified after the treatment school, due to the need to control for demographic consistency between groups.

Youth Substance Use Perception Survey

The questionnaire designed was based on previous research by (Stephens-Hernandez et al., 2007) with a CADDY in analyzing the programmatic impact of “Alex’s Story”. The survey was designed to include questions similar to the survey included in the TCYL program. A Youth Substance Use Perception Survey was administered to high school students from schools, which included cadet programs, to establish a baseline for survey results. The survey included questions assessing substance use knowledge, attitudes, beliefs, and perception of harm related to the use of drugs. The survey was designed to assess students’ perceptions of the risk associated with heroin and opioid use. The targeted population includes adolescent students in grades nine through 12.

Youth Substance Use Perception Survey

The research question is whether exposure to “Alex’s Story” impacts student perceptions and knowledge regarding the risk of heroin and opioid use.

The dependent variable of the study is student perception regarding risk of harm from heroin and opioid use. Manipulating the independent variable – providing the intervention of viewing “Alex’s Story” – will directly affect student perceptions and knowledge regarding heroin and opioid use compared to the control group. Using surveys (see Youth Substance Use Perception Survey), changes in attitudes related to heroin and opioid use will be assessed. More specifically, the instrument will assess perceived risk of harm for others, harm for self, benefits of use, and addiction as a disease. It is hypothesized that viewing “Alex’s Story” will increase knowledge and positive perceptions (increased perceptions of risk for self and others related to heroin and opioid use) compared to those who do not view “Alex’s Story”.

In order to evaluate whether “Alex’s Story” has a true impact on student perceptions, this study will utilize a second school, with parent and school administrative approval, that is not receiving “Alex’s Story”, as a control group. The control school will need to be similar to the treatment school in demographics, including: Student enrollment, socioeconomic status, race, ethnicity, gender, and substance use data. The control school will be given the opportunity to view “Alex’s Story” upon completion of the study. This will ensure that CADDY is serving both populations ethically by providing the treatment to both groups.

The research design includes a randomized controlled trial (RCT) for both populations, including: one group receiving the intervention (viewing “Alex’s Story”) and the other group serving as the control group. The intervention group will be identified after the completion of the study. The survey will be in paper form, group administered, and consist of one double-sided page. There will be five demographic questions, and 13 perception-based questions. The advantage of this design is that it does not require technology or internet and does not take an excessive amount of time to complete. Limitations include: necessary time to review and input data for program analysis, proximity of participants to one another when completing the survey, and self-report (Young, 2010). Survey administrators will emphasize to students there are no wrong answers as this is an opportunity to gather group information regarding the program.

Conclusion

The purpose of this research project is to understand the impact of prior programs similar to CADY’s “Alex’s Story”, and design an instrument to collect data used to inform decision-making and accountability for the CADY program. Specifically, if CADY is able to administer a survey to students who view “Alex’s Story”, and provide data analysis, this organization will be better positioned to discern the program’s impact on student perceptions and knowledge. In February 2016, Senate Bill 353 FN-A (2016) was proposed which would establish a grant program for high school for heroin and opiate prevention education (HOPE). The legislature was proposed to be jointly administered by the TIGER program at Plymouth State University and Communities for Alcohol and Drug-free Youth (CADY). However, in April 2016 the bill was deemed, “inexpedient to legislate” and was killed in the New Hampshire House before being able to establish a one-year grant program providing 84 HOPE presentations to schools in New Hampshire. Providing knowledge and perception data could bolster the efforts of those advocating for program/intervention funding on a community and state-level.

Youth Substance Use Perception Survey

<table>
<thead>
<tr>
<th>Personal Demographics</th>
<th>How much do you agree or disagree with the following statements? (please rate response)</th>
<th>How much do you think you risk harming yourself (physically or otherwise) if you (check one response per question)</th>
<th>How much do you think people risk harming themselves (physically or otherwise) if they (check one response per question)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Please rate response)</td>
<td>(Please rate response)</td>
<td>(Please rate response)</td>
</tr>
<tr>
<td>You are under the age of 18?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are between 18 and 20 years old?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are between 20 and 23 years old?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are over the age of 24 years old?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are male?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are female?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You are of color?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Please rate response)</td>
<td>(Please rate response)</td>
<td>(Please rate response)</td>
</tr>
</tbody>
</table>

...