

Risk factors for suicidal behavior in adolescents

Abstract

Introduction: Currently, suicide is the third leading cause of death worldwide among adolescents aged 11 to 18, and in Cuba, it is the third leading cause of death among those aged 10 to 19. This event occurs more frequently among males, regardless of skin color or social class. When an adolescent commits suicide or attempts suicide, everyone is affected: family, friends, classmates, neighbors, and sometimes even people who didn't know the adolescent. The adolescent who attempts suicide may experience feelings of pain, confusion, and guilt.

Aim: To delve deeper into the problem of suicidal behavior in adolescents because it is a stage of vulnerability and risk.

Method: A literature review was conducted in which the databases included in the LILACS, EBSCO and HINARI services were consulted, and very good coverage was achieved, both in Cuba, in Latin America and the Caribbean, and in the rest of the world.

Development: The general characteristics of healthy adolescents and risk factors that make them vulnerable to suicidal behavior are presented, allowing for reflection on the topic to contribute to its prevention, especially from the primary health care level.

Conclusion: Suicidal behavior in adolescents constitutes a serious health problem that must be addressed by different elements of society since individual, family and community factors are involved.

Keywords: suicidal behavior, adolescence, risk factors

Volume 14 Issue 1 - 2026

Alba Cortés Alfaro, Mayai Alegna Molina
Zaldivar, Franci Emir Salaberry Valera

National Institute of Hygiene, Epidemiology, and Microbiology,
Cuba

Correspondence: Alba Cortés Alfaro, National Institute of
Hygiene, Epidemiology, and Microbiology, Cuba

Received: December 05, 2026 | **Published:** March 2, 2026

Introduction

Suicide is a major health problem, a true existential drama of man, recognized since antiquity and recorded in the Bible and other literary works of that time.

In ancient times, both the Greeks and the Romans accepted suicide; however, they did not recognize the right of women, slaves, and children to take their own lives, as they considered the act an attack on the master's property.

Globally, suicide represents a serious public health problem, claiming the lives of approximately 800,000 people each year, equivalent to one death every 40 seconds. This issue knows no borders or levels of economic development, affecting all regions of the world, with 73% of cases occurring in low- and middle-income countries in 2021. Suicide is especially concerning among young people, being the third leading cause of death among adolescents worldwide and among individuals aged 20 to 24 in the Americas.

Furthermore, studies indicate that for every completed suicide, there are between 10 and 25 attempts, highlighting a much greater burden of self-harm and suffering than official statistics reflect.

This phenomenon not only impacts those who experience it, but also leaves deep scars on families, communities, and countries, generating lasting effects on the victims' loved ones. Although suicide can occur at any age, it is particularly alarming among 15- to 29-year-olds, a group in which it ranked as the third leading cause of death worldwide in 2021. Risk factors are diverse and complex, including mental disorders such as depression, alcohol abuse, previous suicide attempts, and impulsive crises stemming from economic problems, personal conflicts, or chronic illnesses. Furthermore, contexts of war, natural disasters, violence, abuse, isolation, and discrimination increase the vulnerability of certain groups, such as refugees, migrants, indigenous peoples, LGBTQ+ individuals, and prisoners.

Given this situation, it is imperative to address suicide from a multisectoral and comprehensive perspective, implementing evidence-based and low-cost interventions that allow for effective prevention. Prevention is not only possible, but also a collective responsibility to reduce the impact of this tragedy on society.¹

The objective of this work is to delve deeper into the risk factors of suicidal behavior in adolescents, as this constitutes a stage of vulnerability and risk.

Methods

The main objective of this article is to address the fact that the World Health Organization (WHO) has stated that: road traffic injuries, HIV/AIDS and suicide are the main causes of death in adolescents; depression is the main cause of illness and disability and depression, among other things, includes suicide attempts and suicide considered in suicidal behavior.

To carry out this review and offer readers an update on the subject in question, the databases included in the LILACS, EBSCO and HINARI services were consulted and very good coverage was achieved, both in Cuba, in Latin America and the Caribbean, as in the rest of the world. Websites on the Internet that are essential reading due to their prestige and leadership on the subject were also visited.

The search inclusion criteria were based primarily on the use of the terms: adolescence, risk factors, and suicidal behavior. All classifications that addressed the same or similar criteria for case definition were considered. Aspects that did not address the topics in question were excluded.

An initial literature search was conducted, focusing on the characteristics of adolescents, the definition of suicidal behavior, and risk factors that influence these behaviors in adolescents. In a second phase of the review, the search terms were broadened to include

articles that, using different keywords, addressed suicidal behavior with a focus on its impact on adolescence as a health problem.

The DeCS controlled vocabulary was consulted for the development of the search strategies, and the corresponding Boolean operators were included. They reviewed more than 100 articles and selected a total of 17 documents corresponding to the period 2005-2025.

Development

General characteristics of adolescence that constitute predisposing factors for suicidal behavior. Adolescence brings an increased burden of individual pressures and responsibilities, which, combined with inexperience and immaturity, can lead to setbacks that may result in moments of anguish, loneliness, and frustration, creating risk factors for suicidal behavior.

These adolescents generally come from dysfunctional families, with economic deficiencies, social and cultural deficits, and disturbances in relationships within and outside the family group; or what could be called multi-problem families, or families that, due to their intrafamilial characteristics and/or the environment in which they live, can be classified as high-risk, with educational poverty, and exposure to adverse family situations. According to the World Health Organization, adolescence is the period between 10 and 19 years of age, during which biological, psychological, and social changes occur. It is estimated that one in five people worldwide is an adolescent. Eighty-five percent of adolescents live in low- or middle-income countries, and approximately 1.7 million adolescents die each year.

Adolescence is essentially a time of change in which the process of transformation from child to adult occurs. It has unique characteristics and is also a stage of discovering one's own identity (psychological identity, sexual identity) as well as individual autonomy. ⁵ On an emotional level, the arrival of adolescence signifies the blossoming of the capacity to feel and develop emotions that are identified with or related to love. Formal thought emerges; adolescents discover their ability to argue and analyze, and begin to do so. They sometimes contradict themselves when speaking with an adult, which is normal as they are exercising their reasoning skills; they also begin to develop their own theories.

As a result, they begin to develop their codes of conduct, values, and ethics; their role in the family gradually changes, from dependent child to independent adult with increased responsibilities and capacity to exercise their freedom. The most dangerous characteristic of adolescent thinking is the feeling of invincibility; they always think that bad things "happen to others"—accidents, assaults, pregnancies, psychotic episodes due to drug use, and alcohol poisoning.

There are traits or attributes of the adolescent's personality that become risk factors for committing a suicidal act, such as low frustration tolerance, hyper-perfectionist attitudes, being critical, intellectually rigid, not tolerating the slightest failure, and sometimes being convinced of their own wickedness and not feeling loved.

School difficulties are predictors of suicidal thoughts and behaviors at this stage of life. Other contributing factors include vulnerability stemming from perceiving certain life events as a direct threat to self-image or dignity; separation from friends, classmates, boyfriends, and girlfriends; the death of a loved one or other significant person; interpersonal conflicts or the loss of valuable relationships; disciplinary problems at school or legal situations for which the adolescent must answer; the acceptance of suicide as a way to resolve problems among friends or peer groups; peer pressure to

commit suicide under certain circumstances and in certain situations; academic failure; high expectations from parents and teachers during exam periods; unwanted pregnancy or another sexually transmitted infection; suffering from a serious physical illness; being a victim of natural disasters; rape or sexual abuse, which is more dangerous if perpetrated by family members; being subjected to death threats or beatings; being ridiculed at school; and failing to meet the expectations of parents, teachers, or other significant figures.

In many cases, suicide is a taboo subject and, therefore, a problem that remains silenced, despite its alarming prevalence as the eighteenth leading cause of death globally. Its impact on public health is significant, although the suicide rate per 100,000 inhabitants is not uniform worldwide or across different social strata, as evidenced by 2016 data from the World Health Organization (WHO). Furthermore, there is a marked gender disparity in this phenomenon: in high-income countries, men commit suicide, on average, almost three times more often than women, while in low- and middle-income countries, the gender differences are less pronounced.

From a regional perspective, Eastern Europe, sub-Saharan Africa, and Southeast Asia have the highest age-standardized suicide rates. Using the crude rate—calculated as the number of suicides divided by the total population—would make it difficult to compare the impact of this problem between countries, since each has a different population structure. This means that even if two countries had identical suicide rates for each age group, the overall rate could vary due to demographic differences. For example, a country with a higher proportion of young people, an age group particularly vulnerable to suicide, might show above-average figures, not necessarily because of a greater impact of these deaths, but because of its population composition. To correct for these deviations, the age-standardized rate is used, which allows for a more accurate and equitable comparison between nations.

Risk factors

A large number of authors have attempted to identify the characteristics of suicidal children and adolescents. A wide range of factors has been linked to suicidal behavior in this age group. Below, we will describe the most relevant ones.

Gender

While completed suicides are more common among men, women are at greater risk for other suicidal behavior. Several explanations have been proposed to understand the difference between men and women in relation to suicide: men are more exposed to the consequences of socioeconomic fluctuations; they have a higher prevalence of alcoholism; they use more violent means, and therefore suicide attempts are more successful among them than among women; in contrast, suicide attempts are more prevalent among women, since depression predominates in them.

Age

Suicidality increases with age; suicide before age 15 is unusual. Studies show that risk factors for suicide in both groups studied were mood disorders, disruptive disorders, and not living with both biological parents. They concluded that children and early adolescents are as likely as late adolescents to commit suicide when risk factors are present.

This raises the question of why fewer young people between the ages of 10 and 14 commit suicide, compared to adolescents between 15 and 20 years of age. Three likely explanations can be suggested from the findings:

- a) Less exposure to stress and risk factors: early adolescents are still partly dependent on their parents, which provides them with greater emotional and social support;
- b) A lower prevalence rate of mood disorders at a younger age; and
- c) Maturation factors: the capacity to plan and carry out a suicidal act requires a level of maturity not reached by children or early adolescents.

Family dysfunction

There is clear evidence that family adversity contributes to an increased risk of suicidal behavior. A lack of family warmth, poor communication with parents, and family discord limit opportunities for learning problem-solving skills and can create an environment where adolescents lack the necessary support to cope with the effects of stressful life events and/or depression.

Some studies have shown high rates of divorce or parental separation among adolescents who have attempted suicide, compared to non-suicidal community control groups. Furthermore, lack of communication with the mother and divorce, independently, contributed to an increased risk of suicide, and poor communication with the father had an interactive effect with divorce on suicide risk. If the father does not reside in the home as a result of the divorce, then poor communication may be normative and not particularly disruptive; on the other hand, when the parent who lives with the young person “fails to communicate,” it may reflect a more dysfunctional relationship.

Also, a study by Beautrais shows a clear association between a history of childhood sexual abuse, lack of parental care, problems in the parental relationship, and suicide attempts; in contrast, high parental control, physical abuse, separation or divorce, violence, alcoholism or parental incarceration, low income, and being in institutional care during childhood were not associated with the risk of suicide attempts.

Depression

There is substantial evidence to support a strong relationship between depression and suicidal behavior; however, interpreting this relationship is not straightforward. Early-onset depressive disorders are frequently associated with conduct disorder symptoms. Furthermore, studies of suicidal behavior in adolescents have demonstrated a significant association with non-depressive disorders, such as antisocial behavior and alcohol and/or drug use. It is important to understand how much of the risk of suicidal behavior associated with depression is a function of other factors that are frequently associated with depression in young people. Similarly, family relationships may or may not make an independent contribution to the risk of suicidal behavior in adolescents, beyond the effects of depression and behavioral symptoms.

The following variables have been shown to be independently associated with suicidal behavior: depressive disorder, family discord, hostile mother-child (or father-child) relationship, and lack of warmth in family relationships (rejection, lack of interest, parental irritation, and lack of sufficient physical comfort). Results from separate analyses of depressive and non-depressive cases suggest that behavioral symptoms and female gender are only associated with an increased risk of suicidal behavior in non-depressive cases. In depressed adolescents, family discord was the only variable found to be independently associated with suicidal behavior.

Behavioral problems

Multiple studies of suicidal behavior show significant correlations between substance abuse, antisocial behavior, and suicide attempts. Adolescents with conduct disorder who attempt suicide frequently deny depressive symptoms and subsequently exhibit self-inflicted injuries. Many suicidal adolescents have had legal problems, and incarcerated adolescents are at extreme risk of suicide. Suicide attempts have been associated with other risk behaviors such as promiscuous sexual behavior, substance use, failure to use safety measures (e.g., seat belts), violence, truancy, frequent involvement in fights, use of firearms, sexually transmitted infections.

This highlights the importance of being attentive to the possibility of suicide attempts in impulsive or impulsively aggressive adolescents who come from families with low levels of cohesion. They may act impetuously without considering the consequences. On the other hand, most first-degree relatives of children who attempted suicide, compared to those of typical children, had histories of assault and substance abuse. Furthermore, most first-degree relatives of children who completed their suicide attempt had first-degree relatives with antisocial behavior disorder and substance abuse, compared to non-suicidal patients.

Aggressive behavior has also been linked to repeated suicide attempts, which in turn are associated with completed suicide. Four percent of repeat suicide attempts succeed, compared to only 1% among patients with a single attempt (Kotila & Lonnqvist, 1987). High levels of aggression in severely depressed patients can significantly increase the risk of relapse; therefore, preventive measures such as timely referral and the development of effective treatments in young people with psychiatric morbidity can be very effective in reducing suicidal behavior.

Anxiety

Anxiety has recently been identified as a major risk factor for suicidal behavior in adults. Studies with adolescents show mixed results. Andrews and Lewinsohn (1992) found a significant association between anxiety disorders and suicide attempts in males, but not in females, in a large community sample of adolescents.

Most research studies anxiety as a state, that is, as a disorder that appears at a certain time in an individual's life, and there are no significant differences related to gender. These results are consistent with a previous study by De Wilde et al. (1993) showing that adolescent suicide attempters exhibited significantly higher levels of trait anxiety than a sample of hospitalized patients who were not suicide attempters. From this, it can be deduced that only trait anxiety appears to be relatively independent of depression as a risk factor for suicidal behavior.

We can suggest that anxiety added to a clinical picture of suicidal ideation creates particular suffering in the child's psychopathological state, thus playing an amplifying role in the development and/or maintenance of suicidal ideation.

A review of the risk factors most frequently described in the scientific literature associated with suicide attempts in children and adolescents has shown that parents are inaccurate informants regarding their children's psychopathology, typically tending to minimize or deny it. This implies that continuous monitoring of risk indicators by physicians can have a significant preventive impact.

Protective factors

The main protective factors mentioned in the literature include certain family patterns (good family relationships and support); certain cognitive style and personality patterns (good social skills; self-confidence, confidence in one's own situation and achievements; seeking help when difficulties arise, for example, in schoolwork; seeking advice when important choices need to be made; receptiveness to the experiences and solutions of other people; receptiveness to new knowledge); and certain cultural and sociodemographic factors (social integration, for example, participation in sports, religious associations, clubs, and other activities; good relationships with peers; good relationships with teachers and other adults; support from relevant people).

Prevention reducing access to the means of suicide: Many suicide attempts occur during short-term crises, so it is important to consider access to means of suicide during these periods.

Stake holders involved in the control and regulation of means of suicide include the legal and judicial systems, regulatory bodies, agriculture, and transportation.

Community connection: Programs and practices that promote social connection and support can help to mitigate the effects of negative feelings, thoughts, behaviors, and experiences.

Crisis management: Crisis intervention services are a critical part of a comprehensive suicide prevention strategy. It is important to ensure that communities have the capacity to respond to crises with appropriate interventions. It is equally important that individuals in crisis have access to emergency help.

Postvention: For every suicide, there are likely hundreds of people grieving and suffering because of it. Each person grieves in a different way. Some people may have immediate reactions, while others show long-term responses. Postvention can provide emotional support to people after a suicide.

Responsible media outlets: Responsible media coverage of suicide has been shown to reduce suicide rates. Key aspects of media presentation include:

- a) Avoid detailed descriptions of suicidal acts
- b) Avoid generalizations
- c) Use responsible language - without stigmatizing or stereotypical expressions
- d) Avoid oversimplification
- e) Educate the public about suicide and available treatments
- f) Provide information on where to seek help

National policies to reduce suicide: The government has a key role to play in developing national suicide prevention strategies that integrate multiple sectors, not only health, but also education, social services, labor, agriculture, justice, legislation, business, and media, with the aim of reducing suicides.

Effective assistance and treatment for mental disorders: Training health professionals on the mh GAP intervention guide for the assessment and management of mental, neurological, and substance use (MNS) disorders is a critical part of suicide prevention. A large number of people who die by suicide had some contact with primary health care professionals during the month prior to their suicide. By training primary health care professionals to identify depression,

substance misuse, and other priority MNS disorders, and to conduct a thorough suicide assessment, we can provide help when it is most needed.

The person: Working with suicide survivors or with families of those who have died by suicide or survived suicide provides a unique and powerful perspective on the suffering that suicide can cause. Before working with survivors or those who have lost someone to suicide, ensure they are emotionally stable and continue to offer them ongoing emotional support.

Establishment of quality records/data: The creation of records and the collection of data on self-harm and suicide are crucial for understanding trends, patterns, vulnerable groups, and protective factors. This information is invaluable as it can provide evidence for appropriate treatment interventions and support the development of more services.

Community monitoring and support: Follow-up care is essential in suicide prevention. People who die by suicide are likely to have had some contact with primary health care within about a month before their death. This suggests that life-saving opportunities are being missed.

Combating stigmatization and increasing the demand for help: Stigma and negative attitudes surround self-harm, suicide, and mental and social behavior disorders. These negative attitudes affect the likelihood that a person will seek help. This is dangerous. To save lives, it is essential that people seek help for signs and symptoms of self-harm or suicide as soon as possible.

Dr. Sergio Pérez, a leading expert on adolescent suicidal behavior, highlighted and addressed several myths, providing scientific explanations that offer important insights for prevention in this population group, such as:

- a) Those who want to kill themselves don't talk about it. This is a flawed approach because it leads to ignoring people who express suicidal thoughts or threaten suicide. Scientific evidence shows that of every ten people who commit suicide, nine clearly stated their intentions, and the other hinted at their desire to end their life.
- b) Those who talk about it don't do it. This is a flawed approach, as it leads to minimizing suicide threats, which can be mistakenly considered blackmail, manipulation, or boasting. Scientific evidence shows that everyone who commits suicide expressed their intentions through words, threats, gestures, or changes in behavior.
- c) Those who attempt suicide don't want to die; they're just showing off. This is a misguided view because it fosters a negative attitude toward those who attempt suicide, hindering the help these individuals need. The scientific view is that while not everyone who attempts suicide wants to die, it's a mistake to label them as show-offs. These are people whose coping mechanisms have failed, leaving them with no alternative but to attempt suicide.
- d) If he truly wanted to kill himself, he would have thrown himself in front of a train. This flawed approach reflects the aggression these individuals generate in those unprepared to deal with them. Scientifically speaking, every suicidal person is in an ambivalent situation; that is, they are vulnerable to suicide, and providing them with a more lethal means of suicide is classified as the crime of aiding and abetting suicide, penalized under the current penal code.

- e) A person who recovers from a suicidal crisis is not at risk of relapse. This is a misconception that leads to a decrease in close monitoring of the individual and the systematic evaluation of suicide risk. Scientific evidence shows that almost half of those who experienced a suicidal crisis and committed suicide did so within the first three months after the emotional crisis, when everyone believed the danger had passed. The reality is that when a person recovers, their movements become more agile, and they are able to act on any lingering suicidal thoughts, something they were previously unable to do due to inactivity and impaired mobility.
- f) Talking about suicide with someone at risk can actually encourage them to take their own life. This misguided approach fosters fear when discussing suicide with those at risk. However, scientific evidence shows that talking about suicide with someone at risk, instead of inciting, provoking, or planting the idea in their mind, reduces the likelihood of them committing it and may be the only opportunity the individual has to analyze their self-destructive intentions.
- g) A person who is going to commit suicide doesn't give any warning signs. This is a misconception that ignores the prodromal symptoms of suicide. Scientific evidence shows that everyone who commits suicide has expressed their intentions through words, threats, gestures, or changes in behavior. These and other myths are important points that should be understood and shared.

Disseminating the warning signs of a suicidal crisis also constitutes a preventive measure to avoid suicidal behavior, such as inconsolable crying, a tendency towards isolation, suicidal threats, desires to die, hopelessness, sudden changes in behavior, affections and habits, isolation, unusual behaviors, excessive consumption of alcohol or drugs, writing farewell notes, as well as guiding where to go in these cases, all of which provides tools so that the population has more resources to deal with individuals at risk.²⁻¹⁵

Final consideration

This short article on “Suicidal Behavior in Adolescence and Risk” is intended for staff involved in working with adolescents, including parents and guardians, and other personnel involved in working with adolescents. This will allow them to be in the best position to detect these behaviors and thus contribute to taking action to prevent them.

Acknowledgments

None.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this study.

Funding

None.

References

1. Inter-Agency Standing Committee (IASC). Addressing suicide in humanitarian contexts. IASC. 2022.
2. World Health Organization. *Suicide*. WHO. 2025.
3. Redbioética/UNESCO. Suicide: a health problem. UNESCO Bioethics Network; 2019.
4. Vega Hidalgo MC, Pons Álvarez LM, Prats Blanco ME, et al. Risk factors associated with suicide attempts in adolescence. *Yara* 2007–2009. *Multimed*. 2009;13(2-4).
5. Alfaro AC, Hernández MR, Medina RS, et al. Suicidal behavior, adolescence and risk. *Ann Acad Cienc Cuba*. 2021;11(2).
6. Pérez Barrero SA. How to prevent suicide in adolescents? Online Psychology. *Suicide prevention*. 2025.
7. Cortés Alfaro A, Aguilar Valdés J, Suárez Medina R, et al. Risk factors associated with suicide attempts and criteria regarding what happened in adolescents. *Rev Cubana Med Gen Integr*. 2011;27(1).
8. Pan American Health Organization. Mortality from suicide in the Region of the Americas: regional report 2010–2014. 4th ed. Pan American Health Organization; 2021.
9. El Orden Mundial. The map of suicide rates worldwide. 2025.
10. Larraguibel QM, González MP, Martínez NV, et al. Risk factors for suicidal behavior in children and adolescents. *Rev Chil Pediatr*. 2000;71(3):183–191.
11. World Health Organization. Suicide prevention: a global imperative. Pan American Health Organization; 2014.
12. Pan American Health Organization. Implementation guide for suicide prevention in countries. 2025.
13. World Health Organization. Preventing suicide: a community engagement toolkit. WHO; 2016.
14. World Health Organization. mhGAP intervention guide version 2.0. WHO; 2017.
15. Pérez Barrero SA. Myths about suicide: the importance of knowing them. *Rev Colomb Psiquiatr*. 2005.