Residência RP Pediátrica
Publicação Oficial da Sociedade Brasileira de Pediatria
ISSN-Online: 2236-6814

Submitted on: 03/18/2025
Approved on: 03/24/2025

REVIEW

Article Review: Improving Suicide Prevention Through Evidence-Based Strategies: A Systematic Review

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Suicide among adolescents has increased at an alarming rate in recent years, making it essential in the training of the general pediatrician to detect risk factors and prevention strategies. This systematic review[1] analyzed 97 randomized controlled studies and 30 epidemiological studies. The article focuses on identifying prevention methods for suicidal behavior that are replicable strategies and feasible for large-scale implementation in public policies. Suicide risk can be understood through the diathesis–stress model, in which an internal stressor—generally a psychiatric disorder—is considered a likely starting point. Diathesis involves a combination of factors: heightened perception of psychological distress, a greater propensity for emotion-driven decision-making, difficulties in learning and problem-solving capacity, and social cognition with hypersensitivity to negative social cues. Alcohol and illicit substance use also influence the risk estimated in the model, due to their impact on mood and/or disinhibition. The prevention strategies described act at different stages of the model (Figure 1).

Effective interventions include:

- Education of non-psychiatrist physicians and primary care professionals: targeted training in screening, diagnosis, and treatment of major depressive disorder.
- Psychoeducation for adolescents and young adults: instruction on mental health, depression, and suicidal behavior was shown to be significantly effective when delivered in the school setting to high school students.
- Active outreach and routine follow-up after a suicide attempt or suicidal crisis: the period of highest risk for suicidal behavior is considered to be after discharge from the emergency department or hospitalization for acute suicidality, with 80% of suicide deaths occurring

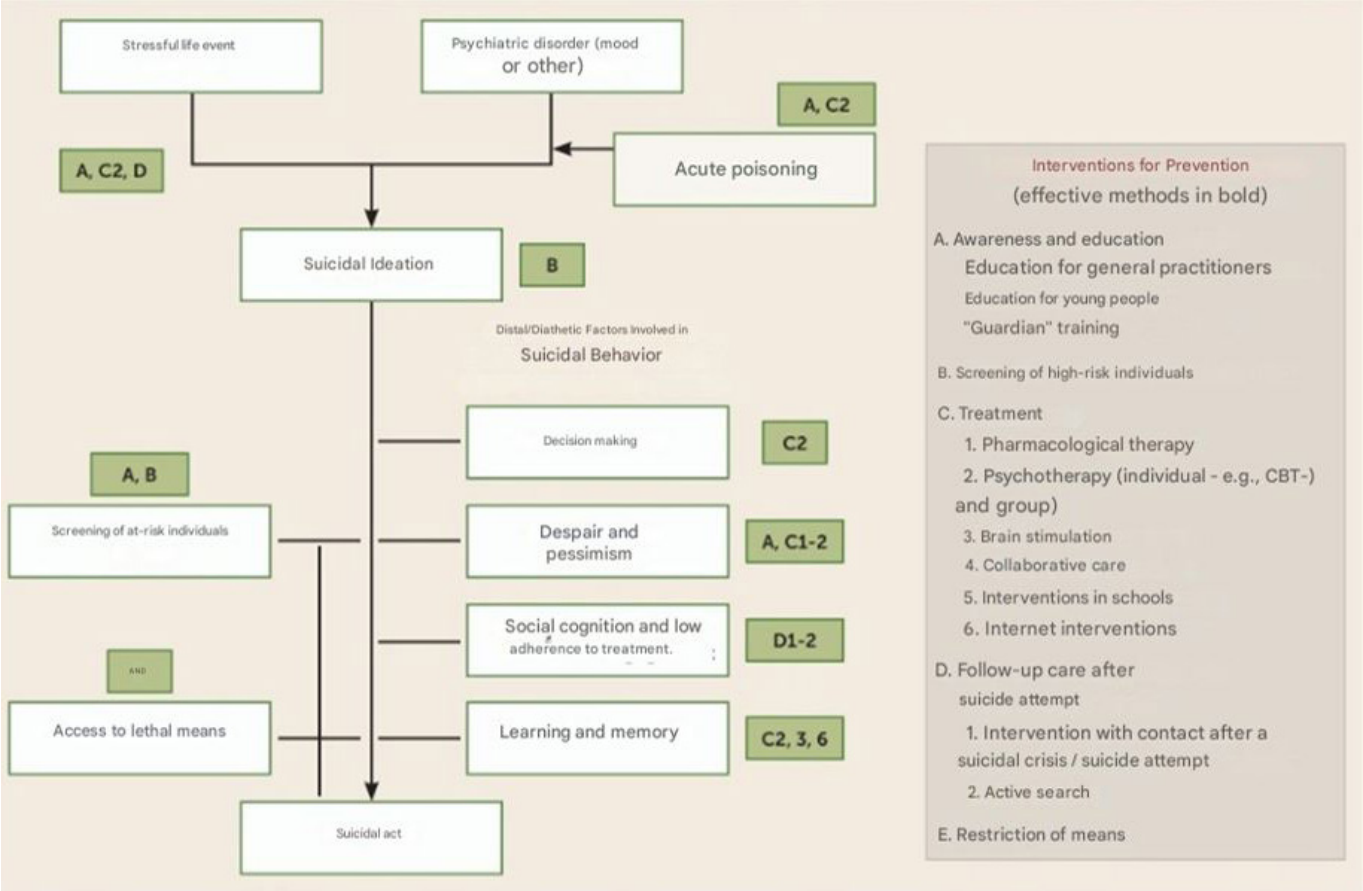
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Resid Pediatr. 2026;16(1). DOI: 10.25060/residpediatr-2026-1459

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Figure 1. Targets and strategies for suicide prevention (adapted and translated from the original article).



in the first year after a non-fatal attempt. Effective prevention was observed with follow-up as simple as sending postcards; it was also achieved through active outreach via telephone calls aimed at improving adherence to post-discharge treatment.

- Pharmacotherapy: antidepressants appear to reduce suicidal ideation more consistently than suicidal behavior, with results that are often contradictory and variable across age groups. A 2005 review of randomized clinical trials showed an association between selective serotonin reuptake inhibitors (SSRIs) and increased suicide attempts in the pediatric population. However, most subsequent studies have shown greater benefits than risks with SSRIs, including for prevention of suicidal behavior, in both pediatric and adult age groups.
- Psychotherapy: cognitive behavioral therapy (CBT), aimed at improving coping strategies in response to stressors and triggering situations, has been shown to be effective in reducing the risk of suicidal behavior in adults and adolescents with depression.
- Restriction of available and highly lethal means: restricting access to firearms—used in half of suicides in the United States and strongly associated with firearm suicides—significantly reduced suicide rates in different countries. In addition, pesticides are used in one third of suicides worldwide, most commonly in rural Asia and Latin America; effective reductions in suicide deaths have been observed with the introduction of less toxic products by industry and with locked storage of these chemicals

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