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# Increased Concern of Suicide Behaviors in the Adolescent Population

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**Increased Concern of Suicide Behaviors in the Adolescent Population**

by

Jaime Earle

A project submitted to the faculty of  
Gardner-Webb University Hunt School of Nursing  
in partial fulfillment of the requirements for the degree of  
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Boiling Springs, NC

2024

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**Philippians 4:13** “I am able to do all things through Him who strengthens me.”

### **Abstract**

This quality improvement project focused on addressing the concern for the increase of depression, anxiety, and self-harm behaviors among adolescents, which can lead to suicidal ideation and attempts. Suicide behaviors have increased among adolescents, and research revealed that suicide is the second leading cause of death in this population. An educational PowerPoint was presented to members of the community on suicide behaviors, how to identify the behaviors, and where to get support and resources in the community. Pre- and post-surveys were used to assess the participants' knowledge and confidence levels before and after project implementation. The surveys contained the same five questions to gather data regarding knowledge and confidence levels among the participants in addressing suicide behaviors in the adolescent population. Results of the survey indicated that the project successfully raised awareness and improved public knowledge and confidence in addressing adolescent suicide behaviors.

*Keywords:* suicide, adolescent, behaviors, depression, anxiety, and self-harm

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## **Problem Recognition**

This Doctor of Nursing Practice (DNP) project addresses the increased concern of suicidal behaviors among adolescents reporting suicidal ideation and suicidal attempts. Suicide rates have increased among the adolescent population. Suicide is said to be the second leading cause of death among youth ages 14 to 18 (Ivey-Stephenson et al., 2019). Globally, suicide among adolescents and young adults is the leading non-natural cause of death and remains the main cause of premature death, along with years of disability during life (Fonseca-Pedrero et al., 2022, para.2). According to the Centers for Disease Control & Prevention [CDC], 2020, between the years 2008-2018, suicide deaths in the United States (US) continued to rise in 10-14 year-olds by 130% and in 15-24 year-olds by 42% (Walsh et al., 2022).

Suicidal behaviors and thoughts are actions of the adolescent having suicidal ideation, thoughts of killing themselves, and suicide attempts, the act of intention to end their life but not resulting in death. There is a great need to educate the community and adolescents on how and when to recognize the signs and symptoms of suicidal ideation and suicide attempts. Adolescents and guardians of the adolescent, along with friends, family, and local school systems, should have knowledge of resources and support in and around the community, and the appropriate interventions to put into place to aid in decreasing the number of youths having suicidal ideation and suicidal attempts.

According to Carballo et al. (2020, para.1), three main factors have been identified and reviewed that appear to be increased risk factors for suicidality: depression, anxiety, previous suicide attempts, drug and alcohol use, and other psychiatric disorders; stressful life events and peer conflicts; along with personality traits such as impulsivity

and neuroticism. Addressing the risk factors is imperative. The information obtained is vital to educate the community to ensure the mental health of our adolescent population gets adequately assessed and evaluated for potential suicidal ideation and suicidal attempts for an outcome of decreased adolescent deaths by suicide.

According to America's Health Rankings (AHR), in 2022, suicide was the second-leading cause of death among the age groups 10-24 and 25-34 (AHR, 2022). Risk factors that place an adolescent at higher risk for suicidal behaviors, such as suicidal ideation and suicidal attempts, are mental health disorders, such as depression, substance use, and behavioral conduct issues. Psychiatric comorbidities combined with mood disorders, disruptive behaviors, and substance abuse disorder increase the risk for the adolescent. The adolescent's family history of mental health disorders, the loss of a parent to death or the loss of a parent resulting from a divorce, and physical and sexual abuse increases the risk for the adolescent to have suicidal ideations and suicide attempts, along with the lack of support and feelings of isolation and bullying (AHR, 2022,). Teen suicide is higher among males, but females report a higher suicidal attempt. American Indian/Alaska Native adolescents, compared to other ethnic groups, are reported higher, while white adolescents report higher suicide rates than Asian/Pacific Islander, Hispanic, and Black adolescents. Suicidal attempts are higher among students who identify as homosexual or bisexual compared to students who are heterosexual (AHR, 2022, para.5).

According to WISQARS, an interactive online database from the CDC, data collected from the *10 Leading Causes of Death in the United States* reported in children aged 5 to 9, suicide ranked 10 in the top leading causes of death with 20 suicide deaths reported, and children aged 10 to 14 ranked 2 with suicide as the leading cause of death

reported, and children aged 15-24 ranked 3 out of 10, with 2,062 suicides (CDC, 2020). One obstacle to clinically preventing and treating the growing number of suicidal ideations and suicidal attempts is the number of providers to patients. In North Carolina, 305 providers per 100,000 residents are available to care for mental health illnesses (AHR, 2022). Addressing the problem of the inadequate number of providers is vital to preventing and treating mental health illnesses. Educating the public, guardians, county-wide school system staff, and students to know the signs and symptoms of suicidal ideation and a suicidal attempt is imperative for adolescent mental health and survival.

### **Problem Statement**

Suicide behaviors among the adolescent population have been statistically reported as a growing concern for public health. Adolescents are reporting higher numbers of suicide behaviors, and reports suggest addressing suicidal ideation and suicidal attempts is crucial for the vitality of adolescent individuals.

### **Literature Review**

Fonseca-Pedrero et al. (2022) examined the risk and protective factors in adolescent suicidal behaviors using stratified random cluster sampling. Risk and protective factors discussed are mental disorders, previous suicide attempts, bullying, cyberbullying, and trauma. The population examined is school-aged adolescents. The method resulted in a final sample size of 1,790 students, 816 male, 961 female, and 13 reporting another gender identity. Instruments such as self-reporting tools were used during regular school hours. The tools assessed emotional and behavioral difficulties, prosocial behavior, subjective well-being, self-esteem, depression, academic

performance, socioeconomic status, social engagement, bullying, and cyberbullying (Fonseca-Pedrero et al., 2022, para.27).

Examples of self-reporting tools are the Paykel Suicide Scale, Personal Well-being Index–School Children, Strengths and Difficulties Questionnaire, Rosenberg Self-esteem Scale, and Reynolds Adolescent Depression Scale–Short Form. Results from the self-reporting tools suggested the highest number of symptoms were depression, and the most significant expected influence was bullying. Self-esteem and personal well-being are negatively related to suicidal behaviors. The result of the present study suggests that bullying was a central focus and that the involvement of bullying, as a victim or as a perpetrator, is a risk factor for suicidal ideation and suicidal behaviors (Fonseca-Pedrero et al., 2022). The study concludes that suicidal behaviors could be hypothesized as a dynamic and complex system of intellectual, emotional, and affective characteristics (Fonseca-Pedrero et al., 2022). Limitations mentioned for the study are solely using self-reported information and self-reported tools, the study is cross-sectional. Psychometric indicators were considered a tentative risk for suicidal behavior, and currently, network analysis is in the initial stages (Fonseca-Pedrero et al., 2022).

Ivey-Stephenson et al. (2019) examined high school-aged students who reported, by use of the Youth Risk Behavior Survey (YRBS) from 2019, suicide behaviors. Data collected in this report correlated information from the 2009-2019 cycles from the YRBS. The YRBS is a cross-sectional school-based survey tool in which the CDC collects information from a nationally representative sample group while gathering data from high school-aged students who have attempted suicide attending private or public schools (Ivey-Stephenson et al., 2019). An analysis of suicidal ideation and suicide behavior had

various factors to examine associations between identified items such as demographic, gender, race, grade level (9, 10, 11, and 12), gender identity, and sexual contact. The purpose of analyses of the associations is to examine attempted suicide by addressing the grade, race, and sex of the youth. Findings revealed a prevalence of suicidal ideation, plans, and attempts that required medical treatment. The highest prevalence was reported in sexual minority youths and youths reporting having sexual contact with the same or both sexes requiring medical treatment (Ivey-Stephenson et al., 2020, para.16). Findings also showed differences by race, with black students reporting the highest estimated prevalence of attempted suicide (Ivey-Stephenson et al., 2020, para.16). The study concluded that suicide is a leading cause of death among youths and pointed out the importance of focusing on nonfatal suicidal behavior and recognizing it as a health priority (Ivey-Stephenson et al., 2020). The limitation of the study mentioned that the analysis was conducted among all high school-age students and did not separate the students. The limitation suggested that suicide patterns may differ between individuals who have had suicidal behaviors and suicidal ideation from those who have not (Ivey-Stephenson et al., 2020).

Walsh et al. (2022) conducted a study analyzing school-based suicide prevention on suicidal ideation and suicidal attempts and how the role of school-based suicide interventions can impact suicidal thoughts and behaviors. The study reports that global suicides are the fourth highest cause of death among those 15-19 years old (World Health Organization [WHO], 2021). The study addresses a need to identify effective interventions in primary and post-primary school settings to reduce adolescent suicidal behaviors and suicidal ideations. The study addresses how primary school-based suicide

prevention (PSSP) has not been comprehensively synthesized and aims to estimate the population of school-aged adolescents 11-18 years and the effect of PSSP intervention on adolescents displaying suicidal thoughts and behaviors (Walsh et al., 2022). The study observed PSSP interventions in classroom settings over 12 months utilizing a teacher-led trial in 329 schools. The results suggested that PSSP effectively reduced suicidal thoughts and behaviors by 13% (Walsh et al., 2022). The meta-analysis and meta-regression study reported that PSSP while targeting suicidal thoughts and behaviors as a primary intervention along with health and well-being interventions, resulted in reduced outcomes for suicidal ideation and suicidal attempts among 33,155 adolescents attending 329 schools (Walsh et al., 2022, p. 840). Limitations mentioned for the study included school characteristics such as the school size and type, being under-reported, and the lack of data resulting in the exclusion of 3 of 15 screened studies (Walsh et al., 2022). Other limitations mentioned are that the interpretations regarding the effectiveness of PSSP on suicidal attempts were reported as crude or adjusted estimates, and the study suggests basing effectiveness off both crude and adjusted estimates or based on adjusted estimates solely (Walsh et al., 2022, p. 841). Additional trials are suggested to clarify interventions, and which are most effective and where (Walsh et al., 2022).

Mars et al. (2019) conducted a study to assess factors that distinguish adolescents with suicidal thoughts from suicidal attempts. Factors that are addressed as prevalent in the study are psychiatric disorders, previous suicidal ideations or suicidal attempts, reports of non-suicidal self-harm, depression or anxiety disorder, female, intellectual disability, impulsivity, higher intensity seeking, lack of motivation, body dissatisfaction, hopelessness, smoking, and illicit drug use (Mars et al., 2019). The study of 4,772

participants was assessed at age 16 via various self-reported questionnaires. The self-reporting tools used are the Wechsler Intelligence Test for Children, The Adapted Test of Everyday Attention for Children, the Community Assessment of Psychic Experience, the Short Mood and Feelings questionnaire, the Development and Well-Being Assessment, a modified version of the Bullying and Friendship Interview Schedule, Stop-signal task, Arnett Inventory of Sensation-Seeking Scale, and International Personality Item Pool. The assessment tools reported that the degree of vulnerability to self-harm and the existence of mental health illnesses differentiate the adolescent who attempts suicide from those who only have suicidal ideation (Mars et al., 2019). The data collected reported that of the 4,772 participants, 3,991 (83.6%) reported no suicidal ideation or attempts, 456 (9.6%) reported suicidal ideation only, and 325 (6.8%) reported a suicide attempt (Mars et al., 2019, p. 94). The study addresses the imperativeness of identifying factors that will differentiate suicidal attempts from those who have suicidal ideation but do not have the ability or will to act on the thoughts. Limitations for the study were based on the population of 16-year-old adolescents. The findings suggested they may not generalize to fatal attempts, clinical suicide, or other age groups, such as younger adolescents (Mars et al., 2019).

Carballo et al. (2020) examined the increasing concern regarding childhood and adolescent suicide. Three researchers identified and reviewed 710 scientific studies addressing suicide, suicidality, and self-harm combined with searches for populations for children and adolescents while limiting search dates to no older than December 2016 (Carballo et al., 2020). Identified psychological risk factors, such as substance abuse, previous suicidal attempts, and depression, were significant contributing factors to



suicidal attempts. Children or adolescents with a current or history of a psychiatric diagnosis, social behaviors, and serious adverse life events such as academic stressors, trauma, family conflicts, and life events following a suicidal behavior are at a higher risk for suicidal ideation and suicidal attempts (Carballo et al., 2020). Among the 710 scientific studies reviewed, the study identified three factors that appear to increase the risk among children and adolescents: psychological factors, stressful life events, and personality traits (Carballo et al., 2020). Limitations addressed include a limited association between the risk factors of suicidality and the fewer prospective studies (Carballo et al., 2020).

McLoughlin et al. (2022) are conducting an ongoing systematic review to determine if there is a correlation between humiliation, shame, self-harm, and suicidal behavior among adolescents and young adults. The purpose of the ongoing study is to address the concern that suicide is reported as the second leading cause of death among young people worldwide, and previous research reveals that negative social experiences involving family and peer relationships influence levels of suicide and suicidal behaviors (McLoughlin et al., 2022). The study used the tools Preferred Reporting Items for Systematic Reviews and Meta-Analysis Protocols (PRISMA-P) while searching electronic databases to identify potential studies to help identify and synthesize evidence for the prevalence of the review. The objectives of this ongoing study will address the prevalence of humiliation, shame, self-harm, and suicidal behaviors among adolescents and young adults and study the correlation between humiliation and shame and suicidal behaviors and self-harm (McLoughlin et al., 2022, para.25). The 1,030 preselected articles focus on adolescents and young adults aged between 13 to 24. The systematic

review determined that the 1,030 articles are identified as prevalent and address the increasing concern of suicide behaviors and self-harm intent among adolescents and young adults. The ongoing systematic review will conclude with correlated findings from the 1,030 articles and integrate the findings of how or if there is a correlation between humiliation and shame with self-harm, suicidal ideation, attempts, and completed suicides (McLoughlin et al., 2022). Concurrently, this is anticipated to be considered as a review that will contribute to evidence-based factors influencing the progression towards self-harm and suicide among adolescents and young adults (McLoughlin et al., 2022, para.25).

Aguirre Velasco et al. (2020) investigated the barriers, facilitators, and interventions targeting help-seeking behaviors for common mental health problems in the adolescent population. Youth and young adults present with the highest prevalence of mental health disorders; approximately 50% of mental health symptoms begin before age 14 (Aguirre Velasco et al., 2020). While utilizing five databases, the main goal of the systematic review was to help describe interventions that can target adolescents' help-seeking. Help-seeking is defined as "the action of actively searching for help for mental health problems, including family and friends or general practitioner, mental health professionals, and other sources, based on interpersonal and social abilities" (Aguirre Velasco et al., 2020, p.3). Ninety studies were reviewed. They met the criteria for the intervention of targeting help-seeking behaviors and targeting the barriers and facilitators that keep the adolescents from seeking mental help. The study focused on adolescents ages 10 to 19. Most of the studies reviewed were conducted in an educational setting, 16 in a community setting, and two in a mental health care facility (Aguirre Velasco et al.,

2020). Barriers that are mentioned as to why adolescents do not seek help for mental health needs include depression, anxiety, emotional distress, self-harm, suicidal ideation, and general symptoms of mental illness. Barriers noted stigma as the highest reported by more than half the participants, followed by family beliefs, mental health literacy, autonomy, cost of care, transportation, and facility waiting times as reasons not to seek help (Aguirre Velasco et al., 2020). Results regarding facilitators noted that the older adolescents reported feeling an increased comfort with individuals with a history of mental health illness and reported less fear of help-seeking from these individuals. Psychoeducation is offered in an educational setting as an intervention and resource for adolescents to seek assistance for their mental health symptoms such as anxiety, self-harm, depression, and suicidal behaviors (Aguirre Velasco et al., 2020).

Facilitators such as more awareness of mental health, more readily available outreach programs, multimedia treatment options, and peer training interventions encouraged adolescents to reach out for help to address mental health illnesses. The study identified stigma and negative beliefs are significant barriers to help-seeking regarding their mental health needs of depression, anxiety, self-harm, suicidal ideation, and emotional distress, and facilitators should be available within and outside school settings (Aguirre Velasco et al., 2020). There are several limitations mentioned. The first limitation mentioned is that only one author from the literature reviews extracted and critically appraised the papers, leaving the data analysis at risk of subjectivity (Aguirre Velasco et al., 2020). Also, there is increasing debate regarding the adolescent age. The debate comprises the suggestion that the age should extend from 10 to 24 years of age. The review focused on depression, anxiety, and emotional distress while excluding

psychiatric symptoms. Lastly, the review prioritized the overinclusion of studies expressing an overall view of existing evidence regarding help-seeking for mental health problems in adolescents (Aguiree Velasco et al., 2020, p. 18).

Mayne et al. (2021, para.2) used a cross-sectional analysis utilizing electronic health record (EHR) data to describe changes in screening, depressive symptoms, and suicide risk among adolescents during the coronavirus 2019 pandemic. The study occurred at the Children's Hospital of Philadelphia, comprised of 29 urban, suburban, and semirural practices caring for over 300,000 patients. Of the 300,000 patients, the participants included in this study were adolescents ages 12 to 21 who utilizing information extracted from their preventive care visits while seeking care from the primary care provider in the Children's Hospital of Philadelphia network between June to December 2019 (pre-pandemic) and June to December 2020 (pandemic) (Mayne et al., 2021). The analysis showed that depression and suicide concerns increased during the pandemic, with female adolescents reporting higher rates. Positive screenings among the adolescent population increased, reporting depressive symptoms from 5.0% to 6.2% greater risk for females, and positive suicide risk screens increased from 6.1% to 7.1%, with a 34% increase in reporting recent suicidal thoughts among the female adolescent population (Mayne et al., 2021, para.3). Limitations mentioned limited EHRs of adolescents who attended primary provider visits. The COVID-19 pandemic impacted primary care office visits. Due to the pandemic, there were lower screening rates, and clinicians were selectively screening adolescent patients who were perceived to be at higher risk (Mayne et al., 2021). Lastly, because of limitations due to the EHR, the study

could not examine adolescents who identify as homosexual, bisexual, transgender, and queer (LGBTQ) and examine patterns among this population.

Lantos et al. (2022) examined suicide risk among adolescents during the pandemic of COVID-19. Rates of suicide among the adolescent population rose 56% over 10 years between 2007 and 2017 (Lantos et al., 2022). According to the National Institute of Mental Health (NIMH) (2022), preventing suicide starts with identifying people who are at a greater risk. During the pandemic, children and adolescents reported higher rates of depression and anxiety than during the previous year (Lantos et al., 2022). A 4-item Ask Suicide-Screening Questions (ASQ), a yes or no assessment tool, was administered to all adolescents between ages 12 to 24 to assess suicide risk at Children's Mercy Kansas City Hospital. In the year 2018, Children's Mercy Kansas City initiated a universal suicide screening, and in 2019 and 2020, over 100,000 screenings were conducted per year (Lantos et al., 2022). The statistical analyses conducted at Children's Mercy Kansas City concluded an increase in positive suicide risk screenings among the adolescent population during the early months of the pandemic. In 2019, 22,896 patients' records were analyzed, and 14,635 in 2020 (Lantos et al., 2022). Although 2020 had higher missed screenings for suicide risk due to more telehealth visits, higher rates for positive screenings resulted in 2020 (Lantos et al., 2022). In 2019, the highest positive suicide risks resulted from females at 14.7% between the ages of 12 to 24; in 2020, the highest positive suicide risks resulted from females at 15.8% between the ages of 12 to 24 (Lantos et al., 2022). The limitations mentioned were the number of patients chosen for face-to-face versus telehealth. The study covered only the first 3 months of the pandemic, and the lower number of screenings for adolescent patients may have been due to the

country being in crisis mode. Providers may not have been as skilled at telemedicine (Lantos et al., 2022).

Brent (2019) examined suicide prevention in children and adolescents. The four alternative method approaches Brent describes are leading youth away from the cliff (prevention), going to where youth are (improving access to care), working with others to change the rules in the field (changing the way care is delivered), and putting a fence around the cliff (restriction of access to lethal agents) (Brent, 2019, p. 25). New reports show that the suicide rate from 2007 to 2015 in adolescents and males increased from 10.8 in 100,000 to 14.1 in 100,000, resulting in a 31% increase. Females reported in the same age range increased from 2.4 to 5.1 in 100,000 (Brent, 2019). The method of leading the youth away from the cliff is prevention. The Adverse Childhood Experiences Study (ACES) suggests that children who experience maltreatment, poverty, parental substance abuse, or mental illness are at higher risk for child or adolescent suicide attempts (Brent, 2019).

Brent discussed family preventive interventions such as The Family Check-Up. The Family Check-Up is an intensive training program for parents. In a follow-up study, after 5 to 15 years of the intervention Family Check-Up, the individuals who received the service as middle schoolers reported reduced suicidal ideation and attempts (Brent, 2019). The Family Bereavement Program targets adolescents who have lost a parent to death. Following the intervention, 6 to 15 years later, reports state there is a 3-to 6-fold reduction in suicidal ideation or suicidal attempts (Brent, 2019). The method of going to where the children are includes improving access to care by utilizing collaborative care and school-based interventions as resources to help at-risk youth and be more effective in

addressing suicide attempts. Collaborating care with other disciplines and providing screenings in primary care locations and emergency departments benefit adolescents at risk for suicidal behaviors. In adolescent patients with symptoms of depression, collaborating care resulted in improved access to care, resulting in more favorable health outcomes and more cost-effective care. Reports showed that the suicide attempt rate is lower among youth receiving collaborative care (Brent, 2019). Another method is changing the rules, using a team effort to implement systemic change. The Zero Suicide initiative has resulted in decades of research. In the United States, the Zero Suicide initiative was launched at the Henry Ford Hospital Health System. The reported suicide rate in mental health care the year before implementing the Zero Suicide initiative was 89 in 100,000 patients (Brent, 2019). After the implementation of the Zero Suicide Initiative program, from 5 to 8 years during the program, there was a 3-year period when no reports of suicide from mental health patients occurred (Brent, 2019).

Brent's method of putting a fence around the cliff ensures the removal and securing of all lethal means within the youth's environment, such as firearms. A comparison from the year 2011 versus the year 2020 reported that more than 3,100 youth have died using a firearm, and firearm suicides have increased by over 53%. (Everytown Research & Policy, 2022). Lethal agents such as prescription pills, specifically tricyclic antidepressants, can be associated with lethal overdose options for suicide attempts. Tricyclic antidepressants are not reported as a safe and effective treatment for adolescent depression but can be fatal when used in overdose (Brent, 2019). Pesticides are also mentioned as fatal if ingested and used as a chemical inhaled to assist youth with suicide

attempts. Brent points out that prevention and not waiting until the adolescent is at the cliff is critical to impacting suicide rates (Brent, 2019).

### **Summary of Literature Review**

The literature review reveals an increased concern for the adolescent population and suicidal behaviors. The literature offers evidence-based research to address statistics and data collected to conclude the need to address suicidal behavior in the adolescent population. The literature reports that parents, caregivers, community leaders, and adolescents require adequate support, healthcare resources, and education to provide prevention, awareness, and treatment efficiently. Addressing the statistics and data from the literature raises awareness of suicidal behaviors in the adolescent population. The research can help guide parents, caregivers, and community leaders by gaining knowledge from the literature to offer the adolescent population support, resources, skills, and tools to safely cope with symptoms that may lead to suicidal behaviors. Offering the adolescent population adequate resources and support affords this population opportunities to learn safe coping skills to manage thoughts of suicide safely and gain skills to address symptoms that may lead to suicidal behaviors.

### **Needs Assessment**

#### **Target Population and Community**

A presentation on suicide behaviors and risk factors in the adolescent population was given in a church in a rural community in the foothills of North Carolina. Parents, teachers, and youth leaders were encouraged to attend.



### **Available Resources**

Resources available for the project leader to receive support and ensure the project was successful included support from the literature that was evidence-based and peer-reviewed to support the need for suicidal behavior education, online mental health resources, and community mental health resources. There was also strong support from the church leaders, parents, caregivers, and teachers from the community.

Various resources were required to implement the project. To present the project to the community, the church offered ample space for participants and technology equipment to present the presentation visually and audibly. Additional resources required for the project were computers, printers, and paper to construct and print the pre- and post-surveys for the participants to complete before and after the presentation. Church staff assisted in setting up the presentation and ensuring all technical equipment was working efficiently for the presentation.

### **Desired and Expected Outcomes**

The expectation was that through education, resources, and support, parents, caregivers, and teachers would become more aware of the concern for the adolescent population and their increased mental health needs associated with suicidal behaviors. It was hoped the project would encourage conversations between parents, caregivers, teachers, and adolescents regarding suicidal behaviors and suicide prevention. The project aimed to influence positive actions to encourage addressing the needs of the adolescent population and to empower them with safe and effective support from their parents, caregivers, and teachers. A long-term goal would result in lower rates of suicide behaviors and suicides in the county.

**Team Selection**

The team consisted of leadership at a local church to help facilitate the venue for the presentation, an exceptional teacher from a local school within the community to help facilitate community knowledge of the project presentation and the project leader.

**Scope of Project**

An educational session was held for members of the community to increase awareness of suicidal behaviors and risk factors regarding suicidal ideation and suicidal attempts.

**Restatement of the Problem**

Suicide behaviors among the adolescent population have been statistically reported as a growing concern for public health. Adolescents are reporting higher numbers of suicide behaviors, and reports suggest addressing suicidal ideation and suicidal attempts is crucial for the vitality of youth-aged individuals.

**Objectives and Timeline****Objectives**

Suicidal behaviors in the adolescent population have become a major concern in the healthcare industry. An increasing number of adolescents are reported to have an increased risk for suicidal behaviors, suicidal ideations, and suicide attempts. This project aimed to address the increased concern about suicidal behaviors and to lower the rate of adolescents reporting suicidal behaviors. A presentation was given in a church setting in Kings Mountain, North Carolina. The presentation started with a brief explanation to the participants, and a pre-survey was completed to address the participants' knowledge and comfort in addressing suicidal behaviors with adolescents. Following the presentation, a

survey was completed by the participants to determine if they gained a broader awareness and knowledge of the signs and symptoms of suicidal behaviors and developed an increased comfort level in addressing the topic of suicide with adolescents.

The project leader managed the project progression and set attainable goals to create an environment to motivate the participants to desire to learn and ask questions before, during, and after the presentation. This project was realistic to address the increased concern for suicidal behaviors in the adolescent population. Communities are becoming more aware of the need to address increasing adolescent suicidal behaviors. Implementing the project to increase knowledge for parents, caregivers, and community leadership was vital. The participants' post-survey results along with a post-presentation discussion were used to indicate if the goal to increase awareness of suicidal behaviors in the adolescent population was met.

Increasing the knowledge of parents, caregivers, and community leaders is imperative to have the resources and support for the adolescent population to have the safe coping skills, tools, and resources to guide them and teach them how to manage mental health illness symptoms and suicidal behaviors. After implementing the educational PowerPoint presentation, it was projected the participants would gain more knowledge, find available resources and support in the community, and become more comfortable speaking with adolescents. The project's goal would be met if the participants' post-survey results indicated increased knowledge of the subject, comfort in speaking with the adolescent population about suicidal behaviors, and acknowledgement of the increased concern to address suicidal behaviors in the community to support the adolescent community safely and effectively with resources.

- Objective 1: To increase awareness and concern for suicidal behaviors in the adolescent population.
- Objective 2: To gain confidence by receiving education and information for resources in the community to openly speak to adolescents demonstrating suicidal behaviors.

### **Timeline**

The project timeline was set to progress through all steps for project completion over 15 months from pre-implementation to closure for evaluation. The 15 months involved collaboration with the Project Chair, Project Leader, leadership from the approval site, community leaders, and gaining approval from the Quality Improvement Council at Gardner-Webb University. Steps to ensure the project would be completed by the expected end goal date for closure of the project included designing, planning, implementation, monitoring, and closure for the final evaluation and approval.

The first step for the project included getting approval for the topic, addressing goals, and discussing the project site for implementation. During the first 3 months, approval from the Project Chair and site confirmation for the project implementation were achieved. Continued planning and design review were addressed during the project's first 5 months. Over the next 2 months, designing, developing, and addressing needs and gaps in the project were assessed and monitored by the Project Leader while collaborating with various team members to ensure the project continued to fall within the timeline goals. Over the next 4 months, the Project Leader continued to plan, focusing on the breakdown of goals and deadlines, and collaborating with team member involvement to ensure the implementation of the project could occur within the timeline

goals. Following implementation, the project concluded by gathering, monitoring, and evaluating the data.

### **Theoretical Underpinnings**

Dorothea Orem's self-care theory is a middle-range theory composed of three intertwined theories: self-care, self-care deficit, and the nursing system. Orem's theory has been utilized in nursing practice for decades. Dorothea Orem's self-care theory focuses on the individual's ability to provide self-care while gaining the skills and tools to gain independence for their overall health and well-being, physically, mentally, and emotionally. "According to Orem's self-care theory, the purpose of nursing is to help people meet their self-care needs" (Hood, 2018, p. 144). Orem's self-care theory directs the care to focus on the individual's ability to perform daily activities with autonomy while maintaining a healthy lifestyle.

Allowing adolescents to gain autonomy and responsibility for their actions, well-being, and mental needs guides them to gain independence and self-worth. The adolescent population requires guidance, support, and resources to succeed in all life aspects. The provider can guide, teach, and support the adolescent by implementing Dorothea Orem's self-care theory. The adolescent will gain self-trust, self-worth, independence, acceptance of oneself, and courage to self-direct their thoughts and emotions in a more positive direction and gain the strength and courage to ask for help when feeling depressed, anxious, or having thoughts of self-harm.

The Self-Care Theory offers individual emotional and mental healing by offering tools, skills, and support to obtain the desire to care for oneself and feel the emotional aspect of the brain's reward center to safely release pleasure and feel-good emotions from

gaining self-worth. Depression, anxiety, and thoughts of self-harm can lead adolescents into a dark and gloomy isolated environment. Mental illnesses can create an unhealthy mindset of unworthiness and hopelessness. The Self-Care Theory allows the individual to create a positive self-healing environment through positive reinforcement from providers of self-worth.

Offering adolescents education, support, counseling, and tools can afford them opportunities to learn self-care and the ability to learn self-care techniques. By implementing the Self-Care Theory, the providers offer motivation to the adolescent. The theory supports the adolescent who feels depressed, anxious, or has thoughts of self-harm. At the same time, the provider encourages and offers positive affirmations so the adolescent will desire to gain self-care skills. Orem's theory of self-care offers adolescents tools and education to gain self-actualization, self-esteem, how to love themselves and have a sense of belonging, learn safe boundaries, and gain a healthy physiological outlook on life.

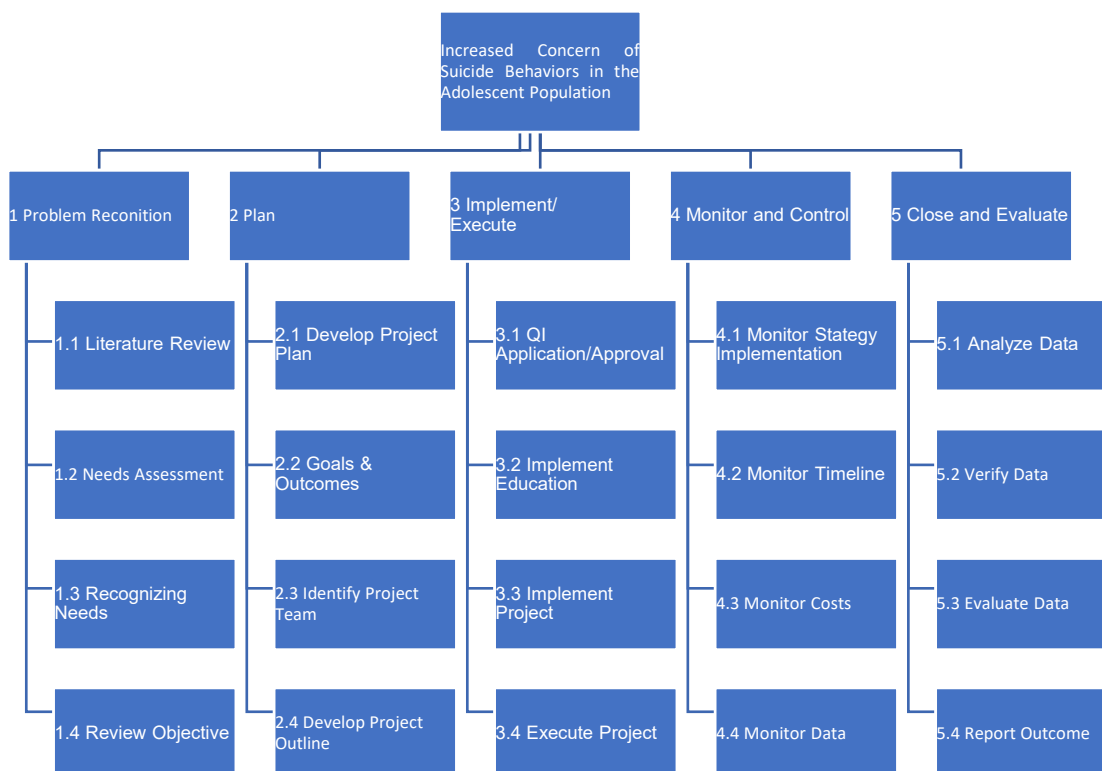
Self-care is a human function to maintain a higher quality of life through self-care. "Orem's approach to the nursing process provides a method to determine the self-care deficits and then to define the roles of the patient or nurse to meet the self-care demands" (Petiprin, 2020, para. 11). Utilizing this model supports and guides the adolescent to promote self-care, allowing them to gain self-worth, and courage to address negative thoughts, feelings, and emotions. The self-care deficit is when adolescents no longer desire to care for themselves, leading to isolation and declining mental health. The self-care deficit opens the opportunity for nursing care to support and offer education, resources, and counseling to the adolescent to help them gain independence for self-care.

The nursing system can then guide and help the community identify where the adolescent requires physical, emotional, or mental care. Orem's self-care theory will guide the promotion of self-care techniques and educate the project participants on caring for and eliminating or reducing the self-care deficit in the mental health adolescent population (Petiprin, 2023).

## **Work Planning**

### **Project Management**

The project management tool chosen for this project was the work breakdown structure. A work breakdown chart is essential for displaying tasks and events over time. Activities are displayed readily to keep track of the project plan and the steps needed to complete each activity. Each step is represented in the structure. There are five steps to address the timeline during the project: design, plan, implementation, monitoring and control, and closure with evaluation. Each step is broken down into sub-steps to address the needs of each activity during the project timeline (Figure 1).

**Figure 1***DNP Project Work Breakdown Structure***Cost/Benefit Analysis*****Budget***

To determine costs for this project, looking at direct and indirect cost projections was vital. A cost analysis table is displayed to address and track spending for the items needed to implement and complete the project. The direct costs included printer paper, printer ink, and gel ink pens. An additional cost included a donation that was given to the church for the opportunity to present the project in the church auditorium. The total cost



for this project was \$123.29. Table 1 depicts the cost/benefit analysis used for this project.

**Table 1**

*Costs*

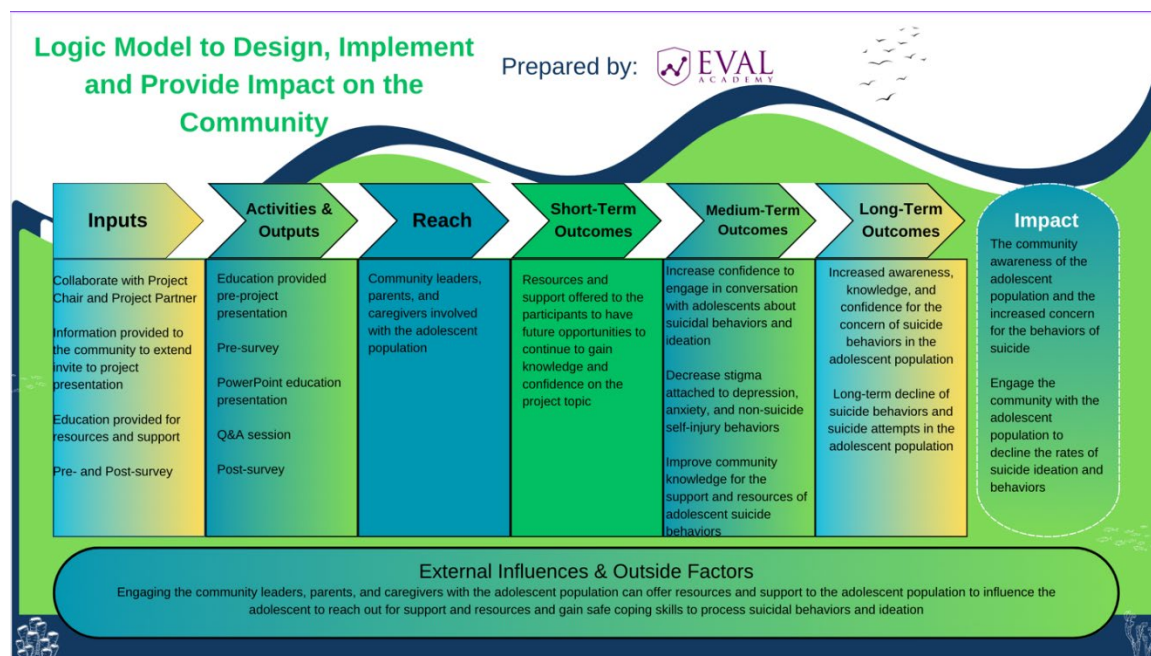
Expenses	Costs
Printer Paper	\$8.44
Printer ink	\$29.99
Gel ink pens	\$34.86
Church donation	\$50
Total Fixed Costs	\$123.29

***Benefits***

The project expectation is that the educational presentation greatly outweighs the project's costs. Increasing the knowledge of the community is imperative to address the public health increased concern of suicidal behaviors of the adolescent population. For this project, the community will benefit from increased knowledge, education, resources, and support in hopes that the community will gain confidence to address the needs of this population and a suicidal behavior will decline.

**Evaluation Plan**

A logic model was developed to show the project's course of design, implementation, impact, and evaluation. The Logic Model is depicted in Figure 2.

**Figure 2***Logic Model*

*Note.* This graph demonstrates a breakdown of the steps taken to design, implement, and evaluate the project's impact on the community.

**Human Resources**

Human resources will include the project chair, project leader, project partner, community leaders, parents, caregivers, and participants for this project.

**Organizational Tools**

For this project, a pre-survey was utilized to establish a baseline of knowledge and comfort level for the participants before implementing the project. Information from the GAD-7 screening tool for anxiety and PHQ-A screening tool for depression and suicide ideation was utilized to educate participants on signs and symptoms to observe in the adolescent population. A post-survey was utilized to assess awareness of the concern

for suicide behaviors in the adolescent population and the knowledge and confidence level post-project implementation.

### **Input**

For the project to be successful, collaboration between the project chair and project partner was essential. Educational material was designed to supply the participants with resources and education, along with the material provided during the PowerPoint presentation to provide adequate information to participants from the community. A pre-and post-survey was implemented to evaluate the knowledge of the participants.

### **Activities/Output**

Education regarding the increased concern of suicide behaviors in the adolescent population was implemented through a PowerPoint presentation. Once the project was completed, information gathered from the pre- and post-surveys was evaluated for the project's impact.

### **Outcomes/Impact**

Pre- and post-surveys were used to determine the outcome and impact of the project. The goal of the project was to increase the participants' knowledge, confidence, and awareness about suicide behaviors in the adolescent population and to decrease the rate of adolescents reporting suicidal behaviors. By offering education, resources, and support in the community, and increasing awareness and knowledge, the project aimed to impact the community with a decline in suicide behaviors and attempts by the adolescent.

## **Project Implementation**

There were obstacles and setbacks throughout the DNP project. However, the process of implementation was driven by the desire to get the community educated about the concern for the adolescent population and the increased risk for suicidal behaviors. The project initially began with the desire to present the project within the community at a local school. After much thought and weighing out the best outcome for the project, the presentation took place at a local church in the community. The location allowed various community residents the opportunity to attend. The initial thought process behind the project was to implement a DNP project that would address the adolescent population while addressing the concern for the increased reported statistics of suicidal behaviors. Suicide is said to be the second leading cause of death among youth aged 14-18 (Ivey-Stephenson et al., 2019). The reported data addressing suicide rates among the adolescent population is concerning and imperative to address. Prevention is critical to ensure the adolescent population is supported and educated. The DNP project implementation directs education, support, and resources to offer the adolescent population what is necessary to be successful in recognizing and treating symptoms of suicidal behaviors safely and effectively. The DNP project was designed to educate the community through a PowerPoint presentation about the increased concern and offer support and resources for the community to address the mental health needs of the adolescent population successfully.

## **Monitoring of Implementation**

The educational presentation was made at a Baptist church in Kings Mountain, North Carolina. Email notices were sent to community leaders, churches, and local

schools. Pre- and post-surveys were printed for the participants to voluntarily complete before and after the presentation. Handouts showing community resources and support services were made to distribute to the participants after the presentation. When the participants arrived and were seated, the project leader made introductions and gave instructions for the pre- and post-surveys. The pre-survey was completed, and the educational PowerPoint began. The project leader presented the educational PowerPoint and shared resources and support services with the participants. After completing a question-and-answer session, the participants completed the post-survey. The surveys were collected, and the project was completed. All surveys were anonymous, with no identifying markers from the participants on the pre- or post-surveys.

When the presentation was completed, the project leader thanked the participants. All materials were secured and gathered to begin reviewing the survey results. The surveys addressed the knowledge of the participants about the increased concern about suicidal behaviors in the adolescent population. The pre-survey addressed the participant's knowledge before the PowerPoint presentation. After the PowerPoint presentation and the question and answer session, the post-survey addressed the participant's knowledge. The participants thanked the project leader and acknowledged that the project was informative and helpful. The participants engaged with questions and took copies of the resources and support offered in the community as they left the facility. Time and dates were discussed with the pastor and youth leader of the church for the project leader to come back and address the concern of suicidal behaviors with the parents who attend the church as well as the youth on a date yet to be determined.

## **Project Closure**

Evidence shows there is an increased concern for suicidal behaviors in the adolescent population. The educational PowerPoint offered vital education to increase the knowledge of the participants and how to identify suicidal behaviors. The literature reviewed and utilized for the project identifies behaviors such as depression, anxiety, and self-harm as high-risk for suicide behaviors in adolescents. Ongoing education can offer opportunities to increase knowledge and provide resources and support to the community. Addressing suicide behaviors in the adolescent population is vital to the health and well-being of the adolescent population. The project provided data for community leaders, parents, and caregivers to review, and examine utilizing the resources and support within the community. The increased knowledge can benefit the adolescent population and offer support and resources to the adolescent in hopes of decreasing the rates of suicide and decreasing suicide behaviors in the adolescent population.

## **Interpretation of Data**

Pre- and post-surveys were used to evaluate participants' knowledge of suicidal behaviors and recognition of those behaviors in the adolescent population, knowledge about available resources, and confidence in having a conversation with an adolescent about suicide. The pre-and post-surveys were identical and consisted of a 5-point Likert scale, with 1 being strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree, and 5 strongly agree.

The pre-survey was administered prior to the educational session to assess the knowledge and confidence levels of the participants. The post-survey was administered following the educational session. Twenty-five participants completed both surveys. The

results are presented in Table 2. Mean scores increased for each of the five items on the survey, with the greatest increase in the area of knowledge about available community resources. The pre-survey response percentages for each item are presented in Table 3. The post-survey response percentages for each item are presented in Table 4.

**Table 2**

*Pre- and Post-Survey Mean Scores*

Survey Item	Pre-Survey Mean	Post-Survey Mean
I am confident having a conversation with an adolescent about suicide.	3.4	4.2
I am knowledgeable about the increased concern of adolescent suicidal behaviors.	3.56	4.68
I am knowledgeable about available resources to help guide the adolescent population regarding suicide behaviors.	2.8	4.64
I am knowledgeable about the recognition of suicide behaviors in the adolescent population.	3.16	4.44
I am confident in my ability to get support and resources to help parents, guardians, and leaders in the community address concerns of suicidal behaviors with an adolescent presenting with suicidal behaviors.	3.0	4.48

**Table 3***Pre-Survey Response Percentages for Each Item*

Survey Item	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I am confident having a conversation with an adolescent about suicide.	4%	8%	40%	40%	8%
I am knowledgeable about the increased concern of adolescent suicidal behaviors.	4%	16%	16%	48%	16%
I am knowledgeable about available resources to help guide the adolescent population regarding suicide behaviors.	8%	44%	12%	32%	4%
I am knowledgeable about the recognition of suicide behaviors in the adolescent population.	4%	28%	24%	36%	8%
I am confident in my ability to get support and resources to help parents, guardians, and leaders in the community address concerns of suicidal behaviors with an adolescent presenting with suicidal behaviors.	4%	28%	36%	28%	4%



**Table 4***Post-Survey Response Percentages for Each Item*

Survey Item	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I am confident having a conversation with an adolescent about suicide.	0%	4%	4%	44%	48%
I am knowledgeable about the increased concern of adolescent suicidal behaviors.	0%	0%	0%	32%	68%
I am knowledgeable about available resources to help guide the adolescent population regarding suicide behaviors.	0%	0%	0%	36%	64%
I am knowledgeable about the recognition of suicide behaviors in the adolescent population.	0%	0%	0%	56%	44%
I am confident in my ability to get support and resources to help parents, guardians, and leaders in the community address concerns of suicidal behaviors with an adolescent presenting with suicidal behaviors.	0%	0%	8%	36%	56%

**Process Improvement Data*****Outcomes***

The data obtained from the pre-and post-surveys indicated that participants demonstrated an increased level of knowledge and confidence in all areas addressed by the survey following the 2-hour educational PowerPoint presentation implemented by the

project leader. Community education can be a key factor in addressing the growing concern about suicidal behaviors among adolescents. However, further studies are necessary to effectively address this issue.

### ***Changes***

After participating in education and receiving resources related to addressing adolescent suicidal behaviors, the participants' knowledge and confidence levels increased. The participants were better equipped to find support and resources in the community.

### ***Impact***

The project's impact was measured using pre- and post-surveys created by the project leader. Based on the data gathered, the educational PowerPoint increased the knowledge and confidence of the participants to speak with adolescents about the topic of suicide, gain knowledge and confidence to support the adolescent population, and offer support and find resources related to the subject of suicide for parents, caregivers, and leaders in the community. The project successfully aimed to provide the participants in the community with knowledge, support, and resources. The project instruments focused on determining if the educational PowerPoint was beneficial in increasing the knowledge and confidence of the participants.

### ***Sustainability***

To ensure the sustainability of this project, the project leader should share the project's materials with community leaders, healthcare organizations, and school leaders. These materials can help the community understand the importance of addressing the concerns of adolescent suicidal behaviors. Community leaders, healthcare organizations,

and school leaders can use the provided PowerPoint and pre- and post-surveys to gather data and continue to monitor the project's progress and the needs of the community.

***Future Measurements***

The PowerPoint presentation, along with pre-and post-surveys, can be used annually to assess the need for community education on the topic of adolescent suicidal behaviors. The incidence of suicide behaviors in the community should be tracked to see if there is a decrease over time.

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