



**28 January 2016**

**The BMJ  
Press Release**

**Antidepressants double the risk of aggression and suicide in children**

Children and adolescents have a doubled risk of aggression and suicide when taking one of the five most commonly prescribed antidepressants, according to findings of a study published in **The BMJ** today.

However, the true risk for all associated serious harms—such as deaths, aggression, akathisia and suicidal thoughts and attempts—remains unknown for children, adolescents and adults, say experts.

This is because of the poor design of clinical trials that assess these antidepressants, and the misreporting of findings in published articles.

Selective serotonin reuptake inhibitors antidepressants (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) are the most commonly prescribed drugs for depression.

A team of researchers from Denmark carried out a systematic review and meta-analysis of 68 clinical study reports of 70 trials with 18,526 patients to examine use of antidepressants and associated serious harms.

These included deaths, suicidal thoughts and attempts as well as aggression and akathisia, a form of restlessness that may increase suicide and violence.

They examined double blind placebo controlled trials that contained patient narratives or individual patient listings of associated harms.

Harms associated with antidepressants are often not included in published trial reports, explain the authors. This is why they analysed clinical study reports, prepared by pharmaceutical companies for market authorisation, and summary trial reports, both of which usually include more information.

In adults, they found no significant associations between antidepressants and suicide and aggression. However, a novel finding showed there was a doubling of risk for aggression and suicides in children and adolescents.

This study has shown limitations in trials, not only in design, but also in reporting of clinical study reports, which may have led to "serious under-estimation of the harms," write the authors.

They compared the results from the clinical study reports with data from individual patient listings or narratives of adverse effects. This revealed misclassification of deaths and suicidal events in people taking antidepressants.

For example, four deaths were misreported by a pharmaceutical company, in all cases favouring the antidepressant, and more than half of the suicide attempts and suicidal ideation, for example, were coded as "emotional lability" or "worsening of depression."

In the Eli Lilly summary trial reports, almost all deaths were noted, but suicidal attempts were missing in 90% of instances, and information on other outcomes was incomplete. These were "even more unreliable than we previously suspected," write the authors.

Clinical study reports for antidepressants duloxetine, fluoxetine, paroxetine, sertraline and venlafaxine were obtained from regulatory agencies in the UK and Europe. Summary trial reports for duloxetine and fluoxetine were taken from the drug company Eli Lilly's website.

However, clinical study reports could not be obtained for all trials and all antidepressants, and individual listings of adverse outcomes for all patients were available for only 32 trials.

"The true risk for serious harms is still unknown [because] the low incidence of these rare events, and the poor design and reporting of the trials, makes it difficult to get accurate effect estimates," they explain.

They recommend "minimal use of antidepressants in children, adolescents, and young adults, as the serious harms seem to be greater, and as their effect seems to be below what is clinically relevant," and suggest alternative treatments such as exercise or psychotherapy.

They also call for the need to identify "hidden information in clinical study reports to form a more accurate view of the benefits and harms of drugs."

In an accompanying editorial, Joanna Moncrieff from University College London, agrees that "regulators and the public need access to more comprehensive and reliable data", and that clinical study reports "are likely to underestimate the extent of drug related harms."

Over half the clinical study reports had no individual patient listings and "this begs the question of how many more adverse events would have been revealed if [these] were available for all trials, and raises concerns why this information is allowed to be withheld."

[Ends]

**Note to Editors:**

Research: Suicidality and aggression on antidepressant drugs: systematic review and meta-analyses based on clinical study reports

<http://www.bmj.com/cgi/doi/10.1136/bmj.i65>

Editorial: Misrepresenting harms in antidepressant trials

<http://www.bmj.com/cgi/doi/10.1136/bmj.i217>

**About BMJ**

BMJ is a healthcare knowledge provider that aims to advance healthcare worldwide by sharing knowledge and expertise to improve experiences, outcomes and value. For a full list of BMJ products and services, please visit [bmj.com](http://www.bmj.com)