



# ANTIDEPRESSANTS AND THE RISK OF SUICIDAL BEHAVIOR

## OVERVIEW

Research indicates that as many as 11 percent of adolescents will experience depression. Because depression substantially increases the risk of suicide, much focus has been placed on measuring the effectiveness of treatments. This is particularly true for adolescents because depression in that age group is a strong indicator of suicidal behavior.

Currently, only one pharmacological treatment has been approved for use with youth with depressive disorders by the Food and Drug Administration (FDA). This medication, fluoxetine (a selective serotonin reuptake inhibitor [SSRI]), has been approved by the FDA for treating children eight years of age or older. More research has been completed on fluoxetine than any other SSRI.

However, research has also revealed a possible relationship between suicidal thoughts or actions and the use of SSRIs in children and adolescents with depression. This section outlines the benefits and risks associated with fluoxetine use in children and adolescents with depression.

## FOOD AND DRUG ADMINISTRATION ADVISORY STATEMENT

In response to findings that antidepressant use in pediatric patients had the potential to increase suicidal thinking and behavior, the FDA directed manufacturers to add a black-box warning to the health professional label on antidepressants. A summary of key points in this labelling is outlined in Figure 1.

The FDA also recommended that clinicians should screen for bipolar disorder, because symptoms of depression may be part of a bipolar episode and antidepressants used alone may trigger a mixed/manic episode in these at-risk patients, which may contribute to suicidal thinking or behavior.

In addition, dosage appears to be a contributing factor. One study found that younger patients who began treatment with higher-than-recommended doses of antidepressants were more than twice as likely to try to harm themselves as those who were initially treated with the same drugs at lower, recommended doses. The risk of suicide attempts seemed to be highest in the first 90 days on the medications.

## KEY POINTS

- Research has revealed a link between suicidal thoughts and use of SSRI medications in children.
- Fluoxetine (SSRI) is currently the only medication approved for children suffering from depression.
- Children taking SSRIs must be carefully monitored for suicidal thinking and behavior.

In response to the black-box warning, practitioners such as pediatricians and family practitioners have ceased prescribing antidepressants to children and have begun to refer patients to child and adolescent psychiatrists.

**Figure 1**

### Key Points of FDA Black-Box Warning Label For Suicidality and Anti-Depressant Drugs

- Antidepressants increase the risk of suicidal thinking and behavior in children and adolescents with MDD and other psychiatric disorders.
- Anyone considering the use of an antidepressant in a child or adolescent for any clinical use must balance the risk of increased suicidality with the clinical need.
- Taper dosage to prevent risks of discontinuation syndrome if stopping SSRI treatment.
- Patients who are started on antidepressant therapy should be observed closely for agitation, irritability, clinical worsening, suicidality, or unusual changes in behavior.
- Families and caregivers should be advised to closely observe the patient and to communicate with the prescriber.
- A statement regarding whether the particular drug is approved for any pediatric indication(s) and, if so, which one(s), should be present.

## EFFECTIVENESS OF SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIs) VERSUS THE RISK OF SUICIDALITY

When making decisions about the risks associated with antidepressants, particularly SSRIs, it is important to understand the limitations of the research. Suicidality can be very difficult to measure as these events are rare, and the statistical method used to evaluate the risk associated with treating children and adolescents with antidepressants can only be used in studies where a minimum of one adverse event has taken place. Conversely, a study that fails to detect a significant increase in suicidal risk associated with antidepressant medication does not necessarily indicate that there is not a risk.

A full review of the current literature on the benefits and risks associated with antidepressant use in children and adolescents with depression is provided in the *Collection, 6th Edition*.

In summary, an evaluation of the risk-benefit ratio of using fluoxetine with children and adolescents diagnosed with depression has revealed that the benefits associated with treating moderately to severely depressed youth with this SSRI can outweigh the risks. Outcomes can be improved and risks of suicidal thinking and behavior can be reduced by combining cognitive-based therapy with fluoxetine. It is imperative, however, that when antidepressants are prescribed, youth should be closely monitored by both parents and clinicians. Additional information about effective treatments for youth with depression is located in the “Depressive Disorders” section of the *Collection*.

***The Collection of Evidence-based Practices for Children and Adolescents with  
Mental Health Treatment Needs, 8<sup>th</sup> Edition***  
*Virginia Commission on Youth, 2021*

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