

## The impact of antidepressants, adverse events warnings, and survey results

A 16-year-old girl presents to her physician with a six-month history of fatigue, insomnia, lack of energy, a 10-pound weight loss, and disinterest in friends and school. Three months ago, after a fight with her boyfriend, she took several aspirins to "fall asleep and not wake up". She wishes to be dead but has no plans to kill herself. In the past month, she has self-lacerated her wrist twice superficially while feeling angry or numb.

Depression is diagnosed and fluoxetine is started. During follow-up, she reports feeling more "nervous and hyper", having difficulty sleeping and having more thoughts about cutting. She asks if these are side effects of the medication.

Her mother is worried because she recently heard a Food and Drug Administration (FDA) warning on the radio about selective serotonin reuptake inhibitors in young people. Because of the side effects and the mother's concerns, the physician lowers the dose, feeling that the medication was still indicated, and refers her to an adolescent psychiatrist.

In November 2005, a one-time survey was sent to 2395 CPSP participants to ascertain the impact of the 'black box' warning on their antidepressant prescribing practices. In the previous two years, 75% of the 408 respondents had cared for such patients.

### LEARNING POINTS

- According to the World Health Organization, depression will be the leading cause of disability worldwide by the year 2020.
- Depressive disorders begin in adolescence, and up to 60% will recur in adulthood.
- The CPSP survey showed that of the respondents:
  - Almost three-quarters were aware of the FDA's 'black box' warning.
  - 50% have actively followed depressed patients.
  - One in five have initiated selective serotonin reuptake inhibitors, and 20% reported the following adverse effects: agitation, aggressive behaviour and headache.
  - Only 4% have seen a patient with new onset or worsening suicidal ideation.
- The CPSP survey documented that the response to the warning varied greatly, with 85% changing their prescribing practices, 31% following patients more closely, 26% referring to psychiatry, 19% either changing the dose and/or the medication, and 8% stopping treatment with antidepressants altogether.
- A further 10% of respondents indicated that the patients stopped the medications themselves because of the warning.
- Among FDA indications for antidepressant use in paediatrics, only fluoxetine is approved for the treatment of manic-depressive disorder, and fluoxetine, sertraline, fluvoxamine and clomipramine are approved for obsessive-compulsive disorder. None of the drugs are approved for other psychiatric indications in children.
- Further research is needed to provide evidence for the safety and efficacy of the medications used in children and youth. As well, a more efficient system of communicating the importance of drug information to front-line physicians is required.
- For more information on antidepressants, please visit the following Web sites:
  - <<http://aapnews.aapplications.org/cgi/content/full/e2004146v1>>
  - <[http://www.hc-sc.gc.ca/dhp-mps/alt\\_formats/hpfb-dgpsa/pdf/medeff/prozac\\_hpc-cps\\_e.pdf](http://www.hc-sc.gc.ca/dhp-mps/alt_formats/hpfb-dgpsa/pdf/medeff/prozac_hpc-cps_e.pdf)>

*The Canadian Paediatric Surveillance Program (CPSP) is a project of the Canadian Paediatric Society that undertakes the surveillance of rare diseases and conditions in children. For more information, visit our Web site at <[www.cps.ca/cpsp](http://www.cps.ca/cpsp)> or <[www.cps.ca/pcsp](http://www.cps.ca/pcsp)>.*