Forensic database study suggests selective serotonin reuptake inhibitors do not increase the risk of suicide in people taking antidepressants

Isacsson G, Holmgren P, Ahlner J. Selective serotonin reuptake inhibitor antidepressants and the risk of suicide: a controlled forensic database study of 14,857 suicides. *Acta Psychiatr Scand* 2005;**111**:286–90.

Q Do selective serotonin reuptake inhibitors increase the risk of suicide in people taking antidepressants?

METHODS

Design: Case control study.

Follow up period: Eight years.

Setting: Analysis of the Swedish National Board of Forensic Medicine database for 1992–2000.

People: 4949 people who died from suspected unnatural causes, and found to be taking antidepressants on forensic screening. Cases were people who had taken antidepressants who had committed suicide, and controls were people taking antidepressants who were judged to have died from natural causes or an accident after forensic investigation.

Risk factors: Selective serotonin reuptake inhibitors (SSRIs).

Outcomes: Suicide.

MAIN RESULTS

In people taking antidepressants, SSRI use was no more common among people who had committed suicide than among those who had died from natural causes or an accident (OR 0.83, 99% CI 0.77 to 0.90).

CONCLUSIONS

SSRIs do not appear to increase the risk of suicide in people taking antidepressants.

NOTES

The choice of prescribed antidepressant varies depending on the severity of depression, which may confound the effect of each drug on the rate of suicide.

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Commentary

Isacsson *et al* provide new insights into the debate about the relation between antidepressants and suicidal behaviour.¹ Based on recent evidence that some antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs), possibly increase the risk of suicide² and suicide ideation³ in people with depression, worldwide regulatory authorities have issued warnings about the risk of self harm and suicidal thinking or behaviour in children, adolescents, and adults taking antidepressants.^{4–6} However, the study by Isacsson appears to support the findings of studies that report increased antidepressant use to be associated with a decreased suicide rate.^{7–8}

Notwithstanding the importance of a precautionary attitude when dealing with crucial health policy matters such as suicide risk, substantial methodological limitations of the available evidence can be found. Deliberate self harm is usually under- or non-reported, and deaths by suicide can be difficult to identify. Observational data raise the problem of confounding by indication or other known and unknown variables. Existing randomised controlled trials are usually regulatory trials with carefully selected groups of participants rather than real-world patients, and have insufficient power to provide clear evidence on the effect of antidepressants on suicide.⁹

Although it has been suggested that the recommendations for prescribing antidepressants should be reconsidered,¹⁰ the most robust available evidence indicates that these drugs remain the mainstay for treating moderate to severe depression.¹¹ For clinicians the problem is how to balance the possible benefits and risks of treatment for each individual patient. Large long term non-commercial trials with clinically meaningful outcomes, that are intended to provide information about what may happen to real-world patients in terms of both effectiveness and safety, are urgently needed.⁹

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