Adolescent Peer Support Groups to Reduce Risky Behaviors

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Abstract

Background: Adolescent risky behaviors are taking lives daily and it is the responsibility of healthcare providers to address the issue promptly, utilizing evidence-based research findings and expert translation into practice.

Problem: In 2017, Pennsylvania was one of the five highest states for adolescent overdosing, exceeding the national average of 22% (Centers for Disease Control and Prevention [CDC], 2019). Pennsylvania is also listed as one of the 23 states with a significant increase of 16.9% in opioid overdose deaths in adolescents (CDC, 2019).

Methods: The Youth Risk Behavior Survey (YRBS) was administered as part of the peer support group intervention at weeks one and eight for comparison. Data analysis-Relative frequencies and percentages were calculated for categorical data. McNemar's test was used for analysis to determine the statistical significance of behavioral changes

Interventions: A Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD) was used to identify adolescents at risk for substance abuse. Following the BSTAD screening assessment, interventions were offered. The interventions included participation in adolescent peer support groups, education, referral to a counselor, or referral to a substance abuse treatment center.

Results: Fifty-one adolescents were administered the BSTAD. Two adolescents (4%) scored a four, two adolescents (4%) scored a three, three adolescents (6%) scored a two, and 44 adolescents (86%) scored a one. McNemar's test showed that six out of the seven participants that scored a level appropriate for the peer support group intervention revealed that six

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showed improvement equaling eighty-six percent of participants improved in at least one area on the Youth Risk Behavior Survey.

Using McNemar's test findings of fighting, tobacco, and safety behaviors all showed significant changes after the intervention (p=.041).

Conclusion: Reaching adolescents at the earlier stages of risky behaviors reduces the likelihood of progression to more severe behaviors in their future (Zapoloski & Smith, 2017).

When adolescents participate in peer support groups, we may see a reduction in risky behaviors, adolescent overdose, and death related to substance abuse.

Keywords: BSTAD, YRBSS, YRBS, adolescents, risky behaviors, substance abuse

Dedication

The biggest motivating force throughout my post-graduate coursework has been my son Nico, and I would like to dedicate this scholarly project to him. When I was in the Master's program, Nico said to me, "Mom, you're doing so well, you need to get your doctorate." At that moment, we made a deal that if I completed my master's degree with a 4.0-grade point average (GPA), I would pursue my doctorate in nursing. Though he is my biggest inspiration for success, it would be impossible to thank only one individual for this accomplishment. I would like to thank my family, my friends, and most importantly my spouse, John. This accomplishment did not come without sacrifice, struggles, sweat, and tears. I am forever grateful to my family for their guidance, support, and understanding during my challenging and educational journey. I find it essential to thank everyone who has touched my life or who has been involved in my education in some way during the past two years. I attribute my success to every one of these individuals who provided support and encouragement throughout the journey.

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Reducing Risky Behaviors Related to Adolescent Substance Abuse

Adolescent risky behaviors are taking lives daily and it is the responsibility of healthcare providers to address the issue promptly, utilizing evidence-based research findings and expert translation into practice.

The purpose of the Doctor of Nursing Practice (DNP) project was to utilize the Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD) to identify adolescent substance abuse among adolescent patients in a specific pediatric office located in Pennsylvania. The adolescents at risk were offered the opportunity to participate in peer support group sessions to reduce risky behaviors. The goal of the peer support group was to reduce adolescent risky behaviors that may lead to substance abuse. The reduction of adolescent risky behaviors was attained at a minimal cost and provided patient-centered care for those at risk.

Adolescent substance abuse is increasing the overall number of those who are overdosing as well as increasing admissions to the hospitals' intensive care units (ICU). The highest rate of substance abuse begins in the adolescent population (Renstrom et al., 2017). Moreover, most often adults with substance abuse issues began using drugs in their adolescent years. It is, therefore, vital to target for prevention in adolescents between the ages of 13-17 to prevent overdosing and adolescent death.

The purpose of this paper is to describe the evidence-based practice (EBP) change project to address the adolescent substance abuse crisis and to propose a substance abuse risk assessment tool, along with a peer group intervention targeting risky behavior to reduce adolescent substance abuse. To achieve this purpose a substance abuse risk reduction clinical

practice protocol (SARR-GPP) was implemented (Appendix A). The two-pronged approach that was used to identify those at risk and address common risky adolescent behaviors is described.

Problem

Adolescent substance abuse is a global concern and requires immediate preventable measures. In fact, according to the World Health Organization (WHO), drug abuse is accountable for 0.55% of the total financial burden to the United States (Renstrom et al., 2017). Substance abuse is currently one of the most significant national health issues and concerns within the adolescent population (DelRosario et al., 2017).

Substance abuse in the adolescent population is currently a crisis in the United States. In fact, according to the Centers for Disease Control and Prevention (CDC), drug overdose in the United States is at the highest level it has ever been. Sixty-eight percent of substance abuse deaths that occurred in 2017 were directly related to opioids (CDC, 2019). Substance abuse is not only responsible for adversely affecting society, but it is also affecting the economic growth of the country (Vinish & Prasad, 2018). Money that is necessary to manage the substance abuse crisis is taken away from its original allocation.

Vinish and Prasad (2018), recognize substance abuse as a serious global public health and social issue that has no bounds or limitations. Substance abuse is referred to as a social evil because it destroys the basic human function of society along with the economic growth of the country. Many individuals with substance abuse do not seek available treatment thus causing the inability to correctly create policy changes. Substance abuse destroys families' lifestyles and

income. Lastly, substance abuse negatively affects nurses, nursing care, and healthcare organizations financially with repetitive care and readmissions (Nelson et al., 2015).

The increased data derives from prescription opioids, synthetic opioids, and illegal opioids. It is imperative for all healthcare workers including physicians and nurses to take a stand on reducing this national crisis. There has been a 26% increase in deaths related to heroin and an 80% increase in nonmedical opioid deaths over one year from 2013-2014 (Heavey et al., 2017). Currently, the societal cost of substance abuse is approximately 6% of the nation's income and is reaching over 532 billion dollars annually (CDC, 2019).

Adolescent substance use is simply one concern that is the result of adolescent risky behavior. Research supports substance abuse is linked to risky behaviors and that most risky behaviors begin in the adolescent population (Das et al., 2016; Gremmen et al., 2019; Houck et al., 2016).

The pediatric office, located in Pennsylvania, currently does not have a specific protocol for discovering or reducing adolescent substance abuse. The issue is minimally discussed during annual wellness examinations. With the increasing numbers of overdoses, the local hospital has been receiving increased admissions in the Intensive Care Unit (ICU) from adolescent overdosing. Pennsylvania is also listed as one of the 23 states with a significant increase of 16.9% in opioid overdose deaths in 2017 (CDC, 2019).

The current substance abuse protocol of the pediatric office is to mention substance abuse and to provide a very brief educational component during the wellness exam without any questions or the use of any screening tools. Blood work is ordered if a parent suspects

substance use, however, there are not any standardized referral processes or follow-up procedures upon findings. The issue becomes the sole concern of the parents or caregivers.

Furthermore, if a child is taken to a substance abuse counselor by the parent(s), the pediatric office does not have a process in place for follow-up.

Practice Question

For adolescent patients (ages 13-17) who are seen for a wellness examination at a pediatric office in Pennsylvania, does participation in an adolescent peer support group reduce adolescent risky behavior?

Literature Synthesis

Adolescent substance abuse is a national crisis and is growing in many states causing a financial burden (Das et al., 2016; Nelson et al., 2015; Vinish & Prasad, 2018). Adolescent substance abuse is directly related to risky behaviors (Nelson et al., 2015). The synthesis supports a substance abuse risk reduction protocol (Appendix A) that impacts risky behavior. The substance abuse risk reduction protocol is designed to detect risky behaviors and provide leveled interventions based on the results. A Brief Screener for Tobacco, Alcohol and Other Drugs (BSTAD) was utilized to identify adolescent substance abuse among adolescent patients in a specific pediatric office along with offering peer group sessions targeting risky behavior to reduce adolescent substance abuse. Following the BSTAD result, the interventions include; participation in adolescent peer support groups, education, referral to a counselor. or referral to a substance abuse treatment center.

Ten research articles were appraised utilizing various studies, levels of evidence, and quality. Databases used for the literature search process included the Cumulative Index of Nursing and Allied Health (CINAHL), Cochrane, PubMed, and OVID. The advanced search option was used with keywords related to the practice change project "Adolescent peer groups" AND "risky behaviors" AND "case studies." The original search revealed 1500 articles. Once the advanced search was used, 520 articles were revealed. The results were further limited by including only full-text, and peer-reviewed articles that were published within the past five years. The application of the additional inclusion criteria resulted in 56 articles. Each article abstract was reviewed. Any articles that were not age-specific to the chosen population were eliminated, resulting in 21 articles. Next, any articles that used tools other than the BSTAD and the YRBS that were chosen for the practice change project were eliminated. Upon completion, 10 relevant articles were selected to support the evidence-based intervention and practice change project.

Current Knowledge

Substance abuse globally is a serious adolescent public health and social issue (Das et al., 2016; Vinish & Prasad, 2018). More significantly adolescent substance abuse is causing premature mortality and morbidity (Bhatia et al., 2019; Kelly et al., 2017). Das et al. (2016) and Zapolski and Smith (2017), report the mortality rate is directly related to high-risk behaviors in adolescents.

Adolescent substance use is simply one concern that is the result of adolescent risky behavior. Research supports substance abuse is linked to risky behaviors and that most risky

behaviors begin in the adolescent population (Das et al., 2016; Gremmen et al., 2019; Houck et al., 2016). Risky behaviors that are mentioned in the adolescent population include, but are not limited to alcohol use, tobacco, substance abuse, the combination of tobacco and substance use, anti-social behaviors, and premature sexual activity (Das et al., 2016; Gremmen et al., 2019; Houck et al., 2016). The risky behaviors are reduced with various interventions that are directly associated with adolescent risky behaviors (Das et al., 2016; Nelson et al., 2015).

Discovery of Risky Behaviors

Numerous questionnaires and surveys have been used to examine risky behaviors in adolescents (Arbel et al., 2018; Bhatia et al., 2020; Houck et al., 2016; Vinish & Prasad, 2018; Zapolski & Smith, 2017). Specifically noted the Youth Risk Behavior Surveillance Systems (YRBSS) used with this particular intervention is an appropriate tool for the adolescent population as it measures risky behaviors including substance abuse (Arbel et al., 2018; Bhatia et al., 2020; Houck et al., 2016).

Interventions

Adolescent annual screenings for substance abuse, preventative education, and preventative programs such as peer support groups increase mental and physical health while reducing delinquency (Das et al., 2016; Nelson et al., 2015). Any educational preventative support sessions that specifically aim to develop social and psychosocial attributes in adolescents reduce risky behaviors (Das et al., 2016; Nelson et al., 2015). According to Zapolski and Smith (2017), when the intervention provided an educational program, it was deemed

more successful. While Houck et al. (2015) and Jalling et al. (2015) report having prior education related to substance abuse is essential.

As stated by Das et al. (2016) the discovery of adolescent risky behaviors takes place with school-aged males and females most commonly attending middle school. Houck et al. (2016) and Zapolski and Smith (2017), suggest that adolescents tend to participate in risky behaviors to alleviate the stress that naturally occurs in the adolescent lifestyle. Furthermore, Arbel et al. (2018) stated adolescents tend to participate in risky behaviors to alleviate daily worries. It is well understood that adolescence is a difficult time. Between school requirements, normal physical changes, and peer pressure, it is not surprising this population is vulnerable and requires attention and support to thrive.

Experts Researchers contend that there are many ways to reduce adolescent substance abuse (Arbel et al., 2018; Das et al., 2016; Gremmen et al., 2019; Houck et al., 2016; Jalling et al., 2015; Nelson et al., 2015). Adolescent peer support groups appear to be highly recognized and successful for the reduction of adolescent risky behaviors (Gremmen et al., 2019; Houck et al., 2016; Kelly et al., 2017; Nelson et al., 2017; Zapolski & Smith, 2017).

Various Settings and Populations

Adolescent peer support groups have been successfully implemented in many settings besides pediatric offices such as the school setting (Das et al., 2016; Gremmen et al., 2019; Houck et al., 2016; Zapolski & Smith, 2017). Also, adolescent peer support groups have been successful in reducing risky behaviors with the inclusion of family programs (Das et al., 2016; Jalling et al., 2015; Nelson et al., 2015). The peer support groups that showed the most

significant results were when the groups were conducted weekly between eight and twelve consecutive weeks (Kelly et al., 2017; Zapolski & Smith, 2017). Adolescent peer support groups use many techniques; however, motivational, cognitive, and behavioral techniques are the suggested methods for successful substance abuse reduction (Houck et al., 2015; Jalling et al., 2015; Kelly et al., 2017; Zapolski & Smith, 2017). Adolescent peer support and behavioral mentoring, when used as a strategy to reduce adolescent risky behaviors, is well received and is effective in achieving this reduction (Kelly et al., 2017; Zapolski & Smith, 2017). Evidence suggests there are potentially lasting effects for adolescents in a variety of settings with diverse risky behaviors. Adolescents with poor emotional regulation engage in increased risky behaviors (Houck et al., 2015; Zapolski & Smith, 2017).

Also, risky behaviors are sometimes associated with mental health concerns (Das et al., 2016; Houck et al., 2016). For adolescents with emotional and behavioral symptoms, attendance in peer support groups has been associated with an increase in emotional regulation (Houck et al., 2015; Zapolski & Smith, 2017).

Research Limitations

The most common limitation in interventions-focused studies involving adolescent risky behavior is the use of small study samples (Gremmen et al., 2019; Kelly et al., 2017; Nelson et al., 2015; Vinish & Prasad, 2018). Another common limitation is the use of similar recruitment locations (Kelly et al., 2017; Nelson et al., 2015; Zapolski & Smith, 2017).

Purpose

The purpose of the DNP project was to screen adolescents between the ages of 13-17 for substance abuse and provide interventions to reduce risky behaviors that may lead to substance abuse.

The project aimed to reduce adolescent risky behaviors that may lead to substance abuse and was supported by the following objectives: (a) implement the process for administering the screening assessment; (b) provide interventions based specifically on the assessment tool results to the adolescents who score a Level 2, Level 3, or Level 4; (c) implement peer support group sessions weekly for adolescents that participated in the screening; (d) collect and analyze evaluation data.

Evidence-Based Intervention

During a meeting with the stakeholders at a pediatric office in Pennsylvania, it was discovered that the pediatric office did not have a specific protocol in place for adolescent substance abuse. The project interventions were discussed in detail during this meeting with the stakeholders to address the identified practice gap. The current protocol in place was not sufficient to address the needs of the adolescent population, this conclusion was supported by all of the stakeholders. Following this discovery, the practice change that required implementation was to incorporate screening and intervention for adolescent substance abuse that was evidence-based.

Adolescent substance abuse is increasing the overall number of those who are overdosing as well as increasing admissions to the hospitals' intensive care units (ICU). It is,

therefore, vital to target strategies for prevention in adolescents between the ages of 13-17 to prevent overdosing and adolescent death.

The American Academy of Pediatrics (AAP) reported 83% of adolescents are in contact with their pediatrician annually (Levy et al., 2016). The intervention for the DNP project was implemented at a pediatric office in Pennsylvania and included two tools. The tools were used to help identify adolescent risky behaviors that may lead to substance abuse. First, the Brief Screener Tobacco Alcohol and Other Drugs (BSTAD) (Appendix B) tool was implemented during the adolescent wellness examination as per the AAP recommendation (Levey et al., 2016). The second tool used was the Youth Risk Behavior Survey (YRBS) to identify and monitor specific types of risky behaviors that are the leading cause of death in adolescents such as alcohol, tobacco, drugs, diet, and physical inactivity.

The BSTAD tool was administered by the staff. The results of the BSTAD survey generated a risk level for each adolescent. The paper/pen version of the tool was used and the clinical nurses scored the BSTAD. The BSTAD screening tool assigns adolescents to different levels based on their responses to friends' use and personal use. Following the assigned level, each of the levels has specific suggestions for interventions.

BSTAD Level of Interventions

Level 1

No intervention:

• For the DNP project, if the patient responded "No" to the six questions there was no need for interventions or completion of the remainder of the questionnaire.

Level 2

Education on substance abuse.

 For the DNP project, if the response is that the adolescent's friends use any of the items questioned, then substance abuse education to the adolescent from the provider was initiated and documented.

Level 3

Education and referral to a counselor:

• For the DNP project, if the substance use was personal then the adolescent was provided education from the provider and offered the opportunity to participate in an onsite peer support group conducted by the project manager and a licensed therapist.

Level 4

Referral to a counselor and a substance abuse program:

 For the DNP project, high-risk results specific to drug use require a referral to a substance abuse counselor and substance abuse program with scheduled followup appointments.

The DNP project intervention was the implementation of peer support group sessions to identify and monitor risky behaviors that may lead to substance abuse. According to Tracey and Wallace (2016), studies showed an increase in treatment retention, improved relationships with the providers delivering the treatment, social support, increased satisfaction, and reduced relapse rates for adolescents who attended peer support groups. The vast majority (up to 92%) of participants found the sessions to be incredibly helpful and informative (Tracy & Wallace, 2016).

Intervention Process

A Substance Abuse Risk Reduction Protocol (SARR-P) (Appendix A) was developed for this practice change project. The first step of the intervention was the implementation of substance abuse screening during the annual wellness visits for all 13-17-year-old patients using

the Brief Screener Tobacco Alcohol and other Drugs (BSTAD) screening tool. The project team was formed and included the project manager, two receptionists, two clinical nurses, two pediatricians, and one psychiatric-mental health nurse practitioner (PMHNP). The clinical nurses were educated on the administration and the scoring of the BSTAD screening tool. To achieve an adequate sample size, the project manager was onsite for two weeks explaining the practice change project to all adolescents once they checked in for their wellness exam.

The BSTAD screening tool was provided by the receptionist to all adolescents that met the inclusion criteria for the practice change project. The clinical nurses scored the BSTAD and shared the results with the pediatrician. The BSTAD score was reviewed by the pediatrician, and the level of BSTAD intervention was identified. For intervention levels 2, and 3, the pediatrician invited the adolescent to participate in the peer support group practice change project. Those who required Level 4 intervention were referred to an off-site counselor. The nurses entered the data for each patient and turned in the datasheet each Friday afternoon to the project manager

During the checkout process, the adolescents who agreed to participate in the peer support group sessions met with the project manager for the details and the dates of the scheduled sessions. Informed consent (Appendix C) was obtained from each adolescent's parents and each adolescent signed an assent form (Appendix D).

At the initial peer support group session, the adolescents completed the Youth Risk Behavior Survey (YRBS) (Appendix E) that identifies adolescents' risky behaviors. Adolescents participated in the peer support group sessions for eight weeks. The Youth Risk Behavior Survey was administered again at the last peer support group session at week eight.

Education Plan

An education plan was developed. The team members were trained on the Brief Screener Tobacco Alcohol and other Drugs (BSTAD) screening tool and the Youth Risk Behavior Survey (YRBS). After the education was provided, the team members were able to correctly describe how to implement the substance abuse risk reduction protocol and identify reported adolescent risky behaviors.

Implementation Plan

The project manager was on-site during week one for 30 hours to provide education to the healthcare team and the adolescents about the peer support group intervention. The Project Information sheet was posted in the waiting room to inform the patients of the project implementation (Appendix F).

Weeks 2-8: The Youth Risk Behavior Survey (YRBS) was administered at the first peer support group session. The project peer support group intervention was implemented and led by the PMHNP. The peer support group met on Saturday mornings for one hour. The project manager co-facilitated the weekly sessions. Weekly attendance was monitored and tracked.

Week 9: The peer support group concluded this week on Saturday morning. At the last meeting, each participant completed the Youth Risk Behavior Survey (YRBS). The DNP student project manager distributed and collected the YRBS.

Week 10: Final data collection and data analysis were conducted. The findings were shared with stakeholders.

Translational Science Model

The Knowledge to Action (KTA) translational science model was developed by Graham in the early 2000s (Graham et al., 2006). According to Titler (2018), the KTA framework is designed to assist in the translation of evidence-based ethically sound application of knowledge for health improvement along with healthy options and services to improve healthcare. The use of the KTA translation model for creating change in behavior following peer support groups guided the implementation of changes into practice thus creating positive change and overall health improvement. This translation science model was used as the framework for the DNP project regarding reducing adolescent risky behaviors that may lead to substance abuse. The KTA model is a framework used to identify and implement the best knowledge to influence change in practice settings (Graham et al., 2006).

The KTA translation science model has two distinct but related components, knowledge creation surrounded by the action cycle (Field et al., 2104). The action phase acts as the implementation phase and is composed of seven phases (Field et al., 2014). The seven stages of the action component include: (a) identify the problem; (b) put knowledge into the context; (c) assess barriers to using knowledge; (d) tailor and implement interventions; (e) monitor use of knowledge; (f) evaluate outcomes and; (g) sustain the use of knowledge (Field et al., 2014). The literature supports that the KTA framework when using all of the seven stages is more likely to be successful than a single strategy (Field et al., 2014).

Knowledge creation for this project was identified in the literature by searching for screening tools related to substance abuse. Any educational preventative support sessions that specifically aim to develop social and psychosocial attributes in adolescents reduce risky behaviors (Das et al., 2016). Adolescent annual screenings for substance abuse, preventative education, and preventative programs such as peer support groups increase mental and physical health while reducing delinquency (Levy et al., 2016).

The action phase implementation included: (a) adolescent substance abuse identified following the BSTAD screening tool; (b) the BSTAD results and the appropriate implementation based on the screening level; (c) assess barriers such as refusal to participate or parental refusal to allow the adolescent to participate in the peer support group sessions; (d) administration of the YRBS week one and eight of the peer support group that is monitored and tracked; (e) evaluation of all objections and measurable outcomes throughout the project. The anticipated outcome was the reduction of adolescent risky behaviors that may lead to substance abuse.

Organizational Setting

The DNP project took place at a pediatric office, located in Pennsylvania. Currently, the office sees approximately 50 patients daily between the providers including four pediatricians, three physician assistants (PAs), and two certified registered nurse practitioners (CRNPs). The estimated total number of visits weekly with all providers is approximately 515. This includes all appointments, not only wellness exams. The number of wellness exams that are conducted on adolescent patients is approximately 75 a week during routine office visits, with an estimate of 14.5% of the exams are wellness exams.

Population Description

The project was conducted with female and male adolescents between the ages of 13 – 17 years during their annual wellness examinations. Exclusion criteria were any patients that were less than 13 years of age or greater than 17 years of age. The BSTAD screening was composed of all adolescents that were seen for their annual wellness exam within the age parameters during week one of the project, the anticipated sample was 50. Informed consent forms (Appendix C) were obtained from parents for participation in the peer support group sessions and informed assent forms (Appendix D) were provided to the participants for participation in the group sessions. The peer support group sessions sample size was seven adolescents.

Considerations and Challenges for Implementation

Implementation of change in a healthcare setting may be challenging. Potential risks and barriers were identified related to the implementation of the project plan. There was a concern that the office staff may not have additional time to complete the screening. Another concern was the possible refusal of adolescent parental informed consent or the adolescent assent to participate in the weekly peer support group sessions

The project was successful due to the consistent availability of the project manager as well as the continued education provided to the staff, the participants, and the parents of the participants. Maintaining a professional relationship with the stakeholders and keeping them current on the project was beneficial for their collaboration and continued support.

There may be resistance to change when implementing a practice change project.

However, the healthcare team at the project setting was supportive of the project and presented no resistance. One positive strategy that helped to prevent resistance was to form a project team. Consistency with communication delineated individual team member responsibilities, and a common goal is all imperative. Lastly, to reduce the refusal rate, education was provided to the parents and adolescents, and the assurance of confidentiality of the results. Strategies to promote successful implementation of the practice change project included ensuring availability of the project manager; forming a team with specific roles and responsibilities; and providing consistent education to all parties involved in the practice change.

Outcomes

The desired outcome of this project was to reduce adolescent risky behavior that may lead to substance abuse. The measurable outcome for the practice change project was the risky behavior assessment as measured by the YRBS. The process outcomes included the administration of the BSTAD during the wellness examination appointments and the attendance of the adolescent participants in the peer support group sessions.

Approval for Tools

The BSTAD scale (Appendix B) is available on the internet at no cost provided by the National Institute on Alcohol Abuse and Alcoholism. The BSTAD tool consists of 11 questions and was administered to all males and females between the ages of 13-17 during their annual wellness examination. The assessment tool was administered using a pen and paper and was

able to be completed in under ten minutes. The CDC 2019 Youth Risk Behavior Survey (YRBS) is in the public domain and permission to use is not needed.

Brief Screener for Tobacco, Alcohol, and Other Drugs

An important component of the practice change project is the BSTAD tool as it was used to establish the treatment intervention group. The BSTAD, based on a brief screening instrument developed for assessing adolescent alcohol use in the prior year was developed by the National Institute on Alcohol Abuse and Alcoholism (Levy et al., 2011). Participants are first asked about friends' use of alcohol, tobacco use, and other drug use; then personal use, and then, if endorsed, about use over the past 30, 90 days, and one year to broach the topic in a less-threatening manner (Kelly et al., 2014). Kelly et al. (2014) established evidence of concurrent validity for all three domains (alcohol, tobacco, and marijuana) using the area under the curve (.96, .90, and .87), respectively. Additionally, the sensitivity of the three domains is .95, .96, and .80 and the specificity of the three domains is .97, .85, and .93 for alcohol, tobacco, and marijuana, respectively. Although the instrument is purported to have evidence of validity, it should be noted evidence of validity is not presented using either of the two main frameworks as established by Kane (Kane et al., 1999).

Youth Risk Behavior Survey

The primary outcome for this practice change project was a reduction in risky behaviors as assessed by the 2019 Standard High School Youth Risk Behavior Survey results (CDC, 2018). The instrument consists of 89 questions and was administered twice during the project at week one and again at week eight. The instrument has almost 20 years of use and can be completed

in under 20 minutes. The instrument has evidence of validity with the rationale for each item being presented (with references) in documentation accompanying the instrument (CDC, 2018). In the one study regarding evidence of the reliability of the English version of the instrument in a sample of 1679 students in grades 7th through 12th the instrument had good evidence of test-retest reliability when administered 14 days apart (Brener et al., 2002). Kappa values ranged from .14 to .91 for the 53 items on the instrument with 72% of the items being rated as having "substantial" or higher reliability (kappa coefficient of .61 to 1.00) (Brener et al., 2002). Brener et al. (2002) report no significant differences in prevalence estimates between administrations. However, responses of 7th-grade students tended to be less consistent than students of higher grades and thus it was concluded that the Youth Risk Behavior Survey is best suited to those in 8th grade and above (Brener et al., 2002). Despite there being some evidence of validity, no assessment of validity for the Youth Risk Behavior Survey could be found using the well-established criteria of Kane (Kane, 1990, 1992; Kane et al., 1999) or Messick (Messick, 1975, 1980, 1984).

Data Management Plan

The goal of the practice change project was to impact adolescents' risky behaviors as evidenced by changes in the Youth Risk Behavior Survey (CDC, 2018). The conventional statistical framework has the goal of generalizable knowledge which is inappropriate for local quality improvement investigations (Cheung & Duan, 2014). Research studies and practice change projects handle extraneous variables differently. It is not the goal of practice change projects to control for extraneous variables as this is the goal of effectiveness studies (Portela

et al., 2015). In practice change projects it is the tradition to acknowledge the extraneous variables, but not attempt to interfere with the environment or system under study. practice change projects dictate, because of practicality, goal (that being results that are not generalizable), our sample size researchers recognize complete control of extraneous variables to be impossible, impractical, and not applicable taking an approach so as not to get "bogged down" in excessive data collection required when controlling for extraneous variables (Etchells et al., 2016; Etchells & Woodcock, 2018). Therefore, for the reasons outlined above, the sample size was not expanded to support control for extraneous variables.

Project Design

In this project, after the BSTAD was used as a screening tool, the Youth Risk Behavior Survey was administered (CDC, 2018) to adolescents who agreed to participate during the first peer support group session. The participants took part in a peer support group intervention for eight consecutive weeks. During the final support group session in week eight, the Youth Risk Behavior Survey was administered again (CDC, 2018). The intervention created the independent nominal variable by dividing the administrations of the instrument. However, there are several categories of extraneous variables left uncontrolled which thus become rival explanations of any difference between the two administration times confounded with the possible effect of the intervention or independent variables. These extraneous variables include history and maturation. History is one main effect that must be accounted for; during the period between test or survey administrations, many events will occur and may results in a difference in the dependent variable as opposed to the intervention according to (Campbell &

Stanley 1963). The second extraneous variable that may confound results is maturation. In other words, the systematic passage of time affecting the outcome rather than the intervention. Unlike history, maturation is a systematic change and not due to specific events. The explanation for a change seen in the dependent variable being measured is the testing effect – the effect of testing itself. It has been observed participants taking a test again have scores that are systematically different than their initial scores as shared by (Campbell & Stanley 1963). Also, the source of possible error in a pretest-posttest design is instrument decay. In the hard sciences, this source of variation might exhibit itself in the form of loss of calibration. Or psychometric instruments rater may become fatigued at the end of the day or week. However, when a psychometric assessment is used instrument decay tends to be minimized. Finally, the last source of possible error or a pretest-posttest design is statistical regression. This phenomenon occurs when high scores tend to be lower and low scores upon retest tend to be higher echoing an overall average dampening any results seen by the interventions.

Analysis

Data were collected using pencil and paper and entered into a Microsoft Excel spreadsheet according to guidelines outlined by Broman and Woo (2018). Participants used nonidentifying numbers so pre-intervention and post-intervention data could be paired.

Frequencies and percentages (relative frequencies) for categorical data. Where broader insight can be gained using graphical presentation, appropriate graphical methods were used.

In 1947 Quinn McNemar introduced a test for paired nominal data used with 2 x 2 contingency tables with a dichotomous trait with matched pairs of subjects (McNemar, 1947). In this investigation, we have independent (intervention: pre-counseling and post-counseling) and dependent nominal (YRBS subscale) data that are paired making the use of McNemar's test applicable. The test is used to determine if row and column marginal frequencies are equal where counts in the contingency table represent paired values or values repeated over time. In statistics, this is called marginal homogeneity (McNemar, 1947). A requirement of McNemar's test is the rows and columns must have the same levels where; the counts have paired responses; for example, for each observation, the individual responses must be known before and after the intervention (McNemar, 1947). McNemar's test assesses how many participants change from one category in the preintervention period to a different category in the postintervention period. The null hypothesis of the test is if there exists symmetry in the table. In other, words the probability of cell [i, j] is the same as the probability of cell [j, i] (Mangiafico, 2015; McNemar, 1947). Interpretation of McNemar's test can be characterized as there is a substantial change in an answer from preintervention to post-intervention. Analyses were done using R v3.5.2.

Project Management Plan and Gantt Chart

Week 1

The nurses were educated on the practice change project protocol. The project team was formed and consisted of two receptionists, two nurses, two pediatricians, and one PMHNP.

The BSTAD screening tool was provided by the receptionist to all adolescents that met the age

parameters. The data and the spreadsheet for data collection were reviewed. The nurses entered the data for each patient and turned in the datasheet on Friday afternoon to the project manager. Upon completion of the BSTAD results, informed consent and an informed assent were attained before participation in the peer support group sessions. The project manager was on-site during week one for 30 hours to provide education to the project team and the adolescents about the peer support group intervention following the educational plan for the offering.

Week 2

The peer support group started this week on Saturday morning. At the initial meeting, each participant completed the Youth Risk Behavior Survey. The project manager distributed and collected the YRBS. No identifying data was collected.

Weeks 3 Through 8

The implementation of the intervention continued, including the peer support group, led by the Pediatric Primary Care Mental Health Specialist. The peer support group met on Saturday mornings for one hour. Adherence to the protocol was monitored by recording weekly attendance at the peer support group sessions.

Week 9

The peer support group concluded this week on Saturday morning. At this last meeting, each participant completed the Youth Risk Behavior Survey. The project manager distributed and collected the YRBS.

Week 10

Final data collected and the data analysis was then conducted by a licensed statistician.

Preliminary findings were shared with stakeholders.

Proposed Budget

Project resources needed for implementation included the use of a copier, paper supply, and ink supplies for the handwritten questionnaire and was provided by the project manager.

Non-productive time for staff education was covered by the practice site. The questionnaire was completed in the exam room so no additional space was needed. The weekly peer support groups were conducted on Saturdays and there was plenty of space available at no additional cost.

The project was carried out at a minimal cost to the practice. All supplies (e.g., paper, pens, and masks) were provided by the project manager.

Ethical Issues and Considerations

Ethical considerations are for the protection of the organization to protect human rights, privacy, and confidentiality. The organization must provide this screening to every child within the selected age parameters for the prevention of discrimination. In addition, it is also vital to ensure that relevant education was provided following specific results of the screening. The adolescents were provided with an informed assent form before attending the peer group sessions and this assent was added to the electronic medical records (EMR). Parental informed consent was also provided by the parents and placed in the EMR.

Data was anonymous and no identifiable data was collected. The results were reported in the aggregate form only. The paper and pencil YRBS surveys and data collected will be kept

by the project manager under lock and key and will be held for seven years and can only be accessed by the project manager. At the end of seven years, all project management information will be shredded and/or destroyed by the project manager.

The implementations began once the Institutional Review Board (IRB) approval was received. The approval was be received from the Chamberlain University IRB, as one was not required from the pediatric office. The request for approval was initiated in July 2020. Following the review, the determination received was that the project did not require oversite from the Chamberlain IRB as it was not considered to be human subjects research as determined by the Chamberlain University IRB prescreening process.

Results

The BSTAD was administered to 51 adolescents between the ages of 13 – 17 in a pediatric office in Pennsylvania. The original plan was to include 50 participants. The final family that was invited to participate in the project had two adolescents, which increased the number from 50 adolescents to 51 adolescents (Appendix G). Of the 51 adolescents who received the BSTAD, two adolescents (4%) scored a 4, two adolescents (4%) scored a 3, three adolescents (6%) scored a 2, and 44 adolescents (86%) scored a 1. (Appendix G). All adolescents were invited to participate in the intervention. The goal was to include10 participants. Initially, 12 of the screened individuals indicated they would participate: one adolescent (2%) who scored a 3 on the BSTAD, one teen (2%) who scored a 2, and 10 teens (20%) who scored a 1 on the BSTAD. However, five of the adolescents (10%) did not show up for the intervention, resulting in an actual total of seven participants. Of the seven participants, three of the adolescents (43%)

attended all eight intervention sessions, three teens (43%) attended seven intervention sessions, and one adolescent (14%) attended six intervention sessions.

Findings

Findings indicated 86 percent (*n*=6) of participants improved in at least one area. One teen (14%) did not change in any area. One teen (17% improved in three areas (decreased physical fighting, alcohol use, and tobacco use), two teens (33%) improved in two areas, three adolescents (50%) improved in two areas (improved nutrition & physical activity and improved safety precautions & nutrition), and three adolescents (50%) improved in one area (Improved nutrition, decreased alcohol intake, and improved physical activity) (Appendix H).

Of the six YRBS subscales; three subscales showed statically significant improvement: fighting, tobacco use, and safety (p =.041; See Appendix I).

One unexpected consequence noted that affected the number of participants was the governor re-opened all sports that were previously closed due to the COVID-19 pandemic in the United States. Not all of the original group participants that signed up attended the group sessions due to sports obligations.

Discussion

The project was successful. The first noted strength of the project was forming small adolescent peer support groups, this created the ability to freely engage and maintain confidentiality. Secondly, the time frame of eight weeks was a strength of the project, as one hour each week was adequate to make a difference and yet not too long where the participants did not want to attend.

The limitations include that the project was difficult to implement during a pandemic. Many parents refused to let their adolescents participate, as they did not want them in a group setting. We also identified a scheduling conflict for some eligible participants because the sessions were conducted on Saturdays and many students have sports and practice on Saturdays. We identified that there may have been increased participation and engagement if two groups were established for closer age proximity (e.g. 13 – 15-year-olds and 16-17-year-olds). Lastly, the greatest limitation was the responses to some of the questions on the YRBS may have made the participants uncomfortable. Lastly, the greatest limitation was the responses to some of the questions on the YRBS may have made the participants uncomfortable.

We needed to have a plan in place for mandated reporting. The YRBS was confidential however, it was determined that the information about abuse or neglect might have been required to be reported to the appropriate local or state in accordance with applicable law.

The practice change project answered the PICOT question as originally planned. The anticipated sample was 10 and was reduced to 7 because of scheduling conflicts. These results cannot be extrapolated beyond the project population and setting. Small sample sizes increase the risk for a type II error in statical research, causing a skewed result (Kane, 1992). A larger sample size would be needed to ensure the accuracy of results and to represent the larger population. Larger samples have a higher probability of statistical significance (Kane, 1992).

Recommendations

The Pediatric Primary Care Mental Health Specialist (PPCMHS) recommended that in the future to have two separate peer support groups to increase participation and engagement.

One group session with adolescents between the ages of 13-15 and the second group with adolescents between 16 to 17.

Fighting, tobacco, and safety behaviors all showed significant changes after the intervention (p=.041) using McNemar's test. Considering such a small sample did show improvement based on the reduction of risky behaviors revealed by the pre-and post-surveys, future researchers would obtain more accurate data with an increased sample size.

Upon completion of the practice change project in the local pediatric office setting, the leaders have plans to sustain the practice change project and incorporate suggested recommendations.

Conclusions and Implications for Nursing Practice

Adolescents who participated in a screening process followed by participating in peer support group sessions are more likely to improve their current risky behaviors (Zapolski & Smith, 2017). As noted, and observed in the practice change project reaching adolescents at the earlier stages of risky behaviors reduces the likelihood of progression to more severe behaviors in their future (Zapolski & Smith, 2017). The AAP reported 83% of adolescents are in contact with their pediatrician annually (Levy et al., 2016). Upon completion of the YRBS, statistical evidence of improvement was seen on five of the six (83%) subscales (alcohol use, fighting, tobacco use, physical activity, and safety). The reduction in adolescent risky behaviors contributes to the reduction of the financial burden and improves healthcare outcomes in the

pediatric office setting. Overall, the participants discovered a positive peer support group where they were able to learn new ways to reduce risky behaviors. Parental involvement was a key factor in the success of this practice change project (Nelson et al., 2015)

In 2017, Pennsylvania was one of the five highest states for adolescent overdosing, exceeding the national average of 22% (CDC, 2019). The World Health Organization (WHO) reported that drug abuse is accountable for 0.55% of the total financial burden to the United States (Renstrom et al., 2017).

The implications of the project in healthcare include considerations related to policy development. The development of a comprehensive policy regarding the identification and reduction of risky behaviors may serve as a model for other pediatric offices. Following the risk reduction protocol in pediatricians' offices enables the nurses to detect increased risky behaviors in adolescents. This discovery at a young age provided the opportunity to implement an intervention to prevent the consequences of adolescent risky behaviors (Rodgers, 2018). Reducing substance abuse in adolescents will provide nurse leaders better patient outcomes as well as financial savings related to the high cost of substance abuse treatment. In addition, and most importantly, adolescent lives will be saved. Reduced risky behaviors may reduce the global financial burden and reduce adolescent death.

Plans for Sustainability

Each area of the project is specifically broken down and assigned to the members of the healthcare team. The creation of the project team consisted of two pediatricians, two receptionists, two nurses, and one PMHNP. The protocol with the associated algorithm enables

the practice site ongoing success to sustain the practice change. The healthcare team will be responsible and accountable to continue the practice change project. The healthcare team will provide the pediatricians with Excel spreadsheets to keep track of the participants, and the results of the YRBS following the completion of each eight-week group session. The licensed Pediatric Primary Care Mental Health Specialist therapist will be responsible to continue to run the weekly peer support group sessions.

Conclusion

Reaching adolescents at the earlier stages of risky behaviors reduces the likelihood of progression to more severe behaviors in their future (Zapoloski & Smith, 2017).

When adolescents participate in peer support groups, we may see a reduction in risky behaviors, adolescent overdose, and death related to substance abuse.

References

- Arbel, R., Perrone, L., & Margolin, G. (2018). Adolescents' daily worries and risky behaviors: The buffering role of support seeking. *Journal of Clinical and Child Adolescent Psychology,*47(6), 900-911. https://doi.org/10.1080/15374416.2016.1169536
- Bhatia, D., Mikulich-Gilbertson, S. K., & Sakai, J. T. (2020). Prescription opioid misuse and risky adolescent behavior. *Pediatrics*, *145*(1), e20192470. https://doi.org/10.1542/peds.2019-2470
- Broman, K. W., & Woo, K. H. (2018). Data organization in spreadsheets. *American Statistician*, 72(1), 2–10. https://doi.org/10.1080/00031305.2017.1375989
- Brener, N. D., Kann, L., McManus, T., Kinchen, S. A., Sundberg, E. C., & Ross, J. G. (2002).

 Reliability of the 1999 youth risk behavior survey questionnaire. *Journal of Adolescent Health*, *31*(4), 336–342. https://doi.org/10.1016/S1054-139X(02)00339-7
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Houghton Mifflin.
- Centers for Disease Control and Prevention. (2018). *YRBSS Questionnaires*. https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm
- Center for Disease Control. (2019). *Opioid overdose*. Retrieved November 2, 2019, https://www.cdc.gov/drugoverdose/index.html
- Cheung, K., & Duan, N. (2014). Design of implementation studies for quality improvement programs: An effectiveness-cost-effectiveness framework. *American Journal of Public Health*, *104*(1), 23–30. https://doi.org/10.2105/AJPH.2013.301579

- Chung, T., Smith, G. T., Donovan, J. E., Windle, M., Faden, V. B., Chen, C. M., & Martin, C. S. (2012). Drinking frequency as a brief screen for adolescent alcohol problems. *Pediatrics*, 129(2), 205–212. https://doi.org/10.1542/peds.2011-1828
- Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Intervention for adolescent substance abuse: An overview of systematic reviews. *Journal of Adolescent Health*, *59*, 561-575. https://doi.org/10.1016/jadohealth
- DelRosario, G., Khaled, L., Lewis, K., & Lepper, L. T. (2017). Substance abuse screening in adolescents. *American Academy of Physician Assistants*, *30*(11), 52-53. http://doi.org/10.1097/01.JAA.0000525922.99634.0d
- Etchells, E., Ho, M., & Shojania, K. G. (2016). Value of small sample sizes in rapid-cycle quality improvement projects. *BMJ Quality and Safety*, *25*(3), 202–206. https://doi.org/10.1136/bmjqs-2015-005094
- Etchells, E., & Woodcock, T. (2018). Value of small sample sizes in rapid-cycle quality improvement projects 2: Assessing fidelity of implementation for improvement interventions. *BMJ Quality and Safety*, *27*(1), 61–65. https://doi.org/10.1136/bmjqs-2017-006963
- Field, B., Booth, A., Ilott, I., & Gerrish, K. (2014). Using the knowledge to action framework in practice: A citation analysis systematic review. *Implementation Science*, *9*, 172. https://doi.org/10.1186/s13012-014-0172-2

- Graham, I. Logan, J., Harrison, B. M., Straus, E, S., Tetroe, J., Caswell, W., & Robinson, N. (2006),

 Lost in knowledge translation: Time for a map? *Journal of Continuing Education for Health Professionals*, 26(1), 13-24. doi: 10.1002/chp.47.
- Gremmen, M. C., Ryan, A. M., Berger, C. Steglich, C. E.G., Veenstra, V., & Dijsktra J. K. (2019).

 Adolescents' friendships, academic achievement, and risk behaviors: Same-behavior and cross-behavior selection and influence processes. *Child Development*, *90*(2), e192-e211.

 https://doi.10.1111/edev.13045
- Heavey, C. S., Delmerico, M. A., Burnstein, G., Moore, C., Wieczorek, F. W., L Colins, L. R., Chang, Y., & Homish, G., G. (2018). Descriptive epidemiology for community wide naloxone administration by police officers and firefighters responding to opioid overdose. *Journal of Community Health*, *42*(2), 304-311. http://doi 10.1007/s10900-017-0422-8.
- Houck, C. D., Hadley, W., Barker, D., Brown, L. K., Hancock, E., & Almy, B. (2016). An emotion regulation intervention to reduce risky behaviors among at risk early adolescents.

 *Prevention Science, 17(1), 71-82. https://doi.10.1007/s11121-015-0597-0
- Jalling, C., Bodin, M., Romelso, A., Kallmen, H., Durbeej, N., & Tengstrom, A. (2015). Parent programs for reducing adolescent's antisocial behavior and substance abuse: A randomized control trial. *Journal of Child and family Studies*, *25*(3), 811-826. https://doi.org/10.1007/s10826-015-0263-y
- Kane, M. T. (1990). An argument-based approach to validation. *ACT Research Report Series*, 1–49. https://doi.org/10.1037/0033-2909.112.3.527

- Kane, M. T. (1992). The assessment of professional competence. *Evaluation & the Health Professions*, 15(2), 163–182. https://doi.org/10.1177/016327879201500203
- Kane, M. T., Crooks, T. J., & Cohen, A. S. (1999). Designing and evaluating standard-setting procedures for licensure and certification tests. *Advances in Health Sciences Education*, 4(3), 195–207. https://doi.org/10.1023/A:1009849528247
- Knapp, T. R. (2016). Why Is the one-broup pretest–posttestdesign still used? *Clinical Nursing Research*, *25*(5), 467–472. https://doi.org/10.1177/1054773816666280
- Kelly, S. M., Gryczynski, J., Mitchell, S. G., Kirk, A., O'Grady, K. E., & Schwartz, R. P. (2014).

 Validity of brief screening instrument for adolescent tobacco, alcohol, and drug use.

 Pediatrics, 133(5), 819–826. https://doi.org/10.1542/peds.2013-2346
- Levy, S. K., Kokotailo, P. K., & Committee on Substance Abuse. (2011). Substance use screening, brief intervention, and referral to treatment for pediatricians. *Pediatrics*, *128*(8), e1330–e1340. https://doi.org/10.1542/peds.2011-1754
- Levy, S. J., Williams, J. F., & Committee on Substance Use and Prevention. (2016). Substance use screening, brief intervention, and referral to treatment. *Pediatrics*, *138*(1). https://www.doi.org/e2-162120
- McNemar, Q. (1947). Note on the sampling error of the difference between correlated proportions or percentages. *Psychometrika*, *12*(2), 153–157. https://doi.org/10.1007/BF02295996
- Messick, S. (1975). The standard problem: Meaning and values in measurement and evaluation.

 *American Psychologist, 30(10), 955–966. https://doi.org/10.1037/0003-066X.30.10.955

- Messick, S. (1980). Test validity and the ethics of assessment. *American Psychologist*, *35*(11), 1012–1027. https://doi.org/10.1037/0003-066X.35.11.1012
- Messick, S. (1984). The psychology of educational measurement. *Journal of Educational Measurement*, *21*(3), 215–237. https://doi.org/10.1111/j.1745-3984.1984.tb01030.x
- Portela, M. C., Pronovost, P. J., Woodcock, T., Carter, P., & Dixon-Woods, M. (2015). How to study improvement interventions: A brief overview of possible study types. *BMJ Quality and Safety*, *24*(5), 325–336. https://doi.org/10.1136/bmjqs-2014-003620
- Renstrom, M., Ferri, M., & Mandil, A. (2017). Substance use prevention: Evidence based intervention. *Eastern Mediterranean Health Journal*, *23*(3), 198–201. https://www.doi.org/10.26719/2017.23.3.198
- Rodgers, C. (2018). Brief interventions for alcohol and other drug use. *Medicine Wise, 41*(4), 117-120. https://doi.org/10.18773/austprescr.2018.031
- Tracey, K., & Wallace, P. S. (2016). Benefits of peer support groups in the treatment of addiction. *Substance Abuse and Rehabilitation*, *7*, 143-154. https://www.doi.org/10.2147/SAR.S81535
- Titler, M. G. (2018). Translation research in practice: An introduction. *The Online Journal of Issues in Nursing*, 23(2). https://www.doi.org/10.3912/OJIN.Vol23No02Man01
- Ulrich, B., & Crider, N. M. (2017). Using teams to improve outcomes and performance.

 *Nephrology Nursing Journal, 44(2), 141-150.

https://www.ncbi.nlm.nih.gov/pubmed/29165965

- Vinish, V., & Prasad, V. (2018). Knowledge on effects on substance abuse among adolescents: A descriptive study. *Indian Journal of Public Health Research & Development*, *9*(1), 232-237. https://doi.org/10.5958/0976-5506.2018.00043.8
- Wasserstein, R. L., Schirm, A. L., & Lazar, N. A. (2019). Moving to a world beyond "p < 0.05."

 American Statistician, 73(S1), 1–19. https://doi.org/10.1080/00031305.2019.1583913
- Zapolski, T. C.B., & Smith, G. T. (2017). Pilot study: Implementing a brief DBT skills program in schools to reduce health risk behaviors among early adolescents. *Journal of School Nursing*, *33*(3), 198-204. https://doi.10.1177/1059840516673188

Appendices, Tables, and Figures

Appendix A

Substance Abuse Risk Reduction Protocol

These guidelines are in place to reduce adolescent risky behavior.

Adolescent risky behaviors are taking lives daily and it is our responsibility as healthcare providers to address this issue promptly, utilizing our evidence-based knowledge and expert translation of research skills. Substance abuse resulting from risky behavior is one of the eight leading national health issues in the United States. Adolescent substance abuse is rapidly increasing, as well as the number of adolescents who are losing their lives directly related to risky behavior and substance abuse.

All female and male adolescents between the ages of 13 – 17 years during their annual wellness examination will be administered the BSTAD screening as part of their annual wellness examination to assess for risky behaviors. Following the screening, the interventions will be based on the score of the BSTAD. Outcomes that may be expected from the implementation of this risky behavior protocol include the following:

- Risk stratification for entry into the substance abuse risk reduction clinical practice
 protocol measured by the BSTAD
- Intervention outcomes of risky behavior as measured by the YRBSS.

The Commonwealth of Pennsylvania does not require informed consent to attain screenings or surveys during wellness examinations in the pediatric setting. The Commonwealth of Pennsylvania does require parental informed consent for participation in peer support groups.

Informed parental consent will be attained by one parent unless parents are divorced then consent will be required by both parents and must be attained before the first peer group session. In addition, informed assent will also be attained from the adolescent before the initial group session. The Pennsylvania Drug and Alcohol Abuse Control Act12 states that if a minor "suffers from the use of a controlled or harmful substance" the minor can consent to "medical care or counseling related to diagnosis or treatment" without parental consent, and the minor's consent is valid, binding, non-voidable, and cannot be disaffirmed based on the age of minority (Commonwealth of Pennsylvania, 2020). The Pennsylvania minor consent act is provided at the conclusion of this documents in the form of a link.

The substance abuse risk reduction team will consist of two receptionists, two nurses, two pediatricians, and one psychiatric-mental health nurse practitioner (PMHNP).

Team Member Specific Role(s)

Receptionist Administering the BSTAD

Nurses Scoring the BSTAD

Pediatricians Providing education and inviting to the peer support group

sessions

PMHNP Conducting weekly peer support group sessions

All team members will be provided education on the BSTAD and the Youth Risk Behavior Survey (YRBS) before participation in these guidelines.

Intervention Process

Step 1

The BSTAD is provided to all adolescents within the age parameters by the receptionist upon check-in for their annual examination.

Step 2

The BSTAD will be scored (level 1,2,3,4) by the providers' nurse and the appropriate intervention will be implemented.

Interventions:

Level 1

No intervention:

• For the DNP project, if the patient responded "No" to the six questions there was no need for interventions or completion of the remainder of the questionnaire.

Level 2

Education on substance abuse.

 For the DNP project, if the response is that the adolescent's friends use any of the items questioned, then substance abuse education to the adolescent from the provider was initiated and documented.

Level 3

Education and referral to a counselor:

 For the DNP project, if the substance use was personal then the adolescent was provided education from the provider and offered the opportunity to participate in an onsite peer support group conducted by the project manager and a licensed therapist.

Level 4

Referral to a counselor and a substance abuse program:

• For the DNP project, high-risk results specific to drug use require a referral to a substance abuse counselor and substance abuse program with scheduled follow-up appointments.

Step 3

All adolescents that score a Level 1, 2, or 3 will be invited by the pediatricians to participate in the weekly adolescent peer group session. Before participation, parental informed consent and adolescent informed assent are required. Peer support groups will be held weekly and conducted by the onsite PMHNP (Psychiatric/Mental Health). The YRBS will be completed by all participants at the beginning of the first peer support group session. The program manager will collect the completed surveys.

Step 4

The adolescent peer support groups ran for eight consecutive weeks.

Step 5

Upon completion of the weekly support groups, the YRBS was completed by all participants at the end of the final peer support group session. The program manager will collect the completed surveys.

BSTAD Screening

https://www.drugabuse.gov/ast/bstad/#/

YRBSS

https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Commonwealth of Pennsylvania minor consent requirements (2018)

https://casetext.com/statute/pennsylvania-statutes/statutes-unconsolidated/title-71-ps-state-government/part-i-the-administrative-codes-and-related-provisions/chapter-8-provisions-similar-or-closely-related-to-provisions-of-the-administrative-code/pennsylvania-drug-and-alcohol-abuse-control-act/section-1690112-consent-for-minors

Substance Abuse Risk Reduction Protocol Algorithm

All female and male adolescents between the ages of 13 - 17 years during their annual wellness examination will be administered the BSTAD screening as part of their annual wellness examination to assess for risky behaviors that lead to substance abuse. Following the screening, the interventions will be based on the score (level) of the Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD).

Level 1 No intervention. Level 2 Education on substance abuse from the provider will be initiated and Level 3 Education referral to a counselor. Invitation from the pediatricians to participate in weekly peer support group session for eight weeks. Level 4 Informed parental consent obtained. Referral to counselor and substance abuse Informed adolescent assent obtained. Informed parental consent or Informed

Participation in weekly one-hour peer support group sessions for eight consecutive weeks.

Informed parental consent or Informed adolescent assent not obtained the adolescent is unable to participate in the peer support group sessions.

Upon completion of the weekly support groups, the YRBS survey will be completed by all participants at the end of the final peer support group session. The program manager will collect the completed surveys.

Appendix B

Brief Screener for Tobacco, Alcohol, and Other Drugs

FRIENDS' USE		
Do you have friends who		
smoked cigarettes or used other tobacco products in the past year?	□ No	□ Yes
Do you have friends who		
drank beer, wine, or any drink containing alcohol in the past year?	□ No	□ Yes
Do you have friends who in the past year:		
- sniffed or "huffed" anything;		
- took illegal drugs like marijuana (weed, blunts), cocaine, etc;		
- took prescription medications that were not prescribed for them; or		4-1-0
- took prescription or over-the-counter medications and took more than they were sup		
PERSONAL USE	□ No	□ Yes
In the past year, have you		
smoked cigarettes or used other tobacco products?	□ No	□Yes
In the past year, have you		
had more than a few sips of beer, wine, or any drink containing alcohol?	□ No	□ Yes
In the past year, have you:		,
- sniffed or "huffed" anything;		
 taken illegal drugs like marijuana (weed, blunts), cocaine, etc; taken prescription medications that were not prescribed for you; or 		
- taken prescription or over-the-counter medications and took more than you were su	oposed to	take?
	□ No	□Yes
[IF DRUGS ARE ENDORSED IN THE PERSONAL USE QUESTION, ASK THE	FOLLO	DWING:
Which of the following substances have you used in the past year? (check all that app	oly)	
□ Marijuana or Hashish		
□ Cocaine or crack		
□ Heroin		
□ Amphetamines or methamphetamine (nonpharmaceutical)		
□ Hallucinogens (eg, Mushrooms, LSD)		
□ Inhalants		
Which of the following medications have you used in the past year that were not pres which you took more of than you were supposed to take? (check all that apply)	cribed fo	r you or
□ Prescription pain relievers (eg, morphine, percocet, vicodin, oxycontin, dilaudid, n	nethadon	e,
buprenorphine)		
□ Prescription sedatives (eg, Valium, Xanax, Klonopin, Ativan)		
□ Prescription stimulants (eg, Adderall, Ritalin)		
□ Over-the-Counter Medications (eg, Nyquil, Benadryl, cough medicine, sleeping pi	lls)	
[FOR EACH SUBSTANCE WHERE USE WAS ENDORSED, ASK:]		
In the past 30 days, on how many days have you		<u>,</u>
smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]	?	□□ days
In the past 90 days, on how many days have you		
smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]	?	□□ days
In the <u>past year</u> , on how many days have you		
smoked cigarettes or used other tobacco products/used alcohol/used [SUBSTANCE]	? 🗆	□□ days

Appendix C

INFORMED CONSENT FOR PARTICIPATION IN A DNP PROJECT

Project Title:

Adolescent peer support groups to reduce risky behaviors.

Project Manager:

Diane M. Giambra MSN/Ed, RN

What is the purpose of this project?

The purpose of the DNP project is to screen adolescents between the ages of 13-17 for substance abuse and provide interventions to reduce risky behaviors that may lead to substance abuse.

What will I be asked to do if I choose to be in this project?

If you chose to be in this project, you are granting permission for your adolescent to participate in a peer support group and complete a Youth Risk Behavior Screening Survey.

How much time will I be asked to devote to this project?

The Youth Risk Behavior Screening Survey your adolescent was asked to complete can be completed in under twenty minutes. The group sessions are one hour weekly for a total of 8 weeks.

What are the possible risks or discomforts that I might experience?

There is a possible risk of discomfort with the discovery of risky behaviors in your adolescent.

What are the possible benefits for me or others?

The possible benefit for you is identifying risky behavior that may prevent adolescent substance abuse.

What alternatives are available?

The alternative is to not participate.

Do I have to participate?

No, you do not have to participate in this program. Participation is voluntary.

What will happen if I do not participate?

There are no consequences if you decide to not participate.

What will happen if I leave the project?

There are no consequences should you decide to leave the project. Your adolescent will receive the same care from the pediatrician's office.

Will it cost me anything to participate?

There is no cost to participate.

Will I get paid anything if I participate?

You will not be compensated monetarily for participation.

How will my confidentiality and privacy rights be protected?

projects, but *only* with your permission:

The results of this project remain anonymous, no names will be used. Your informed consent will be kept in a locked file cabinet that only the project manager can access. Your adolescent will use a code when completing the pre- and post-survey. All interactions will be private and kept in confidence. The surveys will be stored in a file that only the project manager can access. The data collected will be password protected and all information will be kept under lock and key and can only be accessed by the project manager. Only de-identified, aggregate information will be included in any dissemination of results.

In this project:

	•	
•	Identifiable private in be traced back to you	formation or specimens (private information or specimens that can) will be collected:
	Yes	No 🖂
f yes: •	•	formation or specimens may be used for future practice change ing further permission:
	Yes	No 🖂

Identifiable private information or specimens may be used for future practice change

_____ (initials)

	,	
	Yes	No 🖂
	dentifiable private in rojects:	formation or specimens <u>will not</u> be used for future practice change
	Yes 🔀	No 🗌
Who do	I contact for any qu	estions about this project?
h	•	with someone who is not directly involved in this project, or if you your rights as a participant, contact the DNP Program nberlain.edu.
Is there a	anything else I need	to know?
Y	ou have the opportu	unity to ask questions at any time during the project.
What are	e my rights?	
ir • Y • C p • Y b • If	ncluding respect for ou are free to stop to hoosing not to be in enalty to you or loss ou will be given any elieves is important you want to speak	this project, you have the right to be treated with respect, your decision to stop being in the study. Deing in the project at any time. This project or to stop being in this project will not result in any stop benefits to which you are otherwise entitled. Information that either the project manager or the IRB reasonably to your choice about whether or not to be in this project. With someone who is not directly involved in this project, or if you a your rights as a participant, contact the DNP Program inberlain.edu.
prescree	ned as a practice-ch	en reviewed by the Chamberlain College of Nursing and ange/quality improvement project in collaboration with the tutional Review Board.
I give per	rmission for photogr	raphs or videotapes of me to be used in this project:
	(initials)	
I DO NO	r give permission for	r photographs or videotapes of me to be used in this project:

I have read this form and the project has been explained to me. I have been given the
opportunity to ask questions and my questions have been answered. If I have additional
questions, I have been told whom to contact. I agree to participate in the project described
above and will receive a copy of this consent form after I sign it.

Signature of Parent/Guardian Date

Appendix D

ASSENT FORM TO PARTICIPATE IN DNP PROJECT: MINOR

Project Title:

Adolescent peer support groups to reduce risky behaviors.

Project Manager:

Diane M. Giambra, MSN/Ed. RN

We are doing a project about:

Reducing adolescent risky behaviors utilizing Substance Abuse Risk Reduction Clinical Practice Protocol.

The purpose of this project is to:

The purpose of the DNP project was to screen adolescents between the ages of 13-17 for substance abuse and provide interventions to reduce risky behaviors that may lead to substance abuse.

A project is a way to learn more about people. If you decide that you want to be part of this project you will:

If you chose to participate in this project, you are agreeing to attend a peer support group that will meet weekly on Saturdays for a total of 8 weeks. You will complete the Youth Risk Behavior Survey at the beginning of the sessions and at the end of the sessions (after 8 weeks). The survey is related to adolescent risky behavior.

Not everyone who takes part in this project will benefit. A benefit means that something good happens to you. We think these benefits might be:

For you to identify risky behavior that may lead to substance abuse. Once identified, you will have the opportunity to change the behaviors.

When we are finished with this project, I will write a report about what was learned. This report will not include your name or that you were in the project.

You do not have to participate in this project if you do not want to. If you decide to stop after we begin, that's okay, too. Your parents know about the project, too.

If you decide you want to be in this project, please sign your name.		
I,, want to be in this project.		
(Sign your name here)	 (Date)	

Appendix E

Youth Risk Behavior Survey

2019 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to improve health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B D.
- If you change your answer, erase your old answer completely.
- 1. How old are you?
- A. 12 years old or younger
- B. 13 years old
- C. 14 years old
- D. 15 years old
- E. 16 years old
- F. 17 years old
- G. 18 years old or older
- 2. What is your sex?
- A. Female
- B. Male
- 3. In what grade are you?
- A. 9th grade
- B. 10th grade
- C. 11th grade
- D. 12th grade
- E. Ungraded or other grade
- 4. Are you Hispanic or Latino?
- A. Yes
- B. No
- 5. What is your race? (Select one or more responses.)
- A. American Indian or Alaska Native
- B. Asian
- C. Black or African American
- D. Native Hawaiian or Other Pacific Islander
- E. White

6. How tall are you without your shoes on?

Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

Height	
Feet	Inches
5	7
3	0
4	①
•	2
6	3
7	4)
	\$
	6
	•
	8
	9
	10
	10

Height		
Feet	Inches	
3	0	
4	①	
(5)	2	
6	3	
7	4	
	(5)	
	6	
	7	
	8	
	9	
	10	
	1	

7. How much do you weigh without your shoes on?

Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight		
Pounds	5	
1	5	2
0	0	0
•	① ①	(I)
2	2	•
3	3 4	3
	4	34
	•	(5)
	6	6
	7	7
	8	8
	9	9

Weight		
Pounds		
0	0	0
1	①	①
2	2	2
3	3	3
	4	4
	(5)	(5)
	6	6
	7	7
	8	8
	9	9

The next 4 questions ask about safety.

- 8. How often do you wear a seat belt when **riding** in a car driven by someone else?
- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always
- 9. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol**?
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or more times
- 10. During the past 30 days, how many times did you **drive** a car or other vehicle **when you had been drinking alcohol**?
- A. I did not drive a car or other vehicle during the past 30 days
- B. 0 times
- C. 1 time
- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times
- 11. During the past 30 days, on how many days did you **text or e-mail** while **driving** a car or other vehicle?
- A. I did not drive a car or other vehicle during the past 30 days
- B. 0 days
- C. 1 or 2 days
- D. 3 to 5 days
- E. 6 to 9 days
- F. 10 to 19 days
- G. 20 to 29 days
- H. All 30 days

The next 11 questions ask about violence-related behaviors.

12.	During the past 30 days,	on how many	days did you	carry a weapon	such as a gun,	knife,
or club	?					

- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days
- 13. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife, or club **on school property**?
- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days
- 14. **During the past 12 months**, on how many days did you carry a **gun**? (Do **not** count the days when you carried a gun only for hunting or for a sport, such as target shooting.)
- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days
- 15. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- A. 0 days
- B. 1 day
- C. 2 or 3 days
- D. 4 or 5 days
- E. 6 or more days
- 16. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times

- G. 10 or 11 times
- H. 12 or more times
- 17. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times
- 18. During the past 12 months, how many times were you in a **physical fight on school property**?
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or 7 times
- F. 8 or 9 times
- G. 10 or 11 times
- H. 12 or more times
- 19. Have you ever been physically forced to have sexual intercourse when you did not want to?
- A. Yes
- B. No
- 20. During the past 12 months, how many times did **anyone** force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or more times

- 21. During the past 12 months, how many times did **someone you were dating or going out with** force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
- A. I did not date or go out with anyone during the past 12 months
- B. 0 times
- C. 1 time
- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times
- 22. During the past 12 months, how many times did **someone you were dating or going out with** physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)
- A. I did not date or go out with anyone during the past 12 months
- B. 0 times
- C. 1 time
- D. 2 or 3 times
- E. 4 or 5 times
- F. 6 or more times

The next 2 questions ask about bullying. Bullying is when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way.

- 23. During the past 12 months, have you ever been bullied on school property?
- A. Yes
- B. No
- 24. During the past 12 months, have you ever been **electronically** bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)
- A. Yes
- B. No

The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

- 25. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?
- A. Yes
- B. No
- 26. During the past 12 months, did you ever **seriously** consider attempting suicide?
- A. Yes
- B. No
- 27. During the past 12 months, did you make a plan about how you would attempt suicide?
- A. Yes
- B. No
- 28. During the past 12 months, how many times did you actually attempt suicide?
- A. 0 times
- B. 1 time
- C. 2 or 3 times
- D. 4 or 5 times
- E. 6 or more times
- 29. **If you attempted suicide** during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
- A. I did not attempt suicide during the past 12 months
- B. Yes
- C. No

The next 4 questions ask about cigarette smoking.

- 30. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
- B. No
- 31. How old were you when you first tried cigarette smoking, even one or two puffs?
- A. I have never tried cigarette smoking, not even one or two puffs
- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old

- F. 15 or 16 years old
- G. 17 years old or older
- 32. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days
- 33. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?
- A. I did not smoke cigarettes during the past 30 days
- B. Less than 1 cigarette per day
- C. 1 cigarette per day
- D. 2 to 5 cigarettes per day
- E. 6 to 10 cigarettes per day
- F. 11 to 20 cigarettes per day
- G. More than 20 cigarettes per day

The next 3 questions ask about electronic vapor products, such as JUUL, Vuse, MarkTen, and blu. Electronic vapor products include e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods.

- 34. Have you ever used an electronic vapor product?
- A. Yes
- B. No
- 35. During the past 30 days, on how many days did you use an electronic vapor product?
- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days
- 36. During the past 30 days, how did you **usually** get your own electronic vapor products? (Select only **one** response.)
- A. I did not use any electronic vapor products during the past 30 days

- B. I bought them in a store such as a convenience store, supermarket, discount store, gas station, or vape store
- C. I got them on the Internet
- D. I gave someone else money to buy them for me
- E. I borrowed them from someone else
- F. A person who can legally buy these products gave them to me
- G. I took them from a store or another person
- H. I got them some other way

The next 3 questions ask about other tobacco products.

- 37. During the past 30 days, on how many days did you use **chewing tobacco**, **snuff**, **dip**, **snus**, **or dissolvable tobacco products**, such as Copenhagen, Grizzly, Skoal, or Camel Snus? (Do not count any electronic vapor products.)
- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days
- 38. During the past 30 days, on how many days did you smoke **cigars, cigarillos, or little cigars**?
- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days
- 39. During the past 12 months, did you ever try **to quit** using **all** tobacco products, including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products?
- A. I did not use any tobacco products during the past 12 months
- B. Yes
- C. No

The next 5 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

- 40. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips
- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old
- F. 15 or 16 years old
- G. 17 years old or older
- 41. During the past 30 days, on how many days did you have at least one drink of alcohol?
- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days
- 42. During the past 30 days, on how many days did you have **4** or more drinks of alcohol in a row, that is, within a couple of hours (if you are **female**) or **5** or more drinks of alcohol in a row, that is, within a couple of hours (if you are **male**)?
- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 to 5 days
- E. 6 to 9 days
- F. 10 to 19 days
- G. 20 or more days
- 43. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is, within a couple of hours?
- A. I did not drink alcohol during the past 30 days
- B. 1 or 2 drinks
- C. 3 drinks
- D. 4 drinks
- E. 5 drinks
- F. 6 or 7 drinks
- G. 8 or 9 drinks
- H. 10 or more drinks
- 44. During the past 30 days, how did you **usually** get the alcohol you drank?

- A. I did not drink alcohol during the past 30 days
- B. I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station
- C. I bought it at a restaurant, bar, or club
- D. I bought it at a public event such as a concert or sporting event
- E. I gave someone else money to buy it for me
- F. Someone gave it to me
- G. I took it from a store or family member
- H. I got it some other way

The next 3 questions ask about marijuana use. Marijuana also is called pot, weed, or cannabis.

- 45. During your life, how many times have you used marijuana?
- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 to 99 times
- G. 100 or more times
- 46. How old were you when you tried marijuana for the first time?
- A. I have never tried marijuana
- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old
- F. 15 or 16 years old
- G. 17 years old or older
- 47. During the past 30 days, how many times did you use marijuana?
- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

The next question asks about synthetic marijuana use. Synthetic marijuana also is called Spice, fake weed, K2, King Kong, Yucatan Fire, or Skunk.

48. During your life, how many times have you used synthetic marijuana?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

The next question asks about the use of prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it. For this question, count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.

- 49. During your life, how many times have you taken **prescription pain medicine** without a doctor's prescription or differently than how a doctor told you to use it?
- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times

The next 8 questions ask about other drugs.

- 50. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?
- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times
- 51. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
- A. 0 times
- B. 1 or 2 times
- C. 3 to 9 times
- D. 10 to 19 times
- E. 20 to 39 times
- F. 40 or more times
- 52. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?

- ADOLESCENT PEER SUPPORT GROUPS A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times During your life, how many times have you used methamphetamines (also called speed, crystal meth, crank, ice, or meth)? A. 0 times B. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times 54. During your life, how many times have you used **ecstasy** (also called MDMA)? 0 times Α. В. 1 or 2 times C. 3 to 9 times D. 10 to 19 times E. 20 to 39 times F. 40 or more times
 - 55. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?
 - 0 times A.
 - В. 1 or 2 times
 - C. 3 to 9 times
 - D. 10 to 19 times
 - 20 to 39 times E.
 - F. 40 or more times
 - During your life, how many times have you used a needle to inject any illegal drug into 56. your body?
 - 0 times A.
 - В. 1 time
 - C. 2 or more times
 - 57. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?
 - A. Yes

B. No

The next 9 questions ask about sexual behavior.

- 58. Have you ever had sexual intercourse?
- A. Yes
- B. No
- 59. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
- B. 11 years old or younger
- C. 12 years old
- D. 13 years old
- E. 14 years old
- F. 15 years old
- G. 16 years old
- H. 17 years old or older
- 60. During your life, with how many people have you had sexual intercourse?
- A. I have never had sexual intercourse
- B. 1 person
- C. 2 people
- D. 3 people
- E. 4 people
- F. 5 people
- G. 6 or more people
- 61. During the past 3 months, with how many people did you have sexual intercourse?
- A. I have never had sexual intercourse
- B. I have had sexual intercourse, but not during the past 3 months
- C. 1 person
- D. 2 people
- E. 3 people
- F. 4 people
- G. 5 people
- H. 6 or more people
- 62. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?
- A. I have never had sexual intercourse
- B. Yes
- C. No

- 63. The **last time** you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
- B. Yes
- C. No
- 64. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy**? (Select only **one** response.)
- A. I have never had sexual intercourse
- B. No method was used to prevent pregnancy
- C. Birth control pills
- D. Condoms
- E. An IUD (such as Mirena or ParaGard) or implant (such as Implanon or Nexplanon)
- F. A shot (such as Depo-Provera), patch (such as Ortho Evra), or birth control ring (such as NuvaRing)
- G. Withdrawal or some other method
- H. Not sure
- 65. During your life, with whom have you had sexual contact?
- A. I have never had sexual contact
- B. Females
- C. Males
- D. Females and males
- 66. Which of the following best describes you?
- A. Heterosexual (straight)
- B. Gay or lesbian
- C. Bisexual
- D. Not sure

The next 2 questions ask about body weight.

- 67. How do **you** describe your weight?
- A. Very underweight
- B. Slightly underweight
- C. About the right weight
- D. Slightly overweight
- E. Very overweight
- 68. Which of the following are you trying to do about your weight?
- A. **Lose** weight
- B. **Gain** weight
- C. **Stay** the same weight

D. I am **not trying to do anything** about my weight

The next 9 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

- 69. During the past 7 days, how many times did you drink **100% fruit juices** such as orange juice, apple juice, or grape juice? (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
- A. I did not drink 100% fruit juice during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 70. During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)
- A. I did not eat fruit during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 71. During the past 7 days, how many times did you eat **green salad**?
- A. I did not eat green salad during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 72. During the past 7 days, how many times did you eat **potatoes**? (Do **not** count french fries, fried potatoes, or potato chips.)
- A. I did not eat potatoes during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day

- F. 3 times per day
- G. 4 or more times per day
- 73. During the past 7 days, how many times did you eat carrots?
- A. I did not eat carrots during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 74. During the past 7 days, how many times did you eat **other vegetables**? (Do **not** count green salad, potatoes, or carrots.)
- A. I did not eat other vegetables during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 75. During the past 7 days, how many times did you drink a **can, bottle, or glass of soda or pop**, such as Coke, Pepsi, or Sprite? (Do **not** count diet soda or diet pop.)
- A. I did not drink soda or pop during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day
- 76. During the past 7 days, how many **glasses of milk** did you drink? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)
- A. I did not drink milk during the past 7 days
- B. 1 to 3 glasses during the past 7 days
- C. 4 to 6 glasses during the past 7 days
- D. 1 glass per day
- E. 2 glasses per day

- F. 3 glasses per day
- G. 4 or more glasses per day
- 77. During the past 7 days, on how many days did you eat **breakfast**?
- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

The next 5 questions ask about physical activity.

- 78. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day?** (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)
- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days
- 79. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
- B. Less than 1 hour per day
- C. 1 hour per day
- D. 2 hours per day
- E. 3 hours per day
- F. 4 hours per day
- G. 5 or more hours per day
- 80. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent playing games, watching videos, texting, or using social media on your smartphone, computer, Xbox, PlayStation, iPad, or other tablet.)
- A. I do not play video or computer games or use a computer for something that is not school work

- B. Less than 1 hour per day
- C. 1 hour per day
- D. 2 hours per day
- E. 3 hours per day
- F. 4 hours per day
- G. 5 or more hours per day
- 81. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- 82. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)
- A. 0 teams
- B. 1 team
- C. 2 teams
- D. 3 or more teams

The next question asks about concussions. A concussion is when a blow or jolt to the head causes problems such as headaches, dizziness, being dazed or confused, difficulty remembering or concentrating, vomiting, blurred vision, or being knocked out.

- 83. During the past 12 months, how many times did you have a concussion **from playing a sport or being physically active**?
- A. 0 times
- B. 1 time
- C. 2 times
- D. 3 times
- E. 4 or more times

The next 6 questions ask about other health-related topics.

- 84. Have you ever been tested for HIV, the virus that causes AIDS? (Do **not** count tests done if you donated blood.)
- A. Yes
- B. No
- C. Not sure

- 85. During the past 12 months, have you been tested for a sexually transmitted disease (STD) other than HIV, such as chlamydia or gonorrhea?
- A. Yes
- B. No
- C. Not sure
- 86. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?
- A. During the past 12 months
- B. Between 12 and 24 months ago
- C. More than 24 months ago
- D. Never
- E. Not sure
- 87. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
- B. No
- C. Not sure
- 88. On an average school night, how many hours of sleep do you get?
- A. 4 or less hours
- B. 5 hours
- C. 6 hours
- D. 7 hours
- E. 8 hours
- F. 9 hours
- G. 10 or more hours
- 89. During the past 12 months, how would you describe your grades in school?
- A. Mostly A's
- B. Mostly B's
- C. Mostly C's
- D. Mostly D's
- E. Mostly F's
- F. None of these grades
- G. Not sure

This is the end of the survey.

Thank you very much for your help.



Appendix F

INFORMATION SHEET Participation in a Chamberlain DNP Student Project

The following project has been reviewed by the Chamberlain College of Nursing and prescreened as a practice-change/quality improvement project in collaboration with the Chamberlain College of Nursing Institutional Review Board. Although participation in this project does not require you to sign an informed consent form, it is required that you receive information about the project. You should be aware that you may be observed by the project manager during your day-to-day duties or your charting may be audited as it applies to the purpose of this project.

Project Title:

Reducing Risky Behaviors Related to Adolescent Substance Abuse

Project Manager:

Diane M. Giambra MSN/Ed, RN

What is the purpose of this project?

The purpose of this project is to provide a project change utilizing the Substance Abuse Risk Reduction Clinical Practice Protocol.

What will I be asked to do as a participant in this project?

If you chose to be in this project, you are granting permission for your adolescent to participate in a peer support group and complete a Youth Risk Behavior Screening Survey.

What are the possible risks or discomforts that I might experience?

There is a possible risk of discomfort with the discovery of risky behaviors.

What are the possible benefits for me or others?

The possible benefit for you is identifying risky behavior that may prevent adolescent substance abuse.

How will my confidentiality and privacy rights be protected?

The results of this project will be anonymous, no names will be used. Your informed consent will be kept in a locked file cabinet that only the project manager can access. Your adolescent will use a code when completing the pre- and post-survey. All interactions will be private and kept in confidence. The surveys will be stored in a file that only the project manager can access. The data collected will be password protected and all information will be kept under lock and key and can only be accessed by the project manager. Only de-identified, aggregate information will be included in any dissemination of results.

Is my participation in this project voluntary?

Participation in this project is voluntary and there are no consequences if you chose not to participate.

What consequences, if any, might occur if I choose not to participate?

There are no consequences if you decide to not participate.

Who do I contact for any questions about this project?

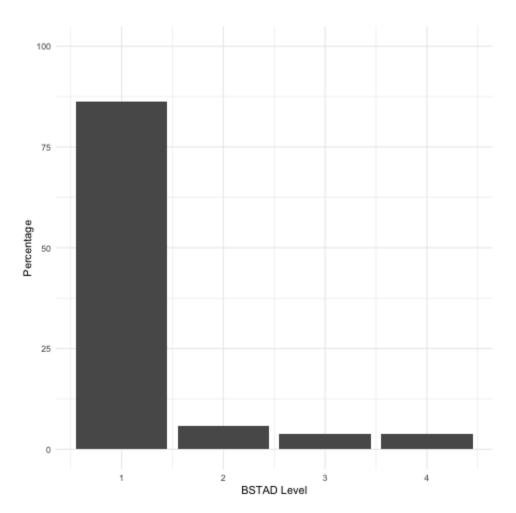
If you want to speak with someone who is not directly involved in this project, or if you have questions about your rights as a participant, contact the DNP Program Dean dnpdean@chamberlain.edu

Is there anything else I need to know?

You have the opportunity to ask questions at any time during the project.

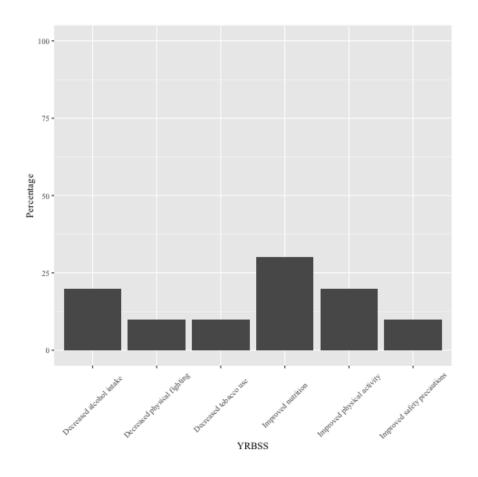
Appendix G

Percentage of Youth Scoring at BSTAD Screening Level



Appendix H

Percentage of Participants Scoring a Positive YRBS Behavior



Appendix I

P-values

Subscale	<i>P</i> -value
Nutrition	.134
Alcohol use	.074
Fighting	.041
Tobacco use	.041
Physical activity	.074
Safety	.041