2022

Clinical Practice Guideline on Suicide Prevention Among Adolescents

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This is to certify that the doctoral study by

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Abstract

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MS, Walden University, 2019

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Project Submitted in Partial Fulfillment

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Abstract

Increasing rates of suicide among adolescents in the United States is an unsettling problem whereby suicide is the second leading cause of mortality among adolescents. Although interventions exist to address this problem, there is a lack of clinical practice guidelines (CPGs) to assist healthcare providers to identify and prevent adolescent suicide. Guided by the zero-suicide model, the purpose of this project was to develop a CPG to address this gap in practice. A literature review on adolescent suicide prevention resulted in 24 peer-reviewed articles published in the past 5 years that were graded and arranged in a literature matrix. These provided the evidence to develop the CPG, which was then evaluated by a group of four content experts using the AGREE II tool and by six end-users for content validity. Each of the six domain scores of the AGREE II tool were above 95% and the end-users reported that the suicide screening pathway was practical, and the CPG would be important to healthcare providers in preventing adolescent suicidality. No revisions were needed to the CPG based on the AGREE II scores all being above 70%, which indicates high quality. The CPG provides a standardized guideline for healthcare providers to identify and engage with at-risk adolescents to prevent suicidality and facilitate treatment and care transitions. The suicide prevention CPG can be used by healthcare providers for early recognition and treatment of suicidality among adolescents, thereby preventing untimely mortalities while allowing the adolescent generation to thrive and achieve maximum adult potential, thus promoting social change and improved quality of life.

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Section 1: Nature of the Project

Suicide is a deliberate attempt to terminate one's life and can result in suicide death or attempted suicide in cases where the suicide plan fails (Cha et al., 2018). Suicidal ideation is the existence of thoughts and ideas of participating in activities meant to terminate one's life (Baiden & Todeo, 2020). On the other hand, a suicide attempt constitutes a self-initiated sequence of behaviors or actions that are self-injurious and performed with the goal of willingly ending one's life (American Psychiatric Association [APA], 2013). Most adolescent suicide attempts occur after a careful plan and involve overdosing, suffocation, using a firearm, or using a sharp object such as a cutting blade (Shain, 2016).

According to the World Health Organization (WHO; n.d.), adolescents constitute individuals aged 10 to 19. The suicide rate of the adolescent population grew by 56%, from 3.9 to 6.1 deaths per 100,000 adolescents between 2007 and 2016 (Curtin et al., 2018). Similar findings were reported in the 2017 Youth Risk and Behavior Survey (YRBS) which revealed that 17.2% of adolescents had thought of suicide and 7.4% attempted suicide (Kann et al., 2018); more recently, the 2019 YRBS revealed that about 9% of adolescents in Grades 9 to 12 had attempted suicide at least once (American Foundation for Suicide Prevention [AFSP], 2021). Nationally, suicide results in approximately one in every three injury-related mortalities among high-school-aged adolescents making suicide one of the primary causes of adolescent mortality (Ivey-Stephenson et al., 2020). Although the emerging trends of suicide reveal spiking suicide

rates among adolescents, the occurrence of suicide varies based on gender, race, and other sociodemographic factors (Cha et al., 2018; Fehling & Selby, 2021).

Sex represents a paradoxical phenomenon in which female adolescents experience more suicidality, but male adolescents experience three times as many suicide deaths as their female counterparts (Centers for Disease Control-Web-based Injury Statistics Query and Reporting System [CDC-WISQARS], 2020; Cha et al., 2018; Shain, 2016). Related to sexual orientation, Ivey-Stephenson et al. (2020) reported that heterosexual adolescents recorded lower suicidal deaths than lesbian, gay, bisexual, transgender, and questioning (LGBTQ) adolescents, and the variation emanated from reduced LGBTQ support in the U.S. Notably, among heterosexual adolescents, 14.6% developed a suicide plan, and 7.9% attempted suicide while among LGBTQ adolescents, 42.4% had a suicide plan and 23.6% attempted suicide (Ivey-Stephenson et al., 2020). Toomey et al. (2018) supported that over 50% of transgender male adolescents in their study had attempted suicide at one point in their life, while only 29.9 percent of transgender female adolescents reported attempting suicide. Further, 41.8% of adolescents who identified as nonbinary stated that they had attempted suicide in their lifetime.

Thompson et al. (2019) reported that troubled childhood occasioned by cases of emotional, physical, and sexual abuse; parental imprisonment; and a family history of suicidality could cause suicidality among adolescents. Further, Guo et al. (2016) revealed a correlation between abusing prescription drugs and suicidality among adolescents, demonstrating that drug abuse can contribute to suicidality. Generally, the occurrence of suicidal ideation confers a high suicidal attempt risk with adolescents who have suicidal

ideations having a 12-fold likelihood of attempting suicide by the age of 30, and over 85% attempt suicide within 12 months of the index episode of suicidal ideation (Cha et al., 2018; Nock et al., 2013).

Although there are worrying levels of adolescent suicide in the current U.S. society, a positive change is achievable through targeted approaches that offer comprehensive management of suicide risk among adolescents (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Therefore, I focused on developing a practical and evidence-based clinical practice guideline (CPG) for preventing suicide in a adolescents aged 10 to 19 at risk of suicide. The implementation of the newly developed CPG should result in reducing adolescent suicidality which is so prevalent in the current U.S. society.

Problem Statement

The problem identified in the CPG project was the rising rate of suicide among adolescents, which has emerged as an unsettling problem in the past decade (Curtin & Heron, 2019; Curtin et al., 2018). For instance, the Centers for Disease Control and Prevention (CDC) reported suicide as the second most common cause of mortality among U.S. adolescents, exceeding homicides and all other causes of adolescent mortality (CDC-WISQARS, 2020; Curtin et al., 2018). Since 2007, suicide deaths among U.S. adults above 35 and children below 10 years have remained low, but adolescent suicide rates in the U.S. have increased exponentially (Curtin & Heron, 2019). According to Curtin et al. (2018), adolescent suicide grew by 56% between 2007 and 2016, and as previously stated, in 2017, the YRBS revealed that 7.4% of adolescents attempted suicide

while in 2019, the YRBS revealed that 9% of adolescents in high school attempted suicide (AFSP, 2021; Kann et al., 2018).

In recent years, several bodies have made calls for action for everyone to participate in adolescent suicide prevention (CDC, 2021a; SAMHSA, 2020; U.S. Department of Health and Human Services [HHS], 2020). Notably, one of the goals of Healthy People 2030 involves a reduction of adolescent suicide from the current 2.4 deaths to 1.8 deaths or less per 100, 000 adolescents (HHS,2020). However, Bilsen (2018) argued that successful attempts to prevent suicide behaviors among adolescents should involve sustained and substantial scientific efforts to evaluate existing and novel prevention strategies. The nursing profession can play an overarching role in the fight against adolescent suicide by empowering professionals with clinical guidelines to better prepare nursing professionals with current evidence-based knowledge and skills on suicide prevention.

As a nursing scholar, I developed a CPG to address suicidality as an intervention for addressing the pressing suicide crisis ravaging the U.S. adolescent population. SAMHSA (2020) recently encouraged expanding suicide prevention approaches among adolescents by pursuing early recognition and treatment to prevent the development of suicidality. As such, the CPG for suicide prevention focused on early recognition and treatment of suicidality, aligning with the above directive by SAMHSA.

Purpose Statement

Currently, several schools of thought support the need for instituting proactive and preventive mental health services to adolescents, given that mental health issues,

sexual orientation, ethnicity, the increased popularity of social media, and bullying constitute a confluence of risk factors that increase the risk of suicidality among adolescents (Lanier et al., 2017; Twenge 2020). Despite the extensive research on suicide, there exists a paucity of research regarding evidence-based guidelines for preventing suicide among adolescents. Zalsman et al. (2016) and Singer et al. (2019) supported the lack of good evidence-based guidelines in the literature on suicide prevention, limiting the efficacy of current suicide prevention strategies. Therefore, a practice gap was established, revealing a lack of a standardized, evidence-based guideline for early recognition and treatment of suicidality among adolescents.

The purpose of the CPG project was to better prepare healthcare providers in identifying suicidality among adolescents and intervening at an early stage by developing a standardized guideline for suicide prevention among adolescents. Two practice-focused questions guided this CPG project. First, does the literature support developing a standardized guideline for preventing suicide in adolescents aged 10 to 19? Second, can an evidence-based CPG for preventing suicide in adolescents aged 10 to 19 be developed and validated using the Appraisal of Guidelines for Research & Evaluation II instrument (AGREE II instrument; see Brouwers et al., 2010a)? The practice-focused questions have vital roles in addressing the gap. For example, the first question supported the need for an evidence-based guideline for preventing suicide among adolescents. Answering the second question provided an evidence-based guideline to be used by healthcare providers to address the rising suicidality rates among adolescents aged 10 to 19.

Nature of the Doctoral Project

Under the guidance of the Walden University CPG manual, I identified the practice problem as rising rates of suicidality among adolescents. I anticipate that the CPG will be useful in any setting where adolescents are treated, especially in high schools, doctor's and nurse practitioners (NP) clinics, and emergency departments. The CPG better enables healthcare providers who care for adolescents (NPs, physicians, physician assistants, sociologists, and child psychologists) to recognize suicidality by using standardized tools to improve their perception of suicide warning signs in adolescents. The CPG also equips the healthcare providers with knowledge and skills on effective remedial actions to prevent suicidality. Further, the CPG aligns with Walden University's mission to improve adolescents' quality of care through education.

During the preparation of this CPG, I carried out an extensive literature review to identify scientific evidence supporting the applicability of using standardized guidelines in suicide prevention. Using keywords such as *prevalence* AND *suicide, prevention* AND *suicide* AND *adolescents,* and *suicide* AND *adolescents,* studies were sourced from several medical databases such as Cochrane, BioMed Central, PubMed, CINAHL, Google Scholar, and ProQuest. The retrieved relevant articles were appraised and organized in a literature matrix (see Appendix A) using the criteria established by Fineout-Overholt et al. (see Appendix B; 2010). I used the appraised studies to develop the CPG on adolescent suicide prevention. Later, a panel of four content experts reviewed the newly developed CPG using the AGREE II instrument (Brouwers et al., 2010a), and it was revised per the content experts' recommendations. Once consensus was met, the

CPG was presented to end-users (providers who care for adolescents) to review the content and usability. After satisfying content experts and the end-users, the CPG was ready for dissemination and adoption in relevant facilities. The findings from the reviewed studies helped me develop a reliable adolescent suicide prevention CPG that would enable providers caring for adolescents to improve their skills and approaches of recognizing, assessing, and managing early signs of suicidality. Therefore, the use of the CPG should contribute to adolescent suicide prevention.

Significance

In the quest to solve the looming suicide crisis among adolescents by preventing suicidality, various stakeholders will be impacted by this CPG project, including healthcare providers, adolescents, community members, and the government. Among healthcare providers working with adolescents, the CPG should enhance early recognition and effective treatment of suicidality by providing the healthcare providers with practical tools to assess and prevent adolescent suicidality. Essentially, the CPG should fine-tune the knowledge of healthcare providers concerning suicidality which will result in improvements in their professional skills. I anticipate that implementing the CPG will also lessen emergency room (ER) visits and hospital admissions related to suicidality. The reduced ER visits and hospital admissions will reduce the patient care burden among healthcare providers, effectively reducing burnout and increasing their job satisfaction (West et al., 2018).

The CPG should benefit adolescents substantially. Bettis (2020) revealed that increasing healthcare access and suicide awareness among adolescents reduces suicidal

thoughts. Therefore, preventing suicidality among adolescents by implementing the proposed CPG should increase the survival and help-seeking behaviors of adolescents; prevent suicidality that can impede a full, healthy life in adolescents; as well as reduce the pain and stigmatization family members feel due to the death of an adolescent by suicide (Bettis, 2020; Mojtabai et al., 2016; Pirkis et al., 2019). Educating adolescents on the importance of life and why it is worth living should also improve their quality of life.

I anticipate that the suicide prevention CPG should benefit community members by improving the health outcomes of the adolescent population by facilitating healthy living and reducing suicidality (Robinson et al., 2018). Reducing adolescent suicide mortalities in the community will prevent productivity losses that would otherwise occur due to untimely mortality (Doran & Kinchin, 2020). Adolescent suicide prevention could allow adolescents to pursue different careers in their adult life, which will help them serve the community by filling the gaps left by the older adult generation retiring from their workplaces. The CPG should also alleviate the healthcare burden in the government and healthcare system by reducing the costs incurred due to suicide. For instance, the CDC (2021b) revealed that suicides and suicide attempts result in $70 billion yearly in lifetime medical and work-loss costs.

The CPG should impact nursing practice by contributing to suicide prevention training programs. Graves et al. (2018) revealed that since 2017, several states in the U.S. require healthcare professionals to complete suicide prevention training. Therefore, the CPG should be valuable in nursing professionals' suicide prevention training programs by providing information on effective suicide prevention interventions for adolescents. In

terms of transferability, the CPG could be modeled to fit the contexts of suicide prevention in adolescents in various countries besides the U.S. Schloemer and Schröder-Bäck (2018) highlighted that diversity in health care systems and settings impact transferability. Differences in healthcare systems between the U.S. and that of other countries could impact the successful transferability of the CPG, but with minor adjustments, the CPG can be modified to fit the differences; an extensive contextual analysis of the adolescent population, the proposed interventions in the CPG, the environment, and the transfer process should assist healthcare professionals in other countries to make appropriate revisions to enhance successful transferability (Schloemer & Schröder-Bäck, 2018).

I anticipate that the CPG will facilitate positive social change by facilitating the adolescent generation to thrive and achieve maximum adult potential by preventing untimely mortalities. The reduction of adolescent mortalities due to the CPG's implementation should also enhance growth in local communities and economies as many adolescents will remain engaged in productive activities such as participation in formal education or honing out their talents across various disciplines. Therefore, there could be a reduction in the number of resources used to cater for injuries emanating from attempted suicides.

Summary

Suicide refers to a deliberate attempt to end one's life. Various factors predispose people, more so adolescents, to suicidality, including exposure to stress due to bullying, a troubled childhood, sexual orientation, drug abuse, and family history of suicidality.

Recently, an increasing prevalence of suicide among adolescents has emerged, leading suicide to become one of the prominent causes of mortality in the U.S. adolescent population (CDC-WISQARS, 2020). Reportedly, suicide among adolescents aged 10 to 19 has shown the most drastic upward trend in the past decade (Curtin & Heron, 2019; Curtin et al., 2018; Ruch et al., 2019). Several studies have reported pertinent findings that reveal significant gaps in the fight against adolescent suicide (SAMHSA, 2020; Zalsman et al., 2016). For instance, SAMHSA (2020) highlighted a need to diversify the scope of suicide prevention among adolescents to include early recognition and treatment to control the growing trend of suicidal behavior. Zalsman et al. (2016) highlighted that the lack of evidence-based guidelines in the literature limited the efficacy of current suicide prevention strategies. Understandably, healthcare providers should implement and support interventions to save the young generation from suicidality (AFSP, 2021; SAMHSA, 2020).

By answering the practice-focused questions, I addressed the existing practice gap by developing a suicide prevention CPG for adolescents following Walden University's CPG manual and guided by the AGREE II model. The CPG will benefit healthcare professionals working with adolescents by equipping them with knowledge and skills for flagging suicide indicators and preventing suicide among adolescents. The newly developed CPG should bring about a positive social change by promoting changes in perceptions involving suicide and help-seeking motives among adolescents since suicide is a significant problem plaguing the current young generation (Mojtabai et al., 2016). At large, the community and the nation should benefit through reduced healthcare burdens

that otherwise emanate from high suicide rates in society. In the next section, I discussed the background and context of the project as well as the model that guided the study, along with the project's relevance to nursing practice, local background and context, and the role of the DNP student.

Section 2: Background and Context

The problem identified in this CPG project involved the rising rate of suicide among adolescents aged 10 to 19. Thus, interventions are needed to manage the ongoing problem of suicidality among U.S. adolescents. With the CPG, I focused on answering two research questions. First, does the literature support developing a standardized guideline for preventing suicide in adolescents aged 10 to 19? Second, can an evidence-based CPG for preventing suicide in adolescents aged 10 to 19 be developed and validated using the AGREE II instrument? The CPG should help achieve the long-term goal of decreasing suicide among adolescents. The CPG's objective aligned with the goals of Healthy People 2030, which calls for a reduction of suicide among adolescents from the current 2.4 deaths to 1.8 deaths or less per 100,000 adolescents (HHS, 2020). In this section, I present a discussion of the model that guided the project; I further address the project's relevance to nursing practice, the local background and context, and the role of the DNP student.

Concepts, Models, and Theories

AGREE II

I used the AGREE II model (Brouwers et al., 2010a) to guide the DNP project. The initial AGREE tool was developed in 2003 by a group of guideline developers and researchers known as the AGREE consortium, and their objective was to develop an instrument for assessing the quality of the guideline. Despite its swift adoption, several opportunities to improve the initial instrument's usability, implementation, and measurement properties were recognized, sparking the development of the AGREE II

instrument in 2009 by an evolving team of international researchers, CPG developers, and users (Makarski & Brouwers, 2014). The main goal of the AGREE research program entails improving patient care quality and the performance of healthcare systems. The AGREE research program achieved the goals of scientific and CPG practice advancements by creating an appraisal instrument for differentiating the quality and guiding the development and reporting of CPGs (Makarski & Brouwers, 2014). Thus, the AGREE II instrument was designed as a better instrument that would create opportunities to facilitate its use and improve the overall quality of CPGs globally.

The AGREE II instrument itemizes 23 key components that are further categorized into six domains: the scope and purpose of the guideline, stakeholder involvement, the rigor of development, clarity of presentation, applicability, and editorial independence. The AGREE II instrument's reliability and validity are well supported in the literature as studies show that the instrument has excellent interrater reliability and that five of the six domains in the instrument were significant predictors of studies' outcome measures (p<.005; Brouwers et al.,2010b; Brouwers et al., 2010c). Besides the excellent interrater reliability, the AGREE II instrument has an internal consistency ranging between 0.64 and 0.89; therefore, the AGREE II instrument is appropriate for this CPG project. Armstrong et al. (2016) reported that three reviewers utilized the AGREE II instrument to evaluate 19 CPGs addressing osteoporosis management, revealing high scores in the scope and purpose domain but low scores in editorial independence. Chen et al. (2018) reported that three reviewers evaluated 89 CPGs on critical care, revealing the quality of critical care CPGs as suboptimal and recommended

substantial improvements in revising critical care CPGs, especially on the stakeholder involvement and applicability domains. The two studies revealed that the AGREE II instrument is extensively utilized in healthcare to evaluate CPGs and is thus appropriate when developing the proposed CPG.

Zero Suicide Model

I used the zero suicide (ZS) model (Brodsky et al., 2018) as a framework to develop the CPG. The ZS model was developed in 2012 by the National Action Alliance for Suicide Prevention (NAASP) together with other federal agencies such as HHS and SAMHSA as a crucial part of the National Strategy for Suicide Prevention (NSSP; Labouliere et al. 2018). The development of the ZS model was based on findings that 20% to 80% of suicide mortalities in the U.S. were from people whom healthcare providers had treated within the year before their death. The developers argued that many people died of suicide due to insufficient suicide risk detection, poor implementation of evidence-based suicide prevention interventions, or reduced intensity of care during high-risk suicide periods (Labouliere et al., 2018). The ZS model highlights that healthcare systems are crucial avenues for suicide prevention, with many at-risk individuals seeking healthcare services within the year before their suicide attempt, thereby providing a unique chance for healthcare providers to identify these at-risk individuals and prevent suicide deaths.

An assumption of the ZS model is that suicide is preventable; thus, the model calls for coordinating a multilevel strategy of applying evidence-based suicide prevention practices across various healthcare facilities in the U.S. (Brodsky et al., 2018). Based on

the ZS model, this newly developed CPG provides a standardized suicide recognition and prevention strategy for use in various healthcare settings, promoting coordination of suicide prevention among adolescents.

The ZS model also distinguishes four essential clinical elements when implementing suicide prevention strategies across clinical settings, including identify, engage, treat, and transition (Labouliere et al., 2018). The identify element involves screening and assessing suicide risk, while the engage element ensures pathways to care for patients at high risk of suicide. The treat element supports using effective evidence-based practices, and the transition element ensures sustained adolescent contact monitoring and follow-up during care and transitions.

The ZS model has been used in various settings with positive results. Hogan and Grumet (2016) introduced the ZS model at a nonprofit healthcare facility in Tennessee, achieving a 65% reduction in suicide deaths. In Michigan, the ZS model was implemented as part of a depression care program that reduced the suicide rate among patients by 75% after 4 years ($p<.007$; Holoshitz et al., 2019). Recently, Stapelberg et al. (2020) revealed that the ZS framework resulted in a 65% reduction in repeated suicide attempts and a delayed subsequent attempt among individuals receiving a suite of interventions under the ZS framework. The ZS model aligned with the suicide prevention CPG project since it is anticipated to increase healthcare providers' knowledge and competencies regarding suicide prevention among adolescents. Since healthcare providers working with adolescents will be at the forefront of suicide prevention, the CPG underpinned with the ZS model will boost identification, engagement, treatment,

and transitional practices of professionals to reduce suicide incidences among adolescents.

Relevance to the Nursing Practice

Suicide has nearly reached epidemic levels in the U.S. (Brodsky et al., 2018), with over 47,500 deaths reported in 2019 alone (AFSP, 2021) despite having intensive research leading to numerous evidence-based interventions targeting suicidal behavior. Thus, the problem of suicide can no longer be ignored in the U.S. Labouliere et al. (2018) faulted the healthcare system for inadequate detection of suicidality and failure to implement evidence-based, suicide-specific prevention strategies over the past decade, leading to increasing suicide incidences in the U.S. In many instances, individuals seeking treatment for health conditions did not receive any suicide screening during their healthcare facility visit, contrary to expert recommendations on regular universal suicide screening.

A national report (CDC-WISQARS, 2020) revealed that the ballooning incidence of deaths resulting from adolescent suicide has made suicide one of the primary causes of mortality in the current adolescent population of the U.S. Curtin et al. (2018) pointed out that the suicide rate among adolescents aged 10 to 19 grew from 3.9 in 2007 to 6.1 per 100,000 individuals in 2016, demonstrating a 56% increase. Further, the 2019 YRBS showed that about 18.8% of high schoolers in the U.S. had considered suicide, with 8.9% carrying out a suicide attempt despite accessing healthcare facilities and school clinics in the community (Ivey-Stephenson et al., 2020). The increasing incidences of suicidality occurring among adolescents can be partially attributed to bullying and high-stress rates

among adolescents with low coping mechanisms (Mitchell et al., 2018; Mueller et al., 2015; Reed et al., 2015).

Lindsey et al. (2019) examined suicidality among high-school students in the U.S, finding one in every five adolescents had suicidal thoughts, representing a worrisome figure of 18.8%. Lindsey et al. (2019) found significant suicide variations among Black adolescents, which showed a growing trend of suicidality among Black adolescents (*OR* [Odds Ratio] = 1.04, p =.001), supporting the fact that Black adolescents experienced a more significant increase in suicide attempts between 1991 and 2017 than other ethnic and racial groups.

Studies have linked racial disparities in adolescent suicidality to various factors (Cha et al., 2018; Lanier et al., 2017; Lindsey et al., 2019). According to Cha et al. (2018), racial variations of suicide attempts stem from mental health treatment disparities and the disproportionate social etiological factors in adolescents. For instance, Black adolescents face racial discrimination and troubled childhood emanating from widespread neglect, abuse, and poverty (Lanier et al., 2017) which positively correlate with self-harm behaviors (Cha et al., 2018). Lindsey et al. (2019) raised another perspective by attributing the racial disparity in adolescent suicide to Black adolescents ignoring mental health symptoms or viewing them with skepticism leading to unmanaged mental health concerns due to poor mental health-seeking behavior. Thus, the implementation of the proposed CPG will benefit Black adolescents as a vulnerable group of adolescents.

Regarding gender differences in adolescent suicidality, Ruch et al. (2019) reported that the historically substantial difference between male and female suicide

cases where males have higher suicide cases compared to females has continued to reduce, representing a disproportionate growth in suicide rates among female adolescents. Beginning in 2007, the male to female incidence rate ratio for adolescent suicide decreased from 3.14 to 1.80 for 10- to 14-year-olds and 4.15 to 3.31 for 15- to 19-year-olds. Further, the suicidality of female adolescents had the largest significant percentage increase (12.7% vs. 7.1% for 10- to 14-year-olds; 7.9% vs. 3.5% for 15- to 19-year-olds). Ivey-Stephenson et al. (2020) reported that female adolescents exhibited more suicidal behaviors than their male counterparts based on the 2018 YRBS report. Other studies shed light on the emerging trends of suicidality, revealing that although suicidal ideation and attempts are more common in females (Roh et al., 2018), completed suicide rates are higher in males (Pontes et al., 2020).

Currently, adolescents who identify as LGBTQ suffer from higher rates of suicidality. Raifman et al. (2020) reported that although the number of adolescents having same-sex sexual contact grew from 7.7% in 2009 to 13.1% in 2017, LGBTQ adolescents were nearly five times likely to attempt suicide than their heterosexual peers. According to Ivey-Stephenson et al. (2020), reduced social support for LGBTQ communities has contributed to higher suicide rates among LGBTQ adolescents than their heterosexual peers. Hatchel et al. (2019) and Aranmolate et al. (2017) have faulted peer victimization, depressive symptoms, drug abuse, and social stigma for causing increased suicidality among LGBTQ adolescents.

Various strategies have been applied in the past to facilitate suicide prevention. The 2001 National Strategy for Suicide Prevention (NSSP) laid out a framework for

action that promoted and guided efforts to uplift the social infrastructure to promote better approaches and attitudinal changes regarding suicide and suicide prevention under judicial, educational, and healthcare systems (Center for Mental Health Services & Office of the Surgeon General, 2001). The Garrett Lee Smith Memorial Suicide Prevention Program (GLS program) was rolled out in 2005 as a multifaceted program across various states, communities, and campuses involving programs for suicide survivors, mental health awareness programs, screening programs, community partnerships, and crisis hotlines (Mandlawitz & Director, 2016). According to Godoy Garraza et al. (2019), the GLS program was impactful since suicide mortalities among adolescents and youths reduced significantly ($p = .029$) 12 months after implementing the program than in counties that failed to implement the program. The persistent implementation of the GLS program for several years resulted in more significant reductions in suicidality.

The Office of the Surgeon General and the National Action Alliance for Suicide Prevention (2012) noted variations in state plans for suicide prevention and emphasized that healthcare professionals receive suicide prevention education accredited by relevant bodies (Graves et al., 2018). The directive led to the training of different healthcare providers on the competencies for suicide prevention. Smith-Millman and Flaspohler (2019) reported that some states in the U.S. require all high schools to implement specific suicide prevention activities, allocating funds for suicide prevention programs, or providing school staff training on suicide prevention. Many high schools in the target state have school clinics where students get medical care, providing an available venue for implementing adolescent suicide prevention measures such as the current CPG.

Overall, adolescent suicide is a pressing issue in the current U.S. society despite several sociodemographic disparities. Therefore, I developed a standardized clinical practice tool to facilitate suicide recognition and prevention for all adolescents aged 10 to 19 irrespective of gender, sexual orientation, family-social status, race, or ethnicity. This step makes sense to nursing practice since NPs use standardized procedures to promote quality care delivery to patients. Through the CPG, I focused on promoting better management of suicidality among adolescents to reduce suicide incidences in the community. I anticipate that implementing the CPG will help achieve the above plan by equipping healthcare providers working with adolescents with knowledge and skills for flagging suicide indicators and preventing suicide among adolescents and facilitate reduced hospitalization due to suicidality among the vulnerable group of adolescents, thereby reducing inpatient care costs and patient care burden in nursing practice. I also anticipate that implementing the CPG should improve nursing care delivery through suicide risk identification and prevention and healing among adolescents suffering from suicidal thoughts.

Local Background and Context

In the District of Colombia (D.C.), YRBS indicated that adolescent suicide has persisted as a thorny issue (Office of the Superintendent of Education [OSSE], 2017). Over 800 patients are seen every month in the facility where I work, and about 150 patients are adolescents. In terms of racial distribution, adolescents are predominantly African Americans, who constitute 68.5% of middle school and 72.3% of high school students. Other groups include Asians, Latinos, Whites, American Indians, and other

races. The facility's mission is to offer the best level of care to the locals at the lowest possible cost. The strategic vision of the facility for the adolescent population is achieving the best health outcomes for all adolescents. Through reviewing documentation and discussions with several healthcare providers in the facility, I found that the healthcare providers rarely evaluate the risk of suicidality among adolescent patients visiting the facility. The healthcare providers also admitted a lack of a standard guideline on suicide recognition and prevention among adolescents. Based on the facility's documentation, about 10 adolescent suicide cases were reported in the past year, revealing that adolescent suicide is a problem facing the local community.

The 2017 YRBS in D.C. revealed high rates of suicidality among adolescents (OSSE, 2017). In middle school students, female adolescents had significantly higher suicidality, and on average, the percentage of adolescents with signs of suicidality increased between 2015 and 2017. A similar trend was observed among high school students whereby the YRBS survey reported that 19.1% of females seriously thought about suicide compared to 11.8% of their male counterparts. Regarding racial disparities, within the year before the study, the percentage of White adolescents who reported attempting suicide was lower than African Americans (5.0% vs. 15.6% respectively). Regarding sexual orientation, the YRBS reported that LGBTQ adolescents' suicidality rate was about three times higher in middle school and twice higher in high school than their heterosexual peers. Further, one in 10 LGBTQ high school adolescents received care from a doctor or nurse due to an attempted suicide within the year before the study. In the past, adolescent suicide prevention measures in D.C. have involved phone call and

text message hotlines, chat resources, the establishment of community support groups, and training teachers on suicide prevention through youth behavioral health programs. Despite the measures, adolescent suicidality remains high, as revealed by the 2017 YRBS report.

Measures to prevent adolescent suicide have gained state and national attention. At the federal level, several interventions aimed at curbing suicidality among adolescents and other groups have occurred with tremendous impacts on suicide reduction in the U.S. These interventions included establishing the U.S. National Strategy for Suicide Prevention (NSSP) in 2001 and enacting vital legislation, including the Garrett Lee Smith Memorial Act of 2004 and Every Student Succeeds Act of 2015 (Center for Mental Health Services & Office of the Surgeon General, 2001; Mandlawitz & Director, 2016; Walrath et al., 2015). In D.C., legislations such as the Department of Mental Health Establishment Amendment Act of 2001 and the Youth Suicide Prevention and School Climate Survey Amendment Act of 2016 have been enacted to facilitate suicide prevention through suicide prevention in school (Council of the District of Colombia, 2018).

Role of DNP Student

I work as a psychiatric nurse, and in my routine practice, I come across adolescents receiving treatment in the psychiatric department and other clinical areas. In one week, my overall caseload involves over 20 adults and six or more adolescents. In most of the cases, the adolescents are female high school students who are hopeless, anxious, and angry. Most of the adolescents I encounter report instances of bullying or

substance abuse which have been linked with suicidality (Guo et al., 2016; Mitchell et al., 2018). The most disheartening thing that I have observed is that as suicide incidents among adolescents continue to increase but no CPG exists in the facility where I work to assist healthcare providers in recognizing and preventing suicidality among adolescents. On one occasion, an adolescent male aged 16 was received and treated in the ER for acute alcohol intoxication. Although the adolescent got better and was discharged, he committed suicide 2 weeks later. I believe that that case was not an isolated incident and that adolescent suicides happen in many places around the globe. I am confident that healthcare providers working with adolescents could prevent suicidality with an evidence-based, standardized tool for recognizing and preventing suicidality among adolescents.

As the project leader, I focused on developing and implementing a CPG targeting adolescent suicide prevention. I collected, reviewed, and graded literature on suicide prevention through an in-depth literature search to have current, evidence-based, and peer-reviewed information to develop the CPG on adolescent suicide prevention. I invited four content experts to evaluate the CPG using the AGREE II instrument, and I revised the proposed CPG as recommended. I invited a group of end-users (providers who work with adolescents) to review the CPG for usability and content. After the project is completed, I will request a meeting with healthcare facility administrators to explain the purpose of the CPG and the anticipated benefits. After gaining the buy-in of the facility administrators, I will lead efforts to enlighten healthcare providers on their critical role in mitigating adolescent suicide incidences and the need to use the CPG.

My primary motivation to carry out this project stemmed from realizing that the increasing incidence of suicide among adolescents robs them of many life opportunities as adults, such as having a fulfilling career. Further, since the nation's future lies on the young generation, society cannot benefit from the talents of adolescents who commit suicide which is a significant disadvantage. I believe that the practice gap involving adolescent suicide prevention needs to be explored and addressed to provide effective interventions that would safeguard the lives of adolescents and the nation's future. Since the burden of suicide is currently high in the U.S., I am confident that providing an evidence-based CPG for addressing the suicide crisis among adolescents in the nation is worthwhile.

The potential bias that could have impacted my role in the project entailed confirmation bias. Confirmation bias refers to the suppression of facts when they do not conform to personal decisions (Talluri et al., 2018). I addressed confirmation bias by doing an extensive literature review to generate enough evidence for the proposed CPG and using the evaluations of the content experts and the end-users to ensure that the CPG had comprehensive and balanced information regarding suicide recognition and prevention interventions.

Summary

Despite high levels of suicide among adolescents, the problem has not received optimum attention, leading to thousands of preventable deaths in the country. The overarching aim of implementing the CPG was to achieve the long-term goal of decreasing suicidality among adolescents aged 10 to 19, correlating with one of the goals

of Healthy People 2030, which aims to reduce the incidences of adolescent suicides by 2030 (HHS, 2020). The DNP CPG project was guided by the AGREE II framework and directed by the ZS model (Labouliere et al., 2018), which recognizes suicide as preventable and entails coordinating a multilevel strategy to implement evidence-based practices across U.S. healthcare facilities effectively. I served as the project leader and a change champion by advocating for the CPG's implementation to facilitate suicide prevention among adolescents aged 10 to 19. I developed the guideline and selected a panel of experts to evaluate the newly developed CPG following the AGREE II instrument. In the next section, I reviewed sources of evidence and how the evidence used in the project was collected and analyzed, along with a review of the practice-focused question, protections, and analysis and synthesis.

Section 3: Collection and Analysis of Evidence

Adolescent suicide has emerged as a pressing public health concern in the U.S. that needs intervention. Curtin et al. (2018) demonstrated that the rate of suicide among adolescents aged 10 to 19 increased from 3.9 in 2007 to 6.1 per 100,000 individuals in 2016, demonstrating a 56% increase. Despite extensive research on suicide, Zalsman et al. (2016) and Singer et al. (2019) supported the lack of good evidence-based guidelines in the literature, limiting the efficacy of current suicide prevention strategies. There is a need for expanding suicide prevention approaches among adolescents by pursuing early recognition and treatment to prevent the development of suicidal behavior (SAMHSA, 2020). Therefore, the CPG project's purpose was to better prepare healthcare providers in identifying suicidality among adolescents and intervening at an early stage by developing a standardized guideline for suicide prevention among adolescents aged 10 to 19. In this section, I present the process adopted during the collection and analysis of evidence for the CPG development project, along with a further discussion of the practice-focused questions; sources of evidence; participants, procedures, and protections; and analysis and synthesis. This section ends with a summary of the above subtopics.

Practice-Focused Questions

The problem identified in the CPG entailed a 56% increase in incidences of adolescent suicide from 2007 to 2016, and which continue to increase in current U.S. society (CDC-WISQARS, 2020; Curtin et al., 2019). In practice, there were no standardized guidelines for guiding providers working with adolescents on how to assess and prevent suicide attempts (Zalsman et al., 2016). However, studies reiterate that

healthcare providers need to leverage their education as a tool for identifying health hazards among vulnerable populations, developing evidence-based interventions to address the problems, and implementing these interventions through clinical practice (Xue & Intrator, 2016). As such, I sought to address the above practice problem by developing an evidence-based CPG for preventing suicide among adolescents, thus answering the two practice-focused questions that guided this project. Does the literature support developing a standardized guideline for preventing suicide in adolescents aged 10 to 19? Furthermore, can an evidence-based CPG for preventing suicide in adolescents aged 10 to 19 be developed and validated using the AGREE II instrument? The development of the CPG should assist nurses in gaining knowledge and skills of identifying, assessing, and preventing suicidality among adolescents and provide nurses with the fundamentals for early detection and interventions for managing suicide risks. The CPG could become a guide that all nurses working in various settings use for suicide risk assessment and suicide prevention among adolescents, thereby filling the existing gap and addressing the recalcitrant issue of adolescent suicide in U.S. society.

Sources of Evidence

The CPG was underpinned with published peer-reviewed studies retrieved from an extensive literature search as described in Section 1. The search was limited to studies published in English from 2016 to 2021, unless seminal studies were found. Upon completing the literature search, I arranged pertinent studies in a literature matrix and graded them using the criteria developed by Fineout-Overholt et al. (2010). Given that the purpose of the CPG project was to develop an evidence-based CPG on adolescent

suicide prevention, collecting and analyzing evidence through a thorough scientific process involving an in-depth literature search and analysis yielded current, peer-reviewed, and relevant studies that provided valuable information on evidence-based interventions for adolescent suicide prevention. Using scholarly, peer-reviewed, scientific evidence to develop the CPG aligned with prior recommendations that successful attempts to prevent suicide behaviors among adolescents should involve sustained and substantial scientific efforts to evaluate existing and novel prevention strategies (Bilsen, 2018).

Evidence Generated for the Project

Upon completing the CPG, a panel of four content experts was chosen to review the newly developed CPG for methodological rigor and quality using the AGREE II instrument. The expert panel uploaded their individual AGREE II scores on the AGREE website (www.agreetrust.org), where the scores were averaged, and I received a report containing the individual domain scores and the overall assessment of the proposed CPG. I also gave the newly developed CPG to end-users (providers who care for adolescents) to evaluate the CPG for content and usability. Other evidence gathered through the project was a summative evaluation where the content experts were asked to evaluate the project, process, and my leadership throughout the project. The summative assessment revealed my strengths and weaknesses during the CPG development process and guided me in making necessary changes to improve any future CPG development I undertake. The collection of evidence through the above processes ensured that the CPG addressed

the practice-focused questions comprehensively and that the interventions were applicable in routine practice.

Participants

According to Brouwers et al. (2017), the AGREE II framework endorses using two to four appraisers to assess a CPG, with four being the preferred number. Though four reviewers were the preferred number of reviewers, I invited five for fear of nonparticipation by all of those invited. The five were chosen based on their expertise and experience with adolescent health issues, familiarity with the AGREE II instrument, ability to internalize the practice-focused questions, and experience with adolescents who have had suicidal ideations or attempts. All the panelists were psychiatric NPs with a doctorate level of education. The second group of participants was the end-users who constituted providers who care for adolescents. The end-users included six NPs who were chosen from settings where adolescents receive healthcare, including school clinics, doctors' clinics, NP clinics, and ER departments, each with a minimum of 10 years of experience treating adolescents. Given that the end-users interact with adolescents frequently, it was anticipated that they could evaluate the CPG's content and usability and provide vital feedback important to the revisions needed to make the CPG more acceptable at the provider level.

Procedures

Once the CPG was developed, all content experts were provided with an introduction letter, the Disclosure for Anonymous Questionnaires, a copy of the literature matrix (Appendix A), the rating system established by Fineout-Overholt et al. (Appendix

B; 2010), the AGREE II instructions and AGREE site link, the AGREE II scoring sheet, the newly developed CPG (Appendix C), and the summative evaluation results form. The content experts reviewed the proposed CPG using the AGREE II instrument and I asked them to provide feedback within two weeks; some of them took three weeks to complete the review; during this time, I emailed them every two days to remind them about the due date that had already passed; at this time, those who had not finished their review went ahead and completed it. During the process, the experts reviewed the CPG addressing the six quality domains containing 23 key items of the AGREE II instrument. The six domains focus on the scope and purpose, stakeholder involvement, the rigor of development, clarity of presentation, applicability, and editorial independence. The content experts uploaded their individual AGREE II scores on the AGREE website (www.agreetrust.org) where the scores were averaged, and I received a report containing the overall assessment of the CPG. The AGREE II instrument is a valid and reliable instrument that provides a step-wise strategy of evaluating the information included in CPGs and how it should be reported (Brouwers et al., 2010b; Brouwers et al., 2010c). The CPG was revised per the recommendations of the content experts and after reaching a consensus among the content experts, the CPG was given to 5 end-users who reviewed it for content and usability. After the conclusion of the panelists' project evaluation, they were given a copy of the Summary Evaluation of the project, process, and my leadership to complete.

Protections

The process of completing the CPG did not involve any identifiable risks; however, ethical approval (# 10-29-21-0497894) was obtained from Walden University to show compliance with the Institutional Review Board (IRB), which ensures that ethical standards were used, and the project complies with all the official procedure. As the CPG was not developed for a specific setting, no site agreement was needed. Each expert panelist received a preapproved Disclosure to Expert Panelist form with an accompanying letter introducing them to the process. As the AGREE website does not gather any identifying information, the reviewers remained anonymous with all paperwork identified with numbers instead of names. The expert panelists were not compensated financially for participating in the project. Hard copies of the collected data will be stored in a locked drawer for 5 years, accessible only to the DNP scholar, and then shredded. Electronic copies of the data will be kept in a password-protected computer accessible only to the DNP scholar, stored for 5 years after the project's completion, and then permanently deleted.

Analysis and Synthesis

I used a literature review matrix to summarize all the peer-reviewed studies used in developing the CPG. The content experts appraised the CPG by completing all sections of the AGREE II instrument. The AGREE II scores were averaged through the AGREEtrust.org website, and individual domain scores and an overall assessment were generated. The assessment from the AGREE website enabled me to critique the allocated percentages for each domain and identify any limitations. The analysis involved a two-

step process, collecting feedback from the 23 key items individually and collecting the overall assessment of the CPG. During the overall assessment, the experts considered the quality of the guideline based on the criteria in the assessment process and whether the expert could recommend the guideline for use (Brouwers et al., 2010a). I revised the final CPG based on the results I obtained from the AGREE website. I also used the evaluations of the end-users to refine the newly developed CPG's content and usability.

I completed a thematic analysis of the findings from the Summary Evaluation of the project, process, and my leadership. The common themes derived from the responses to the Summary Evaluation revealed my strengths and weaknesses during the CPG's development process and will guide me in making necessary changes to improve my CPG development in future projects.

Summary

The CPG will fill the existing practice gap of a lack of a standardized guideline for suicide prevention among adolescents aged 10 to 19. The newly developed CPG will enable nurses to assess, identify, and prevent suicide attempts or ideations among adolescents, thereby reducing the adolescent suicide crisis bedeviling the current U.S. society. The validity of the newly developed CPG was shown through the AGREE scoring instrument. An expert panel reviewed and graded the proposed CPG using the AGREE II instrument during this process. The individual scores of the experts were uploaded to the AGREE website and averaged. I received a report containing the overall assessment of the proposed CPG and revised it per the recommendations of the content experts. After reaching a consensus, the CPG was given to end-users to review it for

content and usability. After the content experts concluded the project evaluation, they were given a copy of the Summary Evaluation of the project, process, and my leadership to complete. In the next section, I discussed the findings and implications, recommendations, strengths, and limitations

Section 4: Findings and Recommendations

The problem identified in this CPG project was the increasing rate of suicides among adolescents aged 10 to 19. The literature reports that suicidality among adolescents has emerged as a problematic issue whereby suicide is the second major cause of death among U.S. adolescents (CDC-WISQARS, 2020; Curtin & Heron, 2019; Curtin et al., 2018). I identified a gap in practice involving a lack of a standardized, evidence-based guideline for early recognition and treatment of suicidality among adolescents. Further, Zalsman et al. (2016) and Singer et al. (2019) supported the lack of good evidence-based suicide prevention guidelines in the literature, reducing the efficacy of current suicide prevention strategies. Thus, interventions are needed to prevent suicidality among U.S. adolescents. The practice-focused questions used to address the nursing practice gap were as follows:

Practice-Focused Question 1: Does the literature support developing a standardized guideline for preventing suicide in adolescents aged 10 to 19?

Practice-Focused Question 2: Can an evidence-based CPG for preventing suicide in adolescents aged 10 to 19 be developed and validated using the AGREE II instrument?

The purpose of this CPG project was to better prepare healthcare providers in identifying suicidality among adolescents to intervene at an early stage by developing a standardized guideline for suicide prevention among adolescents. The importance of the newly developed CPG is that it should lead to the long-term goal of decreasing suicide among adolescents by identifying effective strategies for improving early recognition, assessment, and treatment of suicidality in adolescents, as supported in the literature.

The sources of evidence that were used to develop the CPG were current, evidence-based, peer-reviewed studies providing information on best practice interventions for adolescent suicide prevention. I used the appraised studies to develop a CPG on adolescent suicide prevention. Evidence to evaluate the newly developed CPG emanated from evaluations by content experts using the AGREE II instrument and from end-users' comments on the content and usability. The summary evaluations by the expert panelists will guide me in making necessary changes in future projects to improve my CPG development. In this section, I will discuss the findings and implications, recommendations, along with the strengths and limitations of the project

Findings and Implications

The literature search yielded 24 articles that were used when developing the CPG. The studies included five RCTs, three systematic reviews of RCTs, one metanalysis, one longitudinal study, seven cross-sectional descriptive studies, two systematic reviews of descriptive studies, and five literature reviews of descriptive studies.

Four expert panelists evaluated the newly developed CPG using the AGREE II instrument revealing notable findings. Of the 6 domains of the AGREE II instrument, the scores were 100% for Domain 1 (scope and purpose), 96% for Domain 2 (stakeholder involvement), 99% for Domain 3 (rigor of development), 100% for Domain 4 (clarity of presentation), 99% for Domain 5 (applicability), and 100% for Domain 6 (editorial independence; see Appendix D). No revisions were needed to the CPG based on the AGREE II scores all being above 70%, which indicates high quality (see Brouwers et al., 2010a). Domains 1, 4, and 6 received scores of 100%, Domains 3 and 5 received 99%

and Domain 2 received a 96%. The panelists did not provide comments on what revisions were needed, and since the evaluations were done anonymously, the panelists could not be contacted for additional input. Domain 2, Stakeholder Involvement, received the lowest score, 96%, and addresses including relevant professional groups in the CPG's development, seeking the views and preferences of the target population, and clearly defining the target users of the CPG. The healthcare provider is clearly indicated as the stakeholder who will implement the CPG and adolescents between 10 and 19 years of age are identified as those who are to receive the screening using the CPG. NPs and other providers who care for adolescents form the target users of the CPG and were included both as content experts and end users, invited to share their views during the evaluations.

During the overall assessment of the CPG using the AGREE II tool, the content experts were asked to consider the overall quality of the CPG based on the criteria in the assessment process and whether they would recommend the CPG for use. Four panelists completed the evaluation; the fifth did not respond to any correspondence after the initial agreement to participate. Three panelists answered the first question regarding the overall quality of the CPG, giving an overall rating of 71%, and two answered the final question recommending the CPG for use without any modifications. With the three panelists giving their overall quality rating, the overall CPG rating would be 100%, revealing high quality. Additionally, with two panelists responding to the question about recommending the CPG, both saying yes without modification, it showed that the CPG was good and could be used without making any changes. The panelists who did not complete the final

assessment were anonymous, so follow-up was not possible; no comments or feedback were provided.

The summative evaluation was completed by three content expert panelists, whereby the fourth panelist did not explain the reason for not completing the summary evaluation. The summative evaluation revealed that my leadership in the CPG development process was excellent and that I was patient and resourceful when assisting them in using the AGREE website (see Appendix E). The panelists revealed that my communication was effective and concise, and they were grateful for being asked to participate in the project. For instance, one panelist stated, “I feel strong for participating in the study as an expert in the field; I am hopeful that my evaluation will be worthwhile.” I requested they return the evaluations within two weeks for the CPG evaluation by the content experts, but one panelist reported that more time should be allocated to go through the CPG extensively. All the panelists reported that the project's products, including the CPG and the literature matrix, were authentic and revealed an extensive literature search. One panelist reported, “As an expert in the field, I was keen on examining the evidence and interventions proposed in the CPG. I am convinced that the products were evidence-based, and they address the problem of suicidality.”

Besides the summative evaluation, six end-users, all NPs with a minimum of 10 years of experience treating adolescents, evaluated the CPG for usability, revealing that the suicide screening pathway presented in the CPG was practical and would guide healthcare providers on what to do based on the results of the suicide screening process. The end-users reported that the CPG would be an important guideline that will assist

healthcare providers in preventing adolescent suicides. The areas addressed in the newly developed CPG were based on the ZS model (Labouliere et al. 2018) and they include identification of suicide risk among adolescents, engagement with at-risk adolescents, treatment interventions for adolescents at-risk of suicidality, and care transitions. Each of these areas is discussed below.

Identification of Suicide Risk Among Adolescents

Healthcare providers must be aware of risk factors predisposing adolescents to suicidality for early identification and treatment. Notably, Carballo et al. (2020) revealed that psychosocial risk factors causing suicidality among adolescents involve depression, history of suicide attempts, substance abuse, and mental health disorders such as anxiety and bipolar disorders. Stressful events such as family conflicts, bullying, traumas such as sexual abuse, and romantic breakups also preceded suicidal behavior in adolescents (Carballo et al., 2020). Miranda-Mendizabal et al. (2019) further addressed mental disorders or substance abuse disorders and trauma experiences as events that predispose adolescents to suicidality. Risk factors such as eating disorders, being a victim of dating violence, post-traumatic stress disorder, depressive symptoms, and previous abortion were common in females, while among males, the common risk factors for suicidality are disruptive behaviors and conflicts, hopelessness, parental separation, and access to means (Miranda-Mendizabal et al., 2019). Aside from the male and female gender differences, LGBTQ sexual preferences emerged as a risk factor for suicidality (Miranda-Mendizabal et al., 2019). Ribeiro et al. (2018) reiterated that depression and hopelessness were salient risk factors for suicidality in adolescents. Steele et al. (2018) highlighted that previous

suicide attempts or nonsuicidal self-injury, exposure to violence or witnessing violence, and a family history of suicidality or psychiatric illness were critical risk factors for suicidality.

Healthcare professionals must be aware of the warning signs of suicidality as they provide healthcare to adolescents. Becker and Correll (2020) highlighted several warning signs such as sudden behavior change, apathy, withdrawal, elevated emotional lability, distinct hopelessness, severe sleep disturbances, traumatization, giving away personal possessions, depressive symptoms, unusual preoccupation with death or dying expression of altruistic ideas of suicide, and recent experience of a loss. Bernert et al. (2017) agreed that sleep disturbances such as marked changes in sleep timing, insomnia, and nightmares predicted the incidence of suicide ideation. In addition, Suherman et al. (2018) focused on the verbal and nonverbal indicators of suicidality, stating that adolescents could reveal signs of suicidality through verbal and nonverbal communication that shows a desire to harm themselves, such as making verbal statements on committing suicide or through writing suicide notes.

Brahmbhatt et al. (2019) highlighted that healthcare providers should facilitate early assessment and recognition of adolescent suicidality by ensuring universal screening of all adolescents using validated suicide screening tools during all adolescent healthcare facility visits for treatment. Horowitz et al. (2020) supported Brahmbhatt et al. (2019) recommending the Ask Suicide Screening Questions (ASQ) tool (National Institute of Mental Health, 2020a) and the ASQ Brief Suicide Safety Assessment (ASQ-BSSA) tool (National Institute of Mental Health, 2020b) as validated suicide screening

and assessment tools for adolescents. Aguinaldo et al. (2021) explored the validity of the ASQ tool, revealing a sensitivity of 100% and a specificity of 87.9% in primary care settings.

Engagement with At-Risk Adolescents

Vaughn et al. (2020) highlighted the need for healthcare workers to carry out a comprehensive suicide risk screening and assessment when engaging with at-risk adolescents. According to Vaughn et al. (2020), a safe suicide screening environment that ensures privacy and comfort is crucial for adolescents to talk freely about their feelings. Reinforcing this requirement, Brahmbhatt et al. (2019) and Horowitz et al. (2020) reported that healthcare providers should ensure that the suicide screening and assessment are done with only the adolescent present to avoid the influence or bias of parents or guardians.

The suicide risk screening clinical pathway involves a three-tiered system (Brahmbhatt et al., 2019; Horowitz et al., 2020). First, the initial screening using the Ask Suicide-Screening Questions (ASQ) tool (National Institute of Mental Health, 2020a) is conducted by nurses or medical assistants. The ASQ tool consists of five questions with a positive screen identified with a "Yes" to any of questions 1 through 4 or when the adolescent declines to answer any questions. The fifth question in the ASQ tool (Are you having thoughts of killing yourself right now?) is an acuity question for individuals with a positive screen to determine if they are at immediate risk of suicide (Horowitz et al., 2020). A "Yes" answer to the fifth question indicates immediate safety precautions such as always keeping the adolescent in sight and removing objects that can be used for self-

harm by the adolescent should be implemented. These adolescents who are at immediate risk need to undergo a full suicide assessment.

Adolescents who screen positive on the first-tier screening should undergo a second-tier screening process that involves a brief suicide safety assessment using the ASQ-BSSA tool (National Institute of Mental Health, 2020b). The second-tier screening is conducted by mental health practitioners, physician assistants, nurse practitioners, or physicians, and it is used to assess the risk of suicidality further to determine the level of suicidality in adolescents who screened positive in the first tier but did not answer "Yes" to the fifth question on the ASQ tool. During second-tier screening, the adolescent is assessed to determine the frequency of suicidal thoughts, suicide plans, incidences of past suicidal behavior such as self-injury or suicidal attempt(s), symptoms of suicidality, and existing social support networks and stressors. Following the assessment, the adolescent's parent or guardian is interviewed to get their perspective on the adolescent's suicidality. When the second-tier screening outcomes reveal a high or imminent risk of suicide, a third-tier screening should be conducted. In the third-tier screening process, psychiatrists, child psychologists, or other specialized mental health providers triage positively screened adolescents and conduct a full suicide safety evaluation to determine if inpatient medical or psychiatric hospitalization is necessary and, if indicated, the adolescent is admitted (Horowitz et al., 2020). After positive first and second-tier screening, healthcare providers can refer the adolescents to mental health providers, such as psychiatrists or child psychologists, to facilitate specialized management. The mental health providers should create an individualized management plan for each adolescent that incorporates

regular reassessment, increased clinical contact, and specialized treatment (Labouliere et al., 2018).

Treatment Interventions for Adolescents At-Risk of Suicidality

The interventions for treating adolescents who screen positive for suicidality necessitate a multifaceted approach that involves parents or guardians of the adolescent, mental health providers, and adolescents. The various treatment interventions for these adolescents at-risk of suicidality may involve dialectical behavioral therapy (DBT), mentalization-based treatment (MBT), cognitive-behavioral therapy (CBT), and/or family-based interventions. In DBT, the focus of treatment entails boosting parent-adolescent interactions. Thus, DBT sessions involve weekly psychotherapy with the adolescent in addition to parent telephone coaching and consultations with a therapist. McCauley et al. (2018) reported that DBT effectively reduced suicidality among adolescents at high risk of self-harm.

MBT guides adolescents on attachment and emotional regulation, reflection on interpersonal relationships, and mentalization principles helping the adolescent to understand how to control their emotional expression, behavior, and improve their mental health. Griffiths et al. (2019) supported that MBT was an effective intervention to reduce suicidality among adolescents reporting that self-reported self-harm reduced significantly after applying MBT.

Integrative CBT is delivered by a therapist, and it utilizes techniques such as restructuring, problem-solving, affect regulation, and communication skills. Restructuring helps adolescents think about distressing thoughts or feelings in a balanced

way rather than negatively. Problem solving focuses on reducing negative behaviors, such as social avoidance or aggression, by increasing positive behaviors through using social supports, goal setting, and practicing skills such as assertiveness, stress management, and decision-making. Affect regulation better enables adolescents to reduce the triggers, intensity, and duration of negative emotions. According to Iyengar et al. (2018), integrative CBT intervention helps remediate maladaptive cognitions among adolescents at risk of suicide. Iyengar et al. (2018) found CBT effective at decreasing suicidality and self-harm among adolescents.

Family-based interventions may involve modified CBT which is structured to incorporate parents with the adolescent. FBCI is an emergency psychiatric intervention involving cognitive behavioral skills building, psychoeducation, and safety planning with parents and adolescents. For example, one therapist can provide treatment to the adolescent while another works with the parents, and at the end of the treatment session, the adolescent and the parents collaborate to practice skills and address identified issues. Alternatively, a family-based crisis intervention (FBCI) can be used to stabilize an adolescent with suicidal thoughts during an emergency healthcare visit before the adolescent is discharged safely. Asarnow et al. (2017) stated that the family-based intervention significantly increased adolescents' survival by preventing suicidality in adolescents with recent self-harm. Esposito-Smythers et al. (2019) highlighted the effectiveness of family-focused CBT reporting that application of the intervention reduced suicide attempt rates from 20% at 6 months follow-up to 7% at 18 months follow-up. Wharff et al. (2019) stated that adolescents who received FBCI were

discharged with out-patient follow-up care with no suicides reported after discharge. While all the above interventions available have been found to effectively treat adolescents at risk of suicide, the individualized interventions should be personalized to the specific needs of the adolescent based on a thorough investigation of the risk factors and circumstances precipitating suicidality.

Care Transitions

Scott et al. (2018) highlighted that healthcare providers should work with parents or guardians of the adolescent during care transitions, such as discharge from the ER department or transitioning from inpatient to outpatient care, to create a personalized safety plan, review the lethal means available that the adolescent could use, and determine a safe way of storing lethal weapons at home to facilitate restricted access. A safety plan entails documenting warning signs of suicidality; exploring coping strategies that an adolescent is using or is willing to use; identifying triggers that can distract the adolescent; and providing the adolescent with a contact list of people, to include professionals and their phone numbers that the adolescent can call for help (Sisler et al., 2020). Besides safety planning, care transition practices need to focus on ongoing monitoring of suicide risk. Notably, Czyz et al. (2019) revealed that the post-treatment period commonly involves ongoing suicide-risk-related crisis and fluctuating risk patterns. Therefore, care transitions should also engage the adolescent in ongoing monitoring of suicidality through communication such as phone calls or text messages to facilitate continuity of care. Forte et al. (2021) described new technologies involving smartphone apps and text messaging interventions that can facilitate suicide prevention

among adolescents; healthcare providers can use such interventions to promote ongoing monitoring of suicide risk post-discharge.

Simões et al. (2021) explored the transition of adolescents at risk of suicide into the community, highlighting the support of family, peers, and other trusted individuals along with the knowledge of the newly learned coping strategies being crucial for adolescents recovering from suicidality. Thus, healthcare workers need to advise families of adolescents recovering from suicidality to show and maintain support for their adolescent. Simões et al. (2021) established that adolescents felt the need to maintain contact with healthcare workers after hospital discharge, supporting the technologies discussed by Forte et al. (2021), stressing the need for healthcare workers working with adolescents at risk of suicide to engage in follow-up care to support adolescents during the transitional period through technological interventions such as text messaging.

Unanticipated Limitations and Their Potential Impact

The most significant unanticipated limitation of the adolescent suicidality project was that the expert panelists failed to provide comments when evaluating the CPG. The lack of comments made it difficult to know what was considered lacking so I could address them and possibly improve the CPG; nonetheless, all the individual domain scores for the CPG were above 95%, with anything above 70% indicating high quality. Another limitation was that some of the studies retrieved in the literature search were not carried out in the U.S., thus limiting the generalization of the interventions in the U.S.

Implications of the Findings

I anticipate that the newly developed CPG will have positive implications for individuals, communities, institutions, and systems. Among individuals, the implementation of the CPG will safeguard adolescent lives by facilitating the prevention of self-harm behaviors that could be life-threatening along with mortalities associated with suicidality. Addressing suicidality early in adolescents is important since it will improve their quality of life and increase their longevity. The CPG should promote early detection of warning signs and implementation of interventions for suicidality in all adolescents, thus facilitating early treatment (Becker & Correll, 2020). The early interventions should prevent the worsening of symptoms and promote recovery from suicidality (Griffiths et al., 2019; Iyengar et al., 2018; McCauley et al., 2018). The implementation of the CPG should facilitate adolescents at risk of suicide to cope with different hardships that could trigger suicidal ideations, thus enhancing their resiliency, which is crucial as they navigate life problems now and in the future.

In the communities, the implementation of the newly developed CPG should facilitate the improvement of health outcomes of the adolescent population by promoting healthy living and reducing suicidality. Reducing adolescent suicide mortalities in the community will forestall productivity losses (Doran & Kinchin, 2020) and allow the adolescents to fill career gaps left by older adults retiring from their workplaces. At the institutional level, healthcare facilities that implement the CPG will contribute to SAMHSA's (2020) call for adolescent suicide prevention through early detection and treatment of all adolescents who visit facilities as outlined in the CPG. Institutions will

benefit from reduced ER visits and hospital admissions related to suicidality, thus reducing patient care costs associated with adolescent suicidality. The implication to the healthcare systems entails enhancing healthcare delivery among at-risk populations such as adolescents. Notably, I anticipate that the findings will enhance early detection of suicidality among all adolescents, promoting early interventions, improving patient care and quality of life.

Potential Implications to Positive Social Change

The newly developed CPG should facilitate positive social change by decreasing the number of adolescents who die by suicide. The implementation of the interventions highlighted in the CPG should assist in early recognition and treatment of suicidality among adolescents, thus minimizing the prevalence of suicidality in the adolescent population. I anticipate the prevention of suicidality among adolescents will assist the adolescent generation to thrive, thereby enhancing growth and development in local economies as many adolescents will remain engaged in productive activities such as participation in formal education or the workforce. The prevention of adolescent suicidality could reduce the costs used to cater to emergencies from attempted suicides.

Recommendations

Universal screening of all adolescents, as presented in the newly developed CPG, will facilitate early assessment and recognition of suicidality (see Brahmbhatt et al., 2019). To facilitate universal screening, I recommend the CPG become part of standard practice in all settings where adolescents receive healthcare, incorporating the CPG as part of the clinical care processes that healthcare providers working with adolescents

need to meet. Some aspects of the CPG regarding the engagement of the adolescent with healthcare providers during screening differ from routine practice; for example, the CPG highlights the need for conducting suicide screening with the adolescent alone. Therefore, I recommend educating healthcare providers working with adolescents to help them understand the need for privacy while evaluating for suicidality, as well as introduce the CPG and how to apply it. The education can be done during facility meetings or continuous professional education programs where information on the CPG could be shared among all healthcare providers working with adolescents. I recommend that healthcare policymakers provide more support for funding adolescent suicide awareness and prevention forums. Key stakeholders within the project site could collaborate with other facilities to request funding from local authorities to support adolescent suicide awareness and prevention forums. The suicide awareness and prevention forums could be crucial for increasing awareness of adolescent suicidality and educating healthcare providers on the newly developed CPG.

Strengths and Limitations of the Project

A significant strength of the DNP project entailed the meticulous steps involved during article searches. The CPG was based on several peer-reviewed studies utilizing various methodological approaches, thereby enhancing the validity and reliability of the CPG. For instance, each treatment intervention highlighted in the CPG is based on outcomes from randomized control trial studies. The project also met principles such as transparency and rigor to improve the reliability of the CPG. Notably, almost half of the studies used in developing the CPG using Fineout-Overholt's criteria (2010) were Level

1 and 2, systematic reviews of randomized control trials and randomized control trials, all high quality, most reliable sources of peer reviewed evidence. The domain scores of the CPG were all above 96%, with 70% being the mark of high quality and indicating no need to revise the CPG. Further, the CPG is applicable to various settings where adolescents receive healthcare since the CPG is standardized; it is a practical tool for preventing adolescent suicide based on the end-users' evaluations. Additionally, the CPG is universal as the interventions in the CPG can be used for all adolescents aged 10 to 19 irrespective of gender, sexual orientation, family-social status, race, or ethnicity. As discussed in previous sections, suicidality can occur in any adolescent, and as such, the development of a CPG on adolescent suicide prevention that considers all adolescents despite their backgrounds is important.

Under limitations, I experienced problems with the content experts' evaluations providing no comments to guide me in areas that I could improve in the domains that did not score 100%. After submitting the CPG to the content experts, one of the panelists failed to complete the evaluation despite my sending several reminders to contribute as a content expert. I included the panelist as a fifth content expert because I was unsure whether the other four panelists would respond to the invitation to evaluate the CPG, hence, my content expert panel still met the expectations of the AGREE model, with two to four being required but four panelists being the preferred number (Brouwers et al., 2017). One content expert failed to complete the summative evaluation with no explanation, as such, the lack of full participation of all the panelists limited my knowledge on the areas of the CPG that could be improved.

Recommendations for Future Projects

Healthcare providers need to be educated on the need and methods to evaluate suicidality in adolescents. Future projects should focus on an educational module addressing suicidality and introducing the CPG as well as teaching healthcare providers on using the CPG. Once the newly developed CPG has been implemented for six months or more, a study should be conducted to evaluate its effectiveness in decreasing adolescent suicidality. Regarding care transitions, prior investigations have highlighted modern technologies, such as smartphones, can be used to assist healthcare providers in achieving ongoing monitoring (Czyz et al., 2019; Forte et al., 2021); however, additional research should determine the most effective strategy and the frequency of using such interventions.

Future studies could also investigate the barriers to treatment adherence and the effective interventions for facilitating treatment adherence among adolescents at risk of suicide. Information from such studies could be crucial in unraveling potential barriers to treating suicidality among adolescents. Studies focusing on barriers to treating suicidality could guide healthcare providers in helping adolescents navigate barriers they may experience when receiving treatment. Further, investigating interventions that improve treatment adherence among adolescents who screen positive for suicidality could improve their health-seeking behavior, help them achieve treatment goals, and promote quick recovery. In the next section, I present the dissemination plan of the project's findings while discussing the analysis of self; challenges, solutions, and insights gained; and summary of the project.

Section 5: Dissemination Plan

The WHO highlighted that it was unethical to conduct research without proper publication and circulation of the research outcomes (Curtis et al., 2017); thus, it was necessary to remain aware of the study's eventual dissemination throughout the project process and consider how the project results would be disseminated. Dissemination ensures that the outcomes of a project are shared across various audiences. Disseminating the outcomes of this DNP project in the project site, which is also the facility where I work, will first be conducted by meeting with the facility's key stakeholders to facilitate stakeholder buy-in. With permission of the facility chief executive officer, I will request a meeting with all healthcare providers in the facility whereby I will use a PowerPoint presentation to discuss the significance of adolescent suicidality and explain the newly developed CPG. With this current evidence presented, the healthcare providers in the facility should be more open to sharing the CPG and implementing adolescent suicide prevention strategies based on the current evidence.

Besides the project site, I intend the CPG to be used in all settings where adolescents receive healthcare. Therefore, the scholarly community and healthcare professionals working in various healthcare facilities constitute an important audience that can benefit from the newly developed CPG. I will disseminate the CPG at the local level through presenting at local conferences and provide facility meetings with the healthcare providers working in other healthcare facilities located near the project site. Besides the local level, it is appropriate to disseminate the findings at state and national levels. The American Nurses Association (ANA) conference is a vital dissemination

platform for the CPG at the state and national levels. By presenting at the conference, I can equip healthcare professionals with new knowledge to improve suicide prevention among adolescents. I anticipate that by presenting the CPG at national and state ANA-based conferences, healthcare providers will support the incorporation of the CPG in healthcare policies to facilitate the adoption of the CPG across various facilities and contact policy makers to share the information and encourage policy change to better fund and address adolescent suicidality.

I also intend to publish the results of the DNP project in publicly available peer-reviewed journals to facilitate the dissemination of the findings at national and international levels. Initially, I will submit a query letter to the *Journal of the American Academy of Child and Adolescent Psychiatry* after graduation. However, the manuscript would be appropriate for dissemination in other journals such as *The Journal of Clinical Psychiatry, Journal of Child and Adolescent Psychiatric Nursing, Pediatrics,* and *Journal of Psychiatric and Mental Health Nursing,* all peer-reviewed journals that focus on topics related to adolescent mental health. Disseminating the findings through such journals can reach many healthcare providers in the field and create an opportunity for discussion on adolescent suicide prevention, thus advancing the competency of healthcare providers regarding adolescent suicide prevention. I anticipate that disseminating the CPG through the above platforms will facilitate the implementation of the CPG to achieve the prevention of adolescent suicidality.

Analysis of Self

The DNP program has helped me realize that my responsibility as a healthcare provider extends beyond routine clinical practice. I have learned to identify problems within healthcare settings and the healthcare system and develop innovative solutions underpinned by research evidence. After identifying a gap in practice involving a lack of a standardized, evidence-based CPG on suicide prevention among adolescents, I was inspired to complete this project. Throughout the project, I have learned valuable lessons which will add to my wealth of knowledge as a mental healthcare provider. For instance, the project has helped me explore adolescent suicidality in the light of current evidence revealing the risk factors of adolescent suicidality, the suicide risk screening clinical pathway, and the validated screening tools for adolescent suicidality. Previously, I was unsure about the validated tools I could use to screen for suicidality among adolescents; through this project I have learned about the ASQ tools. As a psychiatric nurse, I intend to use the ASQ-BSSA tool to conduct second-tier screening as revealed in the CPG thereby, contributing to adolescent suicide prevention. Below, I discuss my analysis of self as a practitioner, scholar, and project manager to reveal how this project has helped me grow professionally.

Practitioner

I am a certified registered NP working in the field of psychiatry, and I aim to provide the best quality psychiatric care to patients with mental health issues to boost their health. By participating in a DNP program, I was challenged to identify a healthcare practice gap and develop an evidence-based intervention for addressing the gap through

implementing a DNP project. I analyzed my practice and the healthcare needs of patients receiving care from the facility where I work to develop an innovative solution to improve healthcare practice. Gleaning from the education in the DNP program, I realized that an evidence-based CPG would be an effective tool for preventing adolescent suicidality, which is a significant problem affecting adolescents. By completing this project, I have developed an evidence-based CPG, which I anticipate will help me and other healthcare providers who work with adolescents to prevent adolescent suicidality.

Based on my clinical experience working with adolescents, I am confident that the CPG developed through this DNP project will significantly improve care delivery to adolescents by targeting suicide prevention. Healthcare providers can use the CPG to identify adolescents at risk of suicidality and provide early interventions to prevent the incidence of suicide; further, the findings support universal screening of all adolescents. Universal screening should increase the scope of suicide prevention since it will focus on all adolescents, even those with nonbehavioral chief complaints. As a DNP-prepared nurse, I am ready to advocate for patients. I will support the implementation of the CPG to improve adolescent suicide prevention through early recognition, assessment, and treatment of all adolescents at risk of suicide. Disseminating the project outcomes in the facility where I work and with other healthcare providers in different healthcare settings should allow me to contribute new knowledge on adolescent suicide prevention in clinical practice. By developing an evidence-based CPG, I have contributed to improving the caregiving practices of healthcare providers working with adolescents and the health of all adolescents now and in the future.

Scholar

The completion of a DNP program necessitates DNP-prepared students to carry out a DNP project which is the basis of future scholarship and leadership (American Association of Colleges of Nursing [AACN], 2006). Edwards et al. (2018) pointed out that the impact of the DNP program can best be identified through the completion of a scholarly project. The project is a synthesis of the clinical education received throughout the doctorate program to demonstrate scholarship and contribute to clinical practice and the implementation or evaluation of evidence-based practices. According to DNP Essential III, one of my roles as a DNP-prepared practitioner involves knowledge discovery (AACN, 2006). As a scholar, I learned the importance of selecting the most relevant and current peer-reviewed articles that can promote healthcare; I was faced with confirmation bias when I came across information that did not align with my knowledge of adolescent suicidality.

I overcame the above challenges by employing a meticulous and extensive search process for articles across various databases, which helped generate appropriate evidence to support the CPG. Searching and appraising studies used to develop the CPG equipped me with skills of conducting an in-depth literature search as well as evaluating research evidence. I learned that submitting the newly developed CPG to content experts and end-users could prevent confirmation bias as their evaluation would ensure the CPG I developed contained comprehensive, balanced information. By developing the new CPG, I increased my knowledge base about warning signs of suicidality, risk factors of suicidality, a suicide risk screening pathway, and the interventions for preventing

adolescent suicide in routine practice. Since the CPG developed through the DNP project focuses on filling an existing gap, its application will involve translation into practice and incorporating new knowledge into practice. Within this scope, my focus will be designing, directing, and evaluating quality improvement methodologies to facilitate a smooth transition of the CPG into practice.

Project Manager

As a project manager, I had to ensure that my DNP project was successful and met the set deadlines. I met set deadlines throughout my DNP journey by breaking down the work involved in completing the project into daily assignments, which I completed on time. Although some of the content experts failed to contribute fully by providing their scores in the overall assessment of the CPG, I did not give up or become frustrated due to their inconsistency. I learned to be patient with panelists as they took time to complete the evaluation of the CPG. The experience has helped me gain insight into the interpersonal challenges that healthcare professionals encounter during the development or evaluation of healthcare interventions and the need to be patient and respectful in team collaborations. Further, the DNP project has helped me develop a professional goal of holding a leadership position and spearheading the implementation of the evidence-based CPG to facilitate the use of the adolescent suicide prevention CPG in the facility I work and, by extension, participating in conferences such as the ANA conferences where I can share the CPG and implore policy-makers at state and national levels to facilitate the adoption of the CPG across all facilities where adolescents receive healthcare.

Challenges, Solutions, and Insights Gained

As previously noted, the main challenge encountered when developing the CPG involved the content experts. One content expert needed help navigating the AGREE II website, whereby I organized a virtual meeting with the panelist, explained how to navigate the website, and shared a video link to help the panelist understand. Some of the content experts failed to complete the overall assessment of the CPG using the AGREE II tool. Further, the content experts did not provide any comments on the AGREE website after evaluating the CPG. I support that allocating adequate time (3 - 4 weeks) to review the CPG extensively and reiterating to the content experts the need to put comments on the AGREE website as they complete their evaluation would address the challenge concerning incomplete AGREE II assessments. Another challenge was that I was unsure whether the four content experts would respond to the invitation to evaluate the CPG. Therefore, I included a fifth panelist in case one of the four panelists failed to participate, not respecting the invited panelists' integrity. The fifth panelists failed to participate, but all four of the content experts whom I had initially selected participated, thereby meeting the expectations of the AGREE model, with 3 to 5 being required and a minimum of four as appropriate.

When developing the CPG, I learned that although adolescent suicide is a rampant problem, healthcare providers have a unique opportunity to contribute to the prevention of adolescent suicide through a collaborative approach that involves universal screening of all adolescents, managing positively screened adolescents, and referring them to qualified mental health providers for specialized management as indicated. I also learned

new information related to warning signs of suicidality in adolescents, such as severe sleep disturbances and risk factors such as school performance problems and involvement in conflicts. I learned that the interventions for managing adolescent suicide entail DBT, MBT, and/or family-based interventions.

The reviewed studies helped me understand that healthcare providers working with positively screened adolescents need to focus on care transitions that incorporate safety plans and effective follow-up strategies such as monitoring suicide risk through communication between healthcare providers and mental health providers using technologies such as text messages or smartphones apps (Czyz et al., 2019; Forte et al., 2021). I learned that adolescent suicide prevention interventions revealed in the newly developed CPG are vital solutions to the ongoing crisis involving adolescent suicidality as they utilize evidence-based screening and assessment tools through a clinical pathway. Further, using the newly developed CPG should facilitate the prevention of suicide on a case-by-case basis through an individualized management plan of positively screened adolescents. Therefore, although I experienced challenges with time constraints during the project, I gained significant insights on the evidence-based interventions and care practices that healthcare providers could apply in managing adolescents who screen positive for suicidality. I am confident that the insights gained in this project will be of significant help to my professional practice.

Summary

An increasing prevalence of suicide among adolescents has led to suicide being one of the prominent causes of mortality in the U.S. adolescent population. Regrettably,

suicide among adolescents has shown a drastic upward trend in the past decade. As such, there is a need for interventions to control the growing trend of adolescent suicidality through suicide prevention interventions that facilitate early recognition and treatment of suicidality among adolescents. However, a gap in practice was revealed involving a lack of an evidence-based CPG on adolescent suicide prevention, limiting the efficacy of current suicide prevention strategies. Therefore, the purpose of the project was to better prepare healthcare providers in identifying suicidality among adolescents and intervening at an early stage by developing a standardized guideline for suicide prevention among adolescents. With current, evidenced-based literature and guided by the ZS model (Labouliere et al. 2018), I developed a standardized guideline for preventing suicide in adolescents aged 10 to 19 that was validated by a group of content experts using the AGREE II instrument (Brouwers et al., 2010a) and reviewed by end-users for content and usability.

In line with the ZS model, the newly developed CPG included the four clinical elements, identify, engage, treat, and transition. The implementation of the newly developed CPG can safeguard the lives of adolescents, thus reducing self-harm behaviors that could be life-threatening and mortalities associated with suicidality. Treatment based on the newly developed CPG will prepare adolescents who are at risk of suicide to better cope with different hardships that could trigger suicidal ideations, thus enhancing their resiliency, which is important as they navigate life problems now and in the future. In the communities, the findings should facilitate the improvement of health outcomes of the adolescent population through reduced suicidality and associated adolescent suicide

mortalities, thereby preventing productivity losses. The CPG should enhance healthcare delivery within the healthcare system among all adolescents who may be at risk of suicidality.

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Appendix A: Literature Review Matrix

Fineout-Overholt et al.'s tool (2010)
DNP Project Title: Clinical Practice Guideline for Suicide Prevention in Adolescents

Reference	Theoretical/ Conceptual Framework	Research Question(s)/ Hypotheses/Purpose	Research Methodology	Analysis & Results	Conclusions/Recommendations for future research/practice	Grading the Evidence
Asarnow, J. R., Hughes, J. L., Babeva, K. N., & Sugar, C. A. (2017). Cognitive-behavioral family treatment for suicide attempt prevention: A randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, *56*(6), 506–514. https://doi.org/10.1016/j.jaac.2017.03.015	N/A	Purpose: To determine the effectiveness of a family-treatment therapy involving cognitive-behavioral dialectical behavior therapy (SAFETY program) in promoting safety and reducing suicidal attempt risks among youths with self-harm behavior.	A randomized control trial of adolescents who experienced suicide attempt or self-harm. Participants were randomized into the SAFETY program (n = 20) or enhanced treatment as usual (n = 22) which incorporated parent education.	Participants in the SAFETY program had higher likelihood of survival than those in the enhanced treatment as usual group (p = .02). The mean age of the adolescents was 14.62	Family-based interventions such as the SAFETY program are crucial in preventing suicide attempts among adolescents presenting with self-harm. Healthcare providers should adopt the cognitive behavioral family treatment intervention to protect adolescents from suicide attempt-risk.	II

Baiden, P. & Tadeo, S. K. (2020). Investigating the association between bullying victimization and suicidal ideation among adolescents: Evidence from the 2017 Youth Risk Behavior Survey. *Child Abuse & Neglect*, *102*, 104417. https://doi.org/10.1016/j.chiabu.2020.104417	N/A	Purpose: To investigate the association between bullying and suicidal ideation in adolescents	A cross-sectional descriptive study using data statistics from the 2017 National Youth Risk Behavior Survey. The survey involved a sample of 14,603 adolescents aged 14-18 years	The study revealed that suicidal ideation involves the existence of ideas or thoughts of ending one's life. Adolescents who experienced school bullying and cyberbullying were 3.26 times likely to have suicidal ideations.	Bullying was associated with suicidal ideations. Healthcare providers need to understand the association between bullying and suicidal ideations to facilitate early identification of at-risk adolescents.	VI
Becker, M., & Correll, C. U. (2020). Suicidality in childhood and adolescence. *Deutsches Arzteblatt International*, *117*(15), 261–267. https://doi.org/10.	N/A	Purpose: To identify the epidemiology, etiology, risk factors, diagnosis and treatment of suicidality in childhood and adolescence.	A literature review of descriptive studies on suicidality in childhood and adolescence.	Risk factors such as previous suicidal attempt, mental illness, nonsuicidal self-injury, performance problems at school, conflicts, and separation,	Healthcare providers should detect and evaluate the risk factors and warning signs of adolescent suicidality to prevent suicides and improve	V

3238/arztebl.2020.0261				divorce or loss of a parent predispose children and adolescents to suicide. Warning signs of adolescent suicidality emerged as apathy, high emotional lability, withdrawal, giving out personal possessions and distinct hopelessness.	adolescent outcomes.	
Bernert, R. A., Hom, M. A., Iwata, N. G., & Joiner, T. E. (2017). Objectively assessed sleep variability as an acute warning sign of suicidal ideation in a longitudinal evaluation of young adults at	N/A	Purpose: To investigate the impact of disturbed sleep as an independent risk of suicidal ideation among young adults.	A longitudinal study utilizing a sample of 50 participants and a multiphase screening process. The primary sleep measure was actigraphy and suicidal ideation was determined	Changes in sleep timing, insomnia, and nightmares predicted higher suicidal ideation (p <.05).	The study highlighted that sleep disturbances are a crucial warning signs of suicidality. Healthcare providers should flag disturbances in sleep patterns as a potential warning sign of suicidality in adolescents.	IV

high suicide risk. *Journal of Clinical Psychiatry*, *78*(6), e678–e687. https://doi.org/10.4088/JCP.16m11193			through Beck Scale for Suicidal Ideation.			
Brahmbhatt, K., Kurtz, B. P., Afzal, K. I., Giles, L. L., Kowal, E. D., Johnson, K. P., Lanzillo, E., Pao, M., Plioplys, S., Horowitz, L. M., & PaCC Workgroup (2019). Suicide risk screening in pediatric hospitals: Clinical pathways to address a global health crisis. *Psychosomatics*, *60*(1), 1–9. https://doi.org/10.1016/j.psym.2018.09.003	N/A	Purpose: To generate clinical pathways for patients presenting with suicidality in pediatric emergency units with or inpatient settings to facilitate timely and appropriate screening and intervention.	A standardized iterative approach based on evidence from descriptive studies.	Clinical pathways were developed for pediatric emergency units and inpatient medical and surgical units. A 3-tiered suicide screening pathway was developed based on the Ask Suicide Screening Questions (ASQ) tool, a validated suicide screening instrument.	The development of the clinical pathway for adolescent patients presenting in the pediatric unit with suicidality should provide hospitals with an effective suicide risk prevention mechanism involving screening children and adolescents with validated tools to facilitate appropriate interventions for positively screened individuals.	V

Carballo, J. J., Llorente, C., Kehrmann, L., Flamarique, I., Zuddas, A., Purper-Ouakil, D., Hoekstra, P. J., Coghill, D., Schueze, U. M. E., Dittmann, R. W., Buitelaar, J. K., Castro-Fornieles, J., Lievesley, K., Santosh, P., Arango., C., & Stop Consortium. (2020). Psychosocial risk factors for suicidality in children and adolescents. *Europ ean Child & Adolescent Psychiatry*, 1-18. https://doi.org/10.1007/s00787-018-01270-9	N/A	Purpose: To identify major psychosocial risk factors associated with suicidality among children and adolescents.	A systematic review of 44 descriptive studies on suicidality in children and adolescents.	The psychological factors that increase the risk of suicidality among children and adolescents include depression, anxiety, previous suicide attempt, drug and substance abuse, and psychiatric comorbidity.	Suicidality is a complex phenomenon that culminates from an interaction of various factors. Healthcare providers should investigate the identified psychological risk factors to identify adolescent who may be at risk of suicidality. Future studies should focus on studies with large sample sizes to provide more evidence on the complex relationship between risk factors of adolescent suicidality.	V
Cha, C. B., Franz, P. J., M. Guzmán,	N/A	Purpose: To describe the	A literature review of	Identified that a suicide attempt is	Research on suicidality has	V

E., Glenn, C. R., Kleiman, E. M., & Nock, M. K. (2018). Annual research review: Suicide among youth–epidemiology, (potential) etiology, and treatment. *Journal of Child Psychology and Psychiatry*, *59*(4), 460-482. https://doi.org/10.1111/jcpp.12831		phenomenology, etiological mechanisms, treatment and prevention od suicidality among youths.	descriptive studies on suicidality among the youth.	an action intended to deliberately end one's life while suicide death is a fatality that emanates from any action of deliberately ending one's life.	yielded more knowledge on epidemiology and risk factors for suicidality. Further research is required to improve the etiological understanding of suicide mechanisms, to develop short-term predication model, and enhance the scope of suicide research in diverse populations.	
Curtin, S. C., Heron, M., Miniño, A. M., & Warner, M. (2018). Recent increases in injury mortality among children and adolescents aged 10-19 years in the United States:	N/A	Purpose: To present the prevalence of injury mortalities and the death rates among adolescents aged 10 to 19 in the US.	A cross-sectional descriptive study using data statistics from the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative	Morality rates of adolescents aged 10-19 increased by 12% between 2013 and 2016. The death rate by suicide among adolescents was the second leading cause of mortality and increased by	Recent developments in suicide mortalities among adolescents demonstrate a persistent and emerging class of challenges culminating in increased suicides.	VI

1999-2016. *National Vital Statistics Reports: from the Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System*, *67*(4), 1-16. https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_04.pdf			Program. The adolescent suicide rates were calculated per 100,000 population. Ranking of the leading intents of injury deaths and methods were based on the numbers of deaths.	56% between 2007 and 2016 among US adolescents aged 10-19.	Public health efforts need to be improved to reverse the current trends.	
Czyz, E. K., Horwitz, A. G., Arango, A., & King, C. A. (2019). Short-term change and prediction of suicidal ideation among adolescents: A daily diary study following psychiatric	N/A	Purpose: To determine the post-discharge experience of adolescents with suicidality to determine the influence suicide risk factors and protective processes in the post-discharge period.	A cross-sectional descriptive study involving 34 adolescents hospitalized for suicide attempt who responded to daily surveys on their cell phones for four weeks.	Suicidal ideation and risk factors varied considerably daily in the post-discharge period. Risk factors of suicidality occurred together whereby low connectedness combined with	The post-treatment period commonly involved ongoing suicide-risk related crisis and fluctuating risk patterns. Healthcare providers need to support adolescents during the transition from	VI

hospitalization. *Jo urnal of Child Psychology and Psychiatry, and Allied Disciplines*, *60*(7), 732–741. https://doi.org/10.1111/jcpp.12974				hopelessness or high burdensomeness which aggravated risk of suicidality.	hospitalized care to outpatient care reduce suicidal thoughts in the acute post-discharge period.	
Esposito Smythers, C., Wolff, J. C., Liu, R. T., Hunt, J. I., Adams, L., Kim, K., Frazier, E. A., Yen, S., Dickstein, D. P., & Spirito, A. (2019). Family focused cognitive-behavioral treatment for depressed adolescents in suicidal crisis with co occurring risk factors: A randomized trial. *Journal of Child Psychology*	N/A	Purpose: To examine the effectiveness of a family focused cognitive behavioral therapy (F-CBT) intervention for adolescents hospitalized for suicidal attempt or ideation and who had a co-occurring risk factor.	A randomized controlled trial involving 47 adolescents and their families. The participants were randomized in the F-CBT program or the enhanced treatment as usual program. The main outcome variable was suicide attempt.	There were no statistically significant differences in the two treatment arms at any of the post-interventional assessment points. However, suicide rates reduced from 20% at 6 months, 9% at one year, and 7% at 18 months.	The F-CBT intervention resulted in reduction in suicidality among at-risk adolescents. The utilization of F-CBT by mental healthcare providers during management of adolescents at risk of suicide especially at the start of care and during care transitions may be necessary to promote recovery.	II

and Psychiatry, *60*(10), 1133-1141. https://doi.org/10.1111/jcpp.13095						
Forte, A., Sarli, G., Polidori, L., Lester, D., & Pompili, M. (2021). The role of new technologies to prevent suicide in adolescence: A systematic review of the literature. *Medicina*, *57*(2), 109. https://doi.org/10.3390/medicina57020109	N/A	Purpose: To describe the use of new technologies as interventions for adolescent suicide prevention.	A systematic review of 12 articles involving randomized control trials, open label single group trials, and retrospective cohort studies.	The study revealed that telemedicine involving mobile applications were used for screening depression and suicidal ideation and clinical monitoring through text messages.	Telepsychiatry provides aa fast and safe tool for supporting face-to-face clinical assessment. Intervention such as mobile apps and text messages are accepted and well tolerated as support intervention that can facilitate clinical monitoring of suicidality. Future research should focus on extensive longitudinal studies testing the efficacy of telemedicine modalities for suicide prevention among adolescents.	I

Griffiths, H., Duffy, F., Duffy, L., Brown, S., Hockaday, H., Eliasson, E., Graham, J., Smith, J., Thomson, A., & Schwannauer, M. (2019). Efficacy of mentalization-based group therapy for adolescents: The results of a pilot randomized controlled trial. *Biomedcentral Psychiatry*, *19*(1), 167. https://doi.org/10.1186/s12888-019-2158-8	N/A	Purpose: To adapt a mentalization behavioral therapy (MBT) to an adolescent population to determine effectiveness in treating adolescents with self-reported self-harm as a risk factor for suicide.	A randomized controlled single blind feasibility trial involving adolescents aged 12 to 18 with reported self-harm behavior 6 months prior to the study. Participants were randomized into the MBT for adolescents group or treatment as usual.	The study revealed insignificant between group differences. However, the participants self-harm and emergency presentation of self-harm declined. Social anxiety, borderline traits, and emotional regulation decreased significantly.	MBT was a crucial predictor of change in self-harm behavior and hospital emergency for self-harm among adolescent with self-harm behavior. Therefore, MBT emerged as a promising intervention for mental health providers treating adolescents with self-harm.	II
Horowitz, L., Tipton, M. V., & Pao, M. (2020). Primary and secondary prevention of	N/A	Purpose: To describe evidence-based interventions that pediatricians can use to promote	A literature review of descriptive studies on suicidality in	The study revealed that primary suicide prevention interventions for adolescents include promoting	All frontline health workers who interact with adolescents should facilitate universal screening of	V

youth suicide. *Pediatrics*, *145*(Supplement 2), S195-S203. https://doi.org/10.1542/peds.2019-2056H		primary and secondary suicide prevention among adolescents.	childhood and adolescence.	resilience in adolescents, promoting strong social connections among adolescents and peers or family, and managing parent psychopathology. Secondary prevention interventions involve detecting the risk of suicidality, using validated suicide screening tools, and treating at-risk adolescents.	adolescents for suicidality. Suicide screening and associated treatment interventions is crucial and lifesaving. Therefore, healthcare providers should contribute to reducing adolescent suicide by implementing the suicide prevention strategies identified in the study.	
Iyengar, U., Snowden, N., Asarnow, J. R., Moran, P., Tranah, T., & Ougrin, D. (2018). A further look at therapeutic interventions for suicide attempts and self-harm in	N/A	Purpose: To determine effective therapeutic interventions for reducing self-harm and by extension, examining the reduction in	A systematic review of randomized control trials from inception to 2017 focusing on therapeutic interventions for preventing self-harm and suicide	A total of 21 articles were reviewed revealing unique therapeutic intervention involving individual or socially driven intervention and	Individual and socially-driven interventions such as CBT showed the greatest reductions in suicide attempts. However, majority of the studies failed to provide the efficacy of	I

adolescents: An updated systematic review of randomized controlled trials. *Frontiers in Psychiatry*, *9*, 583. https://doi.org/10.3389/fpsyt.2018.00583		suicidal ideation and depressive symptoms after such interventions.	among adolescents.	mixed interventions. Cognitive behavioral therapy (CBT) emerged as a crucial intervention facilitating reduction in self-harm among adolescents.	interventions in terms of primary and secondary outcomes. Future research should focus on addressing cost-analysis to determine the viability of interventions in routine care and among diverse populations.	
Labouliere, C. D., Vasan, P., Kramer, A., Brown, G., Green, K., Rahman, M., Kammer, J., Finnerty, M., & Stanley, B. (2018). "Zero Suicide" - A model for reducing suicide in United States behavioral healthcare. *Suicidology*, *23*(1), 22–30.	Zero suicide (ZS) model	Purpose: To describe the ZS model and the implementation of the model to facilitate suicide prevention among outpatient behavioral health clinics in New York State.	A multi-site cross-sectional descriptive study carried out within the New York City metropolitan region. The study involved 90 healthcare provider facilities and 3500 clinicians.	The clinical elements of the ZS model involving identify, engage, treat, and transition were replicated in the facilities. Healthcare providers learned the clinical procedure involving assessment intervention and monitoring for	The ZS model is applicable in healthcare facilities and healthcare providers can adopt the ZS model to facilitate transition of evidence-based suicide-safe care for individuals with suicidality.	VI

https://doi.org/10.5617/suicidologi.6198				outpatient care of adolescents with suicidality.		
LeCloux M. (2018). The development of a brief suicide screening and risk assessment training webinar for rural primary care practices. *Rural Mental Health*, *42*(1), 60–66. https://doi.org/10.1037/rmh0000087	N/A	Purpose: To determine the acceptability of an online training intervention on suicide prevention among primary care staff.	A single site, descriptive study involving a sample of primary care staff in a primary care facility in West Virginia.	Among the study participants, 73.3% reported that the training was important and relevant to their practices, 75% reported confidence and 69% reported comfort in asking patients about suicide when completing a suicide risk assessment in the post-test period.	While the study revealed that training healthcare providers on suicide risk assessment was important in boosting their confidence in carrying out a suicide assessment, future studies should focus on extensive pre- and post-test study designs that evaluate the potential benefits of universal suicide screening education.	VI
Lois, B. H., Urban, T. H., Wong, C., Collins, E., Brodzinsky, L., Harris, M. A., Adkisson, H.,	N/A	Purpose: To describe the implementation, feasibility and acceptability of a suicide screening	A single site cross-sectional descriptive study at an urban children hospital.	Of the 1934 patients who were screened, 6.3% screened positive and the monthly compliance of	Suicide screening emerged as a feasible intervention in the pediatric department.	VI

Armstrong, M., Pontieri, J., Delgado, D., Levine, J., & Liaw, K. R. L. (2020). Integrating suicide risk screening into pediatric ambulatory subspecialty care. *Pediatric Quality & Safety*, *5*(3). https://doi.org/10.1097/pq9.0000000000000310		intervention in a pediatric subspecialty by focusing on the prevalence of positive screens and compliance with screening practices.	Participants involved children aged above 9 and the multi-disciplinary team of clinicians working with them. The suicide screening tool was the ASQ tool.	clinicians in conducting suicide screening stood at 86%.	However, healthcare providers need to put effort to standardize suicide risk screening as a routine practice. Future research should focus on determining the factors associated with suicide risk among patients in pediatric care settings.	
McCauley, E., Berk, M. S., Asarnow, J. R., Adrian, M., Cohen, J., Korslund, K., Avina, C., Hughes, J., Hanred, M., Gallop, R., & Linehan, M. M. (2018). Efficacy of dialectical	N/A	Research question: Is dialectical behavior therapy more effective than individual and group supportive therapy in reducing suicide attempts and nonsuicidal self-	A multisite randomized control trial study involving 173 adolescents aged 12 to 18 and involving a 12-months follow-up period. Participants were randomized into either DBT group of	There was a significant difference in repeat suicide attempts, nonsuicidal self-injury and self-harm in the DBT group compared to the IGST group (p <.05). There was higher treatment completion rate in	The study revealed that DBT was effective in reducing self-harm and suicidal attempts among self-harming adolescents. Therefore, mental health providers who treat adolescent with	II

behavior therapy for adolescents at high risk for suicide: A randomized clinical trial. *Journal of American Medical Association-Psychiatry*, *75*(8), 777-785. https://doi.org/10.1001/jamapsychiatry.2018.1109		injury in suicidal adolescents?	individual and group supportive therapy (IGST).	the DBT group (χ^2 = 17.42; $P < .001$)	suicidality traits can utilize DBT as a treatment intervention.	
Ribeiro, J. D., Huang, X., Fox, K. R., & Franklin, J. C. (2018). Depression and hopelessness as risk factors for suicide ideation, attempts and death: Meta-analysis of longitudinal studies. *British Journal of Psychiatry*, *212*(5), 279-286.	N/A	Purpose: To evaluate the predictive impact of depression and hopelessness in causing suicidal ideation, death, or attempt	A meta-analysis of studies involving longitudinal analysis that focused on predicting suicidality due to depression or hopelessness.	Depression and hopelessness were associated with suicidal ideation (odds ratios = 1.96, *CI* = 1.81–2.13), suicide attempts (odds ratios = 1.63, *CI* = 1.55–1.72), and suicide death (odds ratios = 1.33, *CI* = 1.18-1.49).	Depression and hopelessness increase suicide risk. Therefore, the study revealed that there was a need to improve and re-evaluate suicide risk-detection strategies to prevent suicidality and untimely mortality.	I

https://doi.org/10.1192/bjp.2018.27						
Robinson, J., Bailey, E., Witt, K., Stefanac, N., Milner, A., Currier, D., Pirkis, J., Candron, P., & Hetrick, S. (2018). What works in youth suicide prevention? A systematic review and meta-analysis. *EClinical Medicine*, *4*, 52-91. https://doi.org/10.1016/j.eclinm.2018.10.004	N/A	Purpose: To synthesize the full spectrum of interventions that focus on reducing suicidality among young people including adolescents.	A systematic review and meta-analysis of randomized control trials which focused on suicide prevention interventions for young people including adolescents in the workplace, clinical, community, and educational settings.	Cognitive or dialectical behavior therapy, and multimodal interventions delivered in clinical or educational settings had a substantial impact on suicide-related outcomes in the post-interventional period.	Specific suicide prevention interventions such as CBT and DBT among the youth can reduce self-harm and suicidal ideation in clinical settings. Mental health providers working with at-risk adolescents should adopt CBT and MBT interventions for treating adolescents with signs of suicidality.	I
Ruch, D. A., Sheftall, A. H., Schlagbaum, P., Rausch, J., Campo, J. V., & Bridge, J. A. (2019). Trends in suicide among youth aged 10 to	N/A	Research question: Does the disproportionate increase in suicide rates among female youth indicate a narrowing of the	A cross-sectional descriptive study of US adolescents aged 10 to 19 years from January 1, 1975, to December 31, 2016. Period	Identified 85,051 youth suicide deaths in the United States From 1975 to 2016 (68,085 males and 16,966 females) from 1975 to 2016. The male to female	Although the incidence of suicide has increased among adolescents, the significant reduction in the historically large gap in youth	VI

19 years in the United States, 1975 to 2016. *Journal of the American Medical Association Network Open, 2*(5), e193886-e193886. https://doi.org/10.1001/jamanetworkopen.2019.3886		historically significant gap between male and female youth in suicide?	trends in suicide rates by sex and age group were assessed using Joint point regression. Incidence rate ratios (IRRs) were estimated using negative binomial regression.	IRR for firearms increased significantly for youth aged 15 to 19 years ($P = .02$). The male to female IRR of suicide by hanging or suffocation decreased significantly for both age groups (10-14 years: $P < .001$).	suicide rates between male and female individuals underscores the importance of interventions that consider unique differences by sex. Future research examining sex-specific factors associated with youth suicide is warranted.	
Schoen, L. E., Bogetz, A. L., Hom, M. A., & Bernert, R. A. (2019). Suicide risk assessment and management training practices in pediatric residency programs: A nationwide needs assessment survey. *Journal of Adolescent*	N/A	Purpose: To investigate the suicide risk assessment and management training practices and educational needs in pediatric residency programs in the U.S.	A cross-sectional descriptive study involving 95 residency program directors and 210 pediatric chief residents.	Suicide prevention training during residency was important to 82% of the participants but only 10% to 18% reported adequate preparation. Suicide prevention training was not universal, and practices varied across programs.	Suicide prevention training is vitally important to meet the need for reducing adolescent suicides. Only a fifth of the participants were adequately prepared to conduct a suicide risk assessment and as such, healthcare professionals need	VI

Health: Official Publication of the Society for Adolescent Medicine, *65*(2), 280–288. https://doi.org/10.1016/j.jadohealth.2019.02.012				Training barriers involved limited time, training resources, and expert faculty for guiding the training.	to participate in such suicide prevention programs to improve their skills and competency of conducting a suicide risk assessment among adolescents.	
Scott, J., Azrael, D., & Miller, M. (2018). Firearm storage in homes with children with self-harm risk factors. *Pediatrics*, *141*(3), e20172600. https://doi.org/10.1542/peds.2017-2600	N/A	Purpose: To determine firearm storage practices in homes with children with self-harm risk factors compared to those without such traits.	A cross-sectional analysis involving a nationwide representative probability based online survey of U.S. adults. Participants were asked how they stored their firearms, if their child had a history of self-harm behavior or risk factors such as depression or other mental health condition.	About 43.5% of the 3949 participants had firearms at homes with children who had a history of self-harm behavior. Among parents with firearms, 34.9% stored all guns locked and unloaded when they had a child with history of self-harm.	Millions of children live in homes with firearms left loaded or unlocked which places them at substantially high risk of fatal firearm injury. The history of depression or other self-harm risk factors did not influence the firearm safety practices of majority of the parents.	VI

					Healthcare providers should work with parents of adolescents under treatment for suicidality to determine lethal means an adolescent can use and determine a safe way of storing firearms at home during care transitions.	
Sisler, S. M., Schapiro, N. A., Nakaishi, M., & Steinbuchel, P. (2020). Suicide assessment and treatment in pediatric primary care settings. *Journal of Child and Adolescent Psychiatric Nursing*, *33*(4), 187-200.	N/A	Purpose: To provide healthcare providers with evidence□based suicide risk screening and assessment tools and best practices for use in patient□centered encounters with adolescents with suicidality.	A literature review of descriptive studies on suicidality and suicide risk screening and assessment in adolescence.	The study revealed that a safety plan was crucial during care transitions. A safety plan entails documenting any warning signs that the risk of suicidality is increasing, exploring coping strategies that an adolescent is using or willing to use, identifying triggers	Suicide assessment emerged as a critical skill for primary care healthcare providers. Healthcare providers who implement the safety plans and make appropriate referrals for specialized care for adolescent with suicidality can contribute	V

https://doi.org/10.1111/jcap.12282				that can distract the patient, and listing people or professionals and their phone numbers that the adolescent can call for help.	meaningfully to reversing the current increasing trend of suicidality among adolescents.	
Steele, I. H., Thrower, N., Noroian, P., & Saleh, F. M. (2018). Understanding suicide across the lifespan: A United States perspective of suicide risk factors, assessment & management. *Journal of Forensic Sciences*, *63*(1), 162-171. https://doi.org/10.1111/1556-4029.13519	N/A	Purpose: To examine the risk factors associated with suicidality and effective strategies of reducing suicidality among adolescents with suicidality.	A literature review of descriptive studies on suicidality and suicide risk factors and assessment in adolescence.	Revealed that a personal history of suicide attempt or nonsuicidal self-injury, exposure to violence or witnessing violence, and a family history of suicidality or psychiatric illness were critical risk factors for suicidality.	Suicide risk assessment should focus on the dynamic risk factors, relevant clinical information, and a thorough evaluation of suicidal thoughts. Healthcare providers should prepare detailed safety plans together with the adolescents to facilitate easier call for help. Healthcare providers should also keep abreast with current	V

					evidence to learn effective suicide assessment interventions.	
Wharff, E. A., Ginnis, K. B., Ross, A. M., White, E. M., White, M. T., & Forbes, P. W. (2019). Family-based crisis intervention with suicidal adolescents: A randomized clinical trial. *Pediatric Emergency Care*, *35*(3), 170-175. https://pubmed.ncbi.nlm.nih.gov/28248838/	N/A	Purpose: To determine the effectiveness of a family-based crisis intervention (FBCI) compared to treatment as usual among adolescent with suicidality and their families.	A randomized control trial. A total of 142 adolescents were randomized into the FBCI group or the treatment as usual group. Self-reported measures of suicidality, family empowerment, and satisfaction were collected from the adolescents and their families.	The adolescents in the FBCI group were more likely to be discharged through outpatient follow-up care compared to the treatment as usual group (p = <.001). Families in the FBCI group had higher empowerment and satisfaction in the post-test period.	FBCI is an effective family based intervention for treating adolescents with suicidality. Mental health providers treating adolescents with suicidality can adopt FBCI as an alternative to routine emergency department care which involves inpatient hospitalization.	II

Note. Evidence graded using the hierarchy of evidence model from "Evidence-based Practice Step by Step: Critical appraisal of the evidence: Part I," by E. Fineout-Overholt, B. M. Melnyk, S. B Stillwell, and K. M Williamson, 2010, *American Journal of Nursing, 110*(7), p.47-52.

Appendix B: Rating system

Type of evidence	Level of evidence	Description
Systematic review or meta-analysis	I	A synthesis of evidence from all relevant randomized controlled trials.
Randomized controlled trial	II	An experiment in which subjects are randomized to a treatment group or control group.
Controlled trial without randomization	III	An experiment in which subjects are nonrandomly assigned to a treatment group or control group.
Case-control or cohort study	IV	Case-control study: a comparison of subjects with a condition (case) with those who don't have the condition (control) to determine characteristics that might predict the condition. Cohort study: an observation of a group(s) (cohort[s]) to determine the development of an outcome(s) such as a disease.
Systematic review of qualitative or descriptive studies	V	A synthesis of evidence from qualitative or descriptive studies to answer a clinical question.
Qualitative or descriptive study	VI	Qualitative study: gathers data on human behavior to understand *why* and *how* decisions are made. Descriptive study: provides background information on the *what*, *where*, and *when* of a topic of interest.
Expert opinion or consensus	VII	Authoritative opinion of expert committee.

Adapted with permission from Melnyk BM, Fineout-Overholt E, editors. Evidence-based practice in nursing and healthcare: a guide to best practice [forthcoming]. 2nd ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams and Wilkins.

Appendix C: Clinical Practice Guideline on Suicide Prevention among Adolescents

Purpose: To prevent adolescent suicide through early recognition, assessment, and treatment of suicidality in all adolescents.

Procedure:

- The suicide prevention interventions will begin when an adolescent makes a healthcare facility visit for treatment.
- The healthcare provider will implement the suicide prevention interventions when working with any adolescent during their initial facility visit.
    - The suicide prevention interventions should be structured as an ongoing process to facilitate suicide risk screening each time an adolescent visits a healthcare facility.
- The healthcare provider will:
    - Assess the risk of suicidality in an adolescent using validated suicide screening and assessment tools.
    - Encourage discussion on suicidality with the adolescent
        - Observe body language and facial expressions to identify areas of concern.
        - Ask for feedback to indicate understanding.
    - Answer questions and clarify information as needed.
    - Plan for treatment if necessary.

Question:

a) What information do healthcare providers need to know regarding adolescent suicide prevention to decrease morbidity and mortality from teen suicides?

Target Population

Adolescents aged 10 to 19 irrespective of gender, sexual orientation, family-social status, race, or ethnicity.

Recommendations

Although suicide among adolescents aged 10 to 19 years has shown the most drastic upward trend in the past decade (Curtin et al., 2018; Ruch et al., 2019),

healthcare providers can implement suicide prevention interventions among adolescents to prevent suicidality (Horowitz et al., 2020).

- The American College of Pediatrics (ACP) highlighted that healthcare providers could utilize primary and secondary prevention strategies to reduce suicidality (Horowitz et al., 2020).
    - Primary prevention strategies
        - Preventing the onset of suicidality through interventions that:
            - Promote resilience in adolescents
            - Promote strong social connections among adolescents and their family members and peers
            - Manage parent psychopathology
    - Secondary prevention strategies
        - Preventing the risk of suicidality through interventions that:
            - Detect the risk of suicidality
            - Recognize adolescents exhibiting warning signs
            - Use suicide screening tools
            - Treat at-risk individuals
- The National Action Alliance for Suicide Prevention (NAASP) highlighted that suicide prevention strategies should be implemented in clinical settings through four essential clinical elements including:
    - Identify
    - Engage
    - Treat
    - Transition (Labouliere et al., 2018)
- The guideline should assist healthcare providers working with adolescents to prevent adolescent suicidality
    - By providing accurate, evidence-based information on interventions for assessment, recognition, and treatment of suicidality among adolescents

- Enhancing early recognition and effective treatment of suicidality among adolescents (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020).

Key Evidence

- Suicide prevention interventions delivered in hospitals or clinical settings can decrease the risk of self-harm and suicidal ideation (Robinson et al., 2018).
- Early warning signs precede many suicides, and healthcare providers must know the warning signs to identify at-risk adolescents but should not solely rely on clinical insight or presence of warning signs to screen patients (Becker & Correll, 2020; Brahmbhatt et al., 2019).
- The American Academy of Child and Adolescent Psychiatry highlighted that detecting the risk of suicidality in clinical settings necessitates utilizing evidence-based screening and assessment tools through a clinical pathway (Brahmbhatt et al., 2019; Horowitz et al., 2020).
- Training healthcare providers on suicide risk screening is crucial in promoting successful suicide risk detection and prevention (Lecloux, 2018; Lois et al., 2020; Schoen et al., 2019).
- The engagement of adolescents at risk of suicide through an individualized management plan is crucial in facilitating reassessment, a higher intensity of clinical contact, and specialized treatment (Labouliere et al., 2018).
- The treatment of adolescents at-risk for suicidality involves dialectical behavior therapy (McCauley et al., 2018), mentalization-based treatment (Griffiths et al., 2019), cognitive behavioral therapy (Iyengar et al., 2018), and family-based interventions (Asarnow et al., 2017; Esposito-Smythers et al., 2019; Wharff et al., 2019).
- During care transitions such as emergency department discharge, healthcare providers should work with parents or guardians of the adolescent to create a personalized safety plan, investigate the lethal means the adolescents has access

to, and determine a safe way of storing them at home (Scott et al., 2018; Sisler et al., 2020).

- Healthcare providers working with adolescents should engage adolescents through ongoing monitoring of suicidality using communication interventions such as phone or text messages during care transitions (Czyz et al., 2019; Forte et al., 2021).

Guideline Monitoring

- The guideline should be evaluated every 3 years or when new recommendations on adolescent suicide prevention are published.
- The healthcare provider should address challenges in implementing the guideline, such as discomfort in asking questions regarding suicide or stigma.

This Suicide Prevention among Adolescents project did not request or receive any funds in the development of the CPG

Suicide Prevention among Adolescents

This guideline is intended to assist healthcare providers working with adolescents to prevent suicidality in all adolescents aged 10 to 19 irrespective of gender, sexual orientation, family-social status, race, or ethnicity.

- Suicidality in adolescents
    - Suicide refers to a deliberate attempt to terminate one's life and can result in suicide death or attempted suicide if the suicide plan fails (Cha et al., 2018).
        - Suicidal ideation is the existence of thoughts and ideas of participating in behaviors intended to end one's life (Baiden & Todeo, 2020).
    - A suicide attempt constitutes a self-initiated sequence of behaviors or actions that are self-injurious performed with the intent of willingly ending one's life (American Psychiatric Association [APA], 2013).
    - Most adolescent suicide attempts occur after a careful plan and involve overdosing, suffocation, using a firearm or using a sharp object such as a cutting blade (Shain, 2016).

- Identification of suicide risk in clinical settings
    - The warning signs of suicidality among adolescents' entail
        - Elevated emotional lability
        - Apathy
        - Withdrawal
        - Distinct hopelessness
        - Recent experience of loss
        - Acute or chronic traumatization
        - Unusual preoccupation with death or dying
        - Threats and expressions of altruistic ideas of suicide
        - Severe sleep disturbances
        - Giving away personal possessions
            - (Becker & Correll, 2020; Bernert et al., 2017)
    - The risk factors of suicidality among adolescents entail
        - Recent suicide attempt
        - Nonsuicidal self-injury
        - Peer victimization or bullying
        - Having a mental illness
        - Suicidal behavior in the family
        - Conflict
        - Separation or divorce of the parents
        - Loss of a parent
        - History of sexual abuse or maltreatment
        - Performance problems at school
        - Drug and substance abuse or overdose
            - (Carballo et al. 2020; Ribeiro et al., 2018; Steele et al., 2018)
    - Healthcare providers working with adolescents must facilitate early assessment and recognition of suicidality by ensuring universal screening of all adolescents, even adolescents presenting with nonbehavioral health complaints, using validated suicide screening tools when an adolescent makes a healthcare facility visit for treatment.
    - A suicide risk screening pathway is a three-tiered system involving
        (1) Nurse or medical assistants conducting initial screening using the Ask Suicide-Screening Questions (ASQ) tool (see Appendage 1; Brahmbhatt et al., 2019; Horowitz et al., 2020)

(2) Mental health practitioners, physician assistants, nurse practitioners, or physicians using the ASQ Brief Suicide Safety Assessment (BSSA; see Appendage 2; Brahmbhatt et al., 2019; Horowitz et al., 2020) tool to conduct a brief suicide safety assessment

(3) Conducting further triage of positive screens through a full mental health evaluation with qualified mental health professional such as a psychiatrist or child psychologist (see guidelines in the next section - Assessment for At-Risk Adolescents)

- The suicide screening or assessment **should be done with the adolescent alone** to avoid the influence or bias of parents or guardians.

- Assessment for **at-risk** adolescents
  - Adolescents who have an elevated risk of suicide or those who screen positive for suicidality must be treated to prevent the incidence of suicide.
    - Healthcare providers should refer adolescents who screen positive for suicidality to mental health providers such as child psychologists or psychiatrists for specialized management (Brahmbhatt et al., 2019; Horowitz et al., 2020).
  - The pathway for care in adolescents at risk of suicidality depends on the severity of suicide risk.
    - Adolescents who screen **negative on the ASQ** tool need no treatment for suicidality.
    - Adolescents who **answer yes to the 5th question** in the ASQ tool (Are you having thoughts of killing yourself right now?) are at imminent risk of suicide.
      - Immediate safety precautions should be initiated
        i. The adolescent cannot leave without completion of a full suicide safety assessment
        ii. Always keep the adolescent in sight
        iii. Alert the physician or clinician responsible for the adolescent's care
        iv. Remove or put out of reach objects that can be potentially used for self-harm by the adolescent

1. Belts
2. Shoestrings, drawstrings
3. Sharp objects (Horowitz et al., 2020).

- Full suicide safety assessment by qualified mental health providers such as child psychologists or psychiatrists
  i. Focus on determining if inpatient medical or psychiatric hospitalization is necessary to prevent the adolescent from being a danger to themselves and others.
  ii. Facilitate specialized treatment (Brahmbhatt et al., 2019; Horowitz et al., 2020).

- Adolescents who **screen positive** based on the **ASQ** tool
  - Undergo further assessment through the second-tier screening
    i. Mental health practitioners, physician assistants, nurse practitioners, or physicians using the ASQ Brief Suicide Safety Assessment (**BSSA**) tool to conduct a brief suicide safety assessment (Brahmbhatt et al., 2019; Horowitz et al., 2020).
- Based on the second tier assessment, adolescents can be at low, high, or imminent risk of suicide
  - Adolescents at **low** risk of suicide
    i. No further evaluation needed.
    ii. Refer to mental health providers for safety education.
  - Adolescents found as being at **high** risk or with **imminent** risk of suicide
    i. Undergo third-tier screening
    1. A full suicide safety assessment to determine if inpatient medical or psychiatric hospitalization is necessary.
    2. If indicated, the adolescent should be admitted to the relevant units (Brahmbhatt et al., 2019; Horowitz et al., 2020).

- Mental health providers working with adolescents who **screen positive** for suicidality should
  - Create an individualized management plan for each adolescent
    - Incorporate regular reassessment

        - High intensity of clinical contact
        - Specialized treatment (Labouliere et al., 2018)
    - The interventions for adolescent suicide prevention should be tailored to the specific needs of the adolescent based on a thorough investigation of the risk factors and circumstances precipitating suicidality in the adolescent.

- Treatment of adolescents who **screen positive** for suicidality
    - Should be multifaceted and involve the contribution of parents and guardians of the adolescent, mental health providers, and adolescents.
    - Interventions include:
        i. Dialectical behavior therapy (DBT)
            - The focus of treatment is increasing validation in parent-adolescent interactions
            - DBT involves individual psychotherapy, multifamily group skills training, and youth and parent telephone coaching (McCauley et al., 2018)
        ii. Mentalization-based treatment (MBT)
            - The aim is increasing emotional literacy
            - MBT intervention guides adolescents on
                - Attachment and emotional regulation
                - Building resilience
                - Reflection on interpersonal and relationship patterns, concepts of mentalization, and understanding how the above aspects affect their emotional expression, behavior, and mental health (Griffiths et al., 2019)
        iii. Cognitive-behavioral therapy (CBT)
            - Integrative CBT intervention helps remediate maladaptive cognitions among adolescents at risk of suicide
            - Involves the use of techniques such as restructuring, problem-solving, affect regulation, and communication skills (Iyengar et al., 2018)
        iv. Family-based interventions
            - Focus on integrating the adolescents and their family members during treatment to facilitate social connectedness between adolescents and family members

i. One qualified mental health provider provides treatment to the adolescent
ii. Another works with the parents/guardians
iii. At the end of the intervention, the adolescents and the parents/guardians came together to practice skills and address identified issues (Asarnow et al., 2017)

- Care transitions
  - Healthcare providers should work with parents or guardians of the adolescent during care transitions such as discharge from the emergency department to
    - Create a personalized safety plan
    - Review the lethal means that adolescents could use
      - Determine a safe way of storing them at home to facilitate restricted access to lethal means (Scott et al., 2018).
  - A **safety plan** entails
    - Documenting any warning signs that the risk of suicidality is increasing
    - Exploring coping strategies that an adolescent is using or willing to use
    - Identifying triggers that can distract the patient
    - Providing adolescents with a contact list of people or professionals and their phone numbers that the adolescent can call for help (Sisler et al., 2020).
  - Care transitions should engage the adolescent in ongoing monitoring of suicidality through communication with healthcare providers working with adolescents
    - Phone calls or text messages to facilitate continuity of care (Czyz et al., 2019; Forte et al., 2021).

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American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual of mental disorders, (5th ed).* Arlington, VA: American Psychiatric Publishing. https://doi.org/10.1176/appi.books.9780890425596

Asarnow, J. R., Hughes, J. L., Babeva, K. N., & Sugar, C. A. (2017). Cognitive-behavioral family treatment for suicide attempt prevention: A randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, *56*(6), 506–514. https://doi.org/10.1016/j.jaac.2017.03.015

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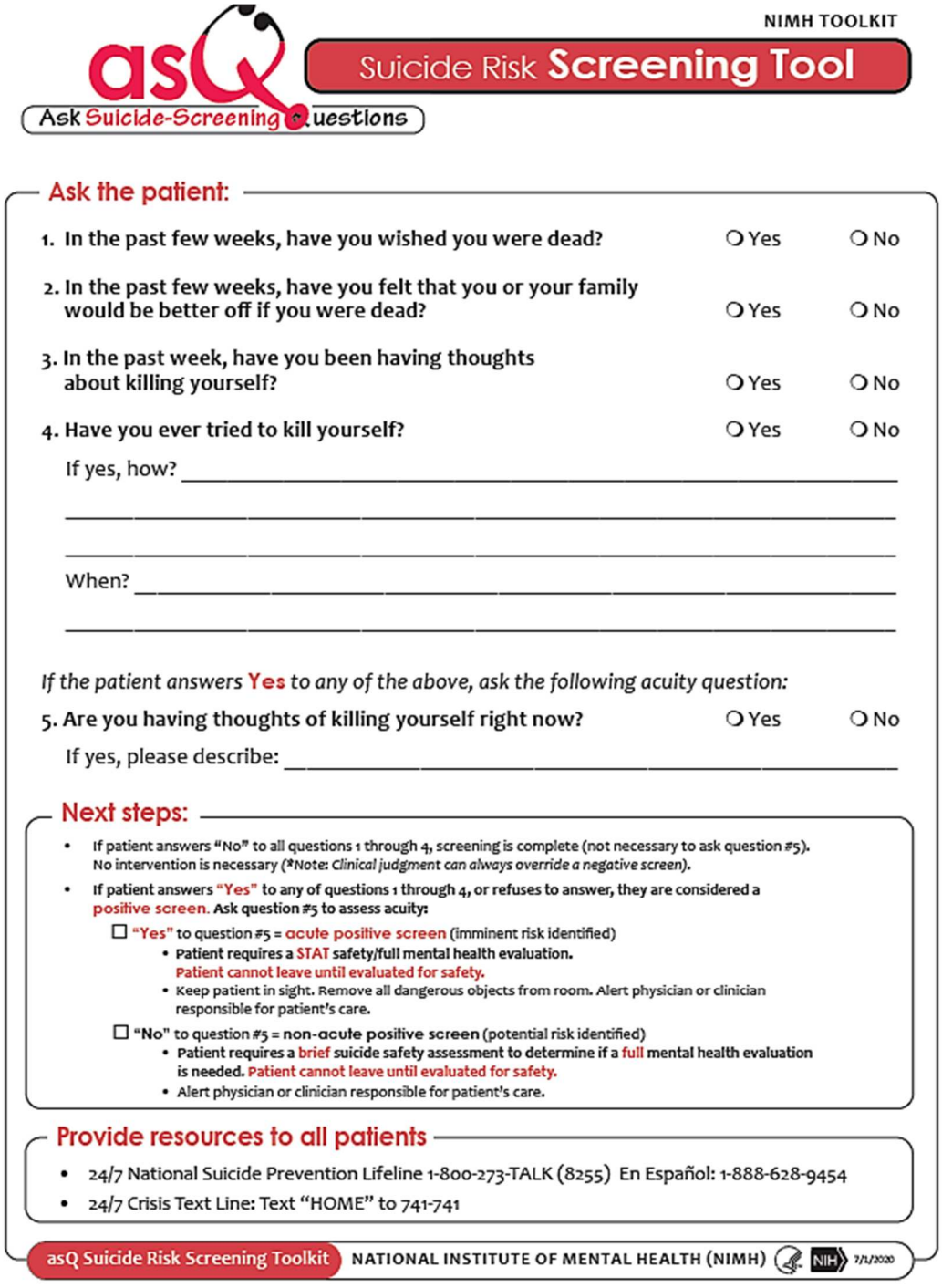
CPG Appendage 1: ASQ Tool



NIMH TOOLKIT

asQ Suicide Risk Screening Tool

Ask Suicide-Screening Questions

Ask the patient:

1. **In the past few weeks, have you wished you were dead?** ❍ Yes ❍ No
2. **In the past few weeks, have you felt that you or your family would be better off if you were dead?** ❍ Yes ❍ No
3. **In the past week, have you been having thoughts about killing yourself?** ❍ Yes ❍ No
4. **Have you ever tried to kill yourself?** ❍ Yes ❍ No

   If yes, how? _____

   _____

   _____

   When? _____

   _____

*If the patient answers **Yes** to any of the above, ask the following acuity question:*

5. **Are you having thoughts of killing yourself right now?** ❍ Yes ❍ No

   If yes, please describe: _____

Next steps:

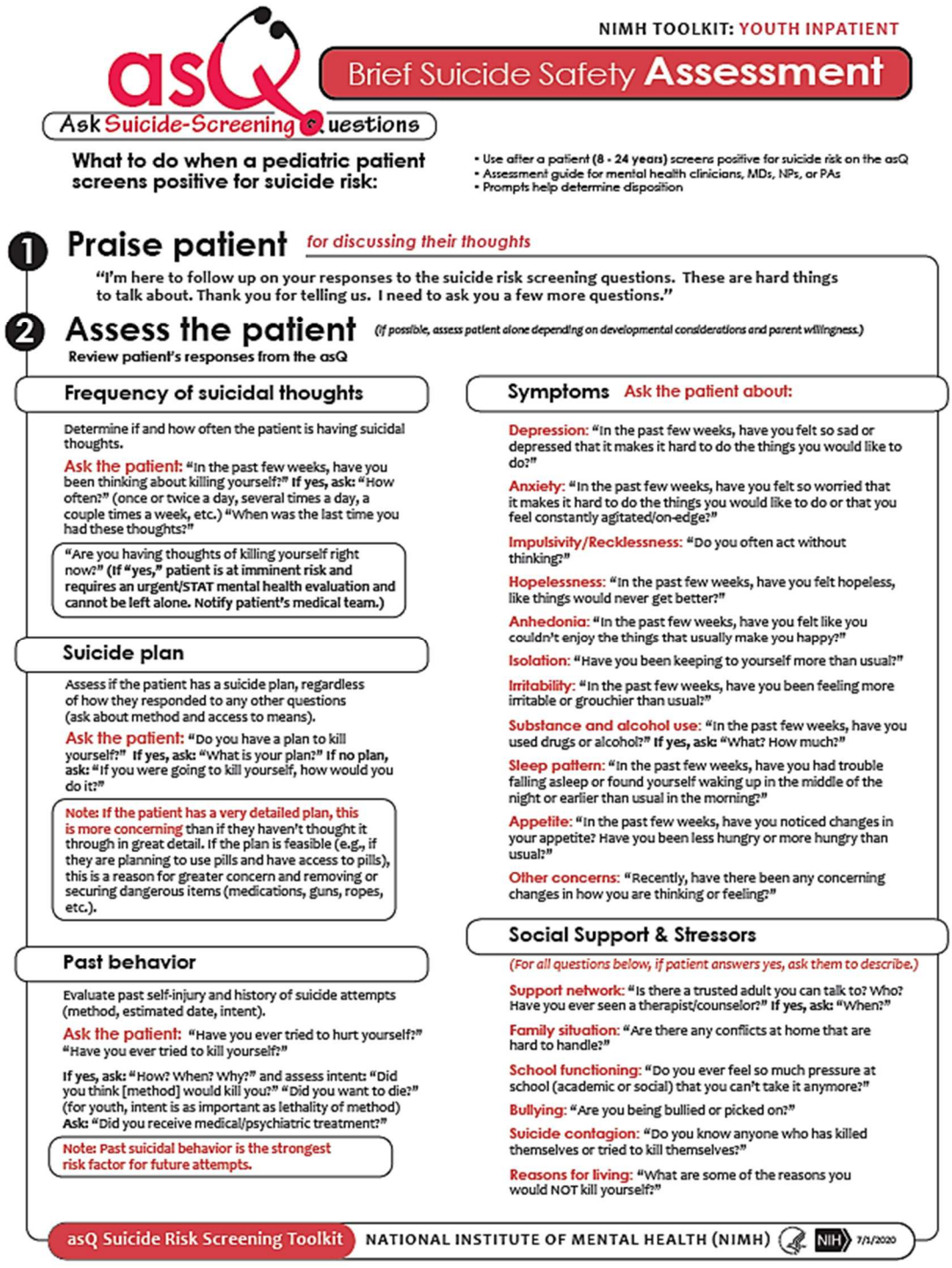
- If patient answers "No" to all questions 1 through 4, screening is complete (not necessary to ask question #5). No intervention is necessary (**Note: Clinical judgment can always override a negative screen*).
- If patient answers "Yes" to any of questions 1 through 4, or refuses to answer, they are considered a positive screen. Ask question #5 to assess acuity:
  - ☐ "Yes" to question #5 = **acute positive screen** (imminent risk identified)
    - Patient requires a STAT safety/full mental health evaluation. Patient cannot leave until evaluated for safety.
    - Keep patient in sight. Remove all dangerous objects from room. Alert physician or clinician responsible for patient's care.
  - ☐ "No" to question #5 = **non-acute positive screen** (potential risk identified)
    - Patient requires a brief suicide safety assessment to determine if a full mental health evaluation is needed. Patient cannot leave until evaluated for safety.
    - Alert physician or clinician responsible for patient's care.

Provide resources to all patients

- 24/7 National Suicide Prevention Lifeline 1-800-273-TALK (8255) En Español: 1-888-628-9454
- 24/7 Crisis Text Line: Text "HOME" to 741-741

asQ Suicide Risk Screening Toolkit | NATIONAL INSTITUTE OF MENTAL HEALTH (NIMH) | NIH | 7/1/2020

CPG Appendage 2: ASQ - BSSA Tool



NIMH TOOLKIT: YOUTH INPATIENT

asQ: Ask Suicide-Screening Questions — Brief Suicide Safety Assessment

3 Interview patient & parent/guardian together

If patient is ≥ 18 years, ask patient's permission for parent/guardian to join.

Say to the parent: "After speaking with your child, I have some concerns about his/her safety. We are glad your child spoke up as this can be a difficult topic to talk about. We would now like to get your perspective."

- "Your child said… (reference positive responses on the asQ). Is this something he/she shared with you?"
- "Does your child have a history of suicidal thoughts or behavior that you're aware of?" **If yes, say:** "Please explain."
- "Does your child seem:
  - Sad or depressed?"
  - Anxious?"
  - Impulsive? Reckless?"
  - Hopeless?"
  - Irritable?"
  - Unable to enjoy the things that usually bring him/her pleasure?"
  - Withdrawn from friends or to be keeping to him/herself?
- "Have you noticed changes in your child's:
  - Sleeping pattern?"
  - Appetite?"
- "Does your child use drugs or alcohol?"
- "Has anyone in your family/close friend network ever tried to kill themselves?"
- "How are potentially dangerous items stored in your home?" (e.g. guns, medications, poisons, etc.)
- "Does your child have a trusted adult they can talk to?" (Normalize that youth are often more comfortable talking to adults who are not their parents)
- "Are you comfortable keeping your child safe at home?"

At the end of the interview, ask the parent/guardian: "Is there anything you would like to tell me in private?"

4 Make a safety plan with the patient

Include the parent/guardian, if possible.

Create a safety plan for managing potential future suicidal thoughts. A safety plan is different than making a "safety contract"; asking the patient to contract for safety is NOT effective and may be dangerous or give a false sense of security.

Say to patient: "Our first priority is keeping you safe. Let's work together to develop a safety plan for when you are having thoughts of suicide."

Examples: "I will tell my mom/coach/teacher." "I will call the hotline." "I will call _____."

Discuss coping strategies to manage stress (such as journal writing, distraction, exercise, self-soothing techniques).

Discuss means restriction (securing or removing lethal means): "Research has shown that limiting access to dangerous objects saves lives. How will you secure or remove these potentially dangerous items (guns, medications, ropes, etc.)?"

Ask safety question: "Do you think you need help to keep yourself safe?" (A "no" response does not indicate that the patient is safe; but a "yes" is a reason to act immediately to ensure safety.)

5 Determine disposition

After completing the assessment, choose the appropriate disposition plan.

- ❑ **Emergency psychiatric evaluation:** **Patient is at imminent risk for suicide (current suicidal thoughts).** Keep patient safe on the unit. Follow the standard of care for a suicidal patient (e.g. remove dangerous objects, 1:1 observer). Request a STAT, emergency psychiatric evaluation.
- ❑ **Further evaluation of risk is necessary:** Request a comprehensive mental health/safety evaluation prior to discharge.
- ❑ **Patient might benefit from non-urgent mental health follow-up post-discharge:** No further mental health evaluation in the hospital is needed at this time. Review safety plan for potential future suicidal thoughts and refer patient for a follow-up mental health evaluation in the community, post-discharge.
- ❑ **No further intervention is necessary at this time.**

6 Provide resources to all patients

- 24/7 National Suicide Prevention Lifeline 1-800-273-TALK (8255) En Español: 1-888-628-9454
- 24/7 Crisis Text Line: Text "HOME" to 741-741

Appendix D: AGREE II scores

AGREE II

A critical group appraisal of: Clinical Practice Guideline on Suicide Prevention among Adolescents using the AGREE II Instrument

Created with the AGREE II Online Guideline Appraisal Tool.

No endorsement of the content of this document by the AGREE Research Trust should be implied.

Co-ordinator:

Date: 6 January 2022

Email: beltta.tachi@waldenu.edu

URL of this appraisal: http://www.agreetrust.org/group-appraisal/16428

Guideline URL: https://www.agreetrust.org/login

Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	OA1	OA2
100%	96%	99%	100%	99%	100%	71%	Yes – 2, Yes with modifications – 0, No - 0
						100%*	Yes - 2/2 Yes, with modifications - 0 No - 0

Note: * Only three of the four reviewers scored it, all giving 7's for a revised OA1 score of 100%.

Domain 1. Scope and Purpose				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 1	7	7	7	7
Item 2	7	7	7	7
Item 3	7	7	7	7
Domain 2. Stakeholder Involvement				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 4	6	7	7	7
Item 5	7	7	6	7
Item 6	7	7	6	7
Domain 3. Rigour of Development				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 7	7	7	7	7
Item 8	7	7	7	6
Item 9	7	7	7	7
Item 10	7	7	7	7
Item 11	7	7	7	7
Item 12	7	7	6	7
Item 13	7	7	7	7
Item 14	7	7	7	7
Domain 4. Clarity of Presentation				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 15	7	7	7	7
Item 16	7	7	7	7
Item 17	7	7	7	7

Domain 5. Applicability				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 18	7	7	7	7
Item 19	7	7	6	7
Item 20	7	7	7	7
Item 21	7	7	7	7
Domain 6. Editorial Independence				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
Item 22	7	7	7	7
Item 23	7	7	7	7
Overall Assessment				
	Appraiser 1	Appraiser 5	Appraiser 7	Appraiser 8
OA1	-	7	7	7

Comments

Domain 1. Scope and Purpose

No comments found for this domain.

Domain 2. Stakeholder Involvement

No comments found for this domain.

Domain 3. Rigour of Development

No comments found for this domain.

Domain 4. Clarity of Presentation

No comments found for this domain.

Domain 5. Applicability

No comments found for this domain.

Domain 6. Editorial Independence

No comments found for this domain.

Created online at www.agreetrust.org 6 January 2022

Appendix E: Summary Evaluation Results of the Project, Process, and Leadership by Content Experts

Title of Project: Clinical Practice Guideline on Suicide Prevention among Adolescents

Student: Beltta G. Tachi, MSN, PMHNP, BSN, RN.

Thank you for completing the Summary Evaluation on my project. Please complete and send anonymously via email

I. Content Expert Approach

a. Please describe the effectiveness (or not) of this project in terms of communication and desired outcomes etc.

Evaluator A	Evaluator B	Evaluator C
The communication was effective and direct.	The communication was good and all the clarifications I needed were provided promptly.	The method of communication was effective and concise.

b. How do you feel about your involvement as a content expert member for this project?

Evaluator A	Evaluator B	Evaluator C
I am humbled to be part of this project and I am confident that my input will count.	I feel strong for participating in the study as an expert in the field, I am hopeful that my evaluation will be worthwhile.	I think it is good to have me participate in this study because it allows me to be a part of this change for these adolescents.

c. What aspects of the content expert process would you like to see improved?

Evaluator A	Evaluator B	Evaluator C
None	N/A	More time should be allocated to go through the CPG extensively.

II. There were outcome products involved in this project including a Clinical Practice Guideline and literature matrix.

a. Describe your involvement in participating in the development/approval of the products.

Evaluator A	Evaluator B	Evaluator C
I evaluated the guideline and the literature matrix, and they were authentic.	As an expert in the field, I was keen on examining the evidence and interventions proposed in the CPG. I was convinced that the products were evidence-based, and they address the problem of suicidality.	Upon evaluating the guideline, I was amazed to see the extensive research that had gone into developing the tool.

b. Share how you might have liked to have participated in another way in developing/approving the products.

Evaluator A	Evaluator B	Evaluator C

I would have liked to share some of my professional experiences with adolescents.	I would have loved to share more information on the risk factors of suicidality especially among female adolescents.	I would have liked to expand on the immediate safety measures for preventing suicidality in adolescents who screen positive for suicidality.

III. The role of the student was to be the leader of the project.

a. As a leader how did the student direct you to meet the project goals?

Evaluator A	Evaluator B	Evaluator C
The student enlightened me by explaining the project's goals, and why it is essential now and for the future of our country to prevent suicide. The student communicated professionally and explained the whole process of appraising the CPG.	The student explained the need for developing a new tool to guide practitioners working with adolescents to prevent suicide and highlighted the importance of the content expert evaluation of the CPG. The student also guided me on using the AGREE website.	The description of the student regarding the evaluation of the CPG was concise. The student highlighted the need to read through the whole CPG before rating it.

b. How did the leader support you in meeting the project goals?

Evaluator A	Evaluator B	Evaluator C
The student was resourceful as she went ahead and shared a video link which helped me to navigate the AGREE website.	The student was available when I needed clarifications. She was also patient with me when I had a problem with uploading my ratings.	The student allowed me to ask questions. She was respectful and did not criticize me.

IV. Please offer suggestions for improvement.

Evaluator A	Evaluator B	Evaluator C
I support the CPG on universal screening, but I also think that besides healthcare professionals more services should be provided in schools, to teachers and nurses.	More attention should be focused on suicidality because it is seldom discussed among family members, our leaders, or the community	Policymakers should pay more attention to adolescent suicidality and increase funding to help disseminate the awareness about this problem. To improve monitoring for the at-risk population, adequate monitoring and treatment of adolescents should be supported