Antidepressant-related deaths

Cheeta et al (2004) present data on antidepressant-related deaths in England and Wales, 1998–2000. They report information about antidepressant deaths collected by the National Programme of Substance Abuse Deaths (np-SAD database). The aims of their paper were: (a) to investigate relative toxicities of major classes of antidepressant (compare accidental/intentional deaths); and (b) to analyse deaths where other drugs were also present at post-mortem examination. We are concerned that the data-set used for this analysis is unable to address these objectives.

The Office for National Statistics (ONS) database of drug-poisoning deaths holds information about all such deaths since 1993. This includes textual information from the coroners’ reports about the types of substances taken. We have recently conducted an analysis of antidepressant-related poisoning deaths for a 10-year period from 1993 to 2002 (Morgan et al, 2004).

Between 1998 and 2000, Cheeta et al reported 468 deaths involving antidepressants recorded in the np-SAD database. Our analysis of the ONS database found 1452 deaths involving antidepressants for the same period. Clearly a large number of antidepressant-related deaths are missing from the np-SAD database. This is probably because about 80% of antidepressant-related deaths are due to suicide and not substance misuse (the data collected by np-SAD). Furthermore, Cheeta et al found that 93% of deaths involving selective serotonin reuptake inhibitors (SSRIs) also involved other drugs. In our study, this figure was 75%, suggesting that the np-SAD database is less likely to contain deaths involving SSRIs taken alone. This is likely to introduce bias into Cheeta et al’s study, leading to an underestimation of the relative toxicity of SSRIs compared to tricyclic antidepressants (TCAs). This is borne out when death rates per million prescriptions are compared between the np-SAD study and our study. The np-SAD study gives the overall death rate per million prescriptions for SSRIs as 1.4. In our study this was 5.1. Our study showed TCA rates to be around 8 times greater than rates for SSRIs; in the np-SAD study TCA rates were 10 times greater.


Authors’ reply: We are very pleased to hear of the interest of Griffiths and Morgan in our paper on antidepressant toxicity using the np-SAD database. It is intriguing that even though our paper was published earlier this year and prior to the Office for National Statistics report (Morgan et al, 2004), there is no mention in their letter of the similarities between the two studies. For example, the proportion of deaths from TCAs (amitriptyline and dothiepin being the most frequently implicated compounds) were very similar (85% and 89%), and both studies found that approximately 80% of deaths from antidepressants were suicides. Furthermore, one of the main implications of our study for clinical practice (and a result not previously reported in the UK) was the risk of SSRI-related fatality when these drugs are ingested in combination with TCAs, with or without other illicit drugs. Griffiths and Morgan appear erroneously to assume that np-SAD only collects information on illicit drugs. Rather to the contrary, the programme protocol, which is published bi-annually with surveillance reports (Ghoodse et al, 2003), defines a case as one where psychoactive substances are directly implicated in the fatality, and this includes antidepressant-related deaths. Consequently, Griffiths and Morgan’s findings de facto suggest that some of the ‘culpable’ antidepressants in their data-set might not have been prescribed. It is unlikely that the Office for National Statistics data-set will contain information on prescriptions written as this is often not required on death certificates.

Depression and the CIDI

Vicente et al (2004) and Weich & Araya (2004) have made important observations regarding the reporting of substantially different rates of mental disorders, particularly major depression, in two well-designed studies in Chile. The lower prevalence of major depression of 3.4% was determined by using the Composite International Diagnostic Interview (CIDI), and Vicente & al noted that diagnoses were based on an algorithm. However, they did not describe the nature of the exclusion criteria for the diagnosis of major depression contained within that. They are perhaps unexpected, and may at least partly explain the different results.

The CIDI has a number of probe or stem questions that determine the presumed clinical significance, thereby excluding a number of conditions. For example, it excludes those persons whose symptoms were considered to be due to medication, drugs or alcohol, physical illness or injury; those who considered their symptoms to be trivial or who had not consulted a doctor; those who considered that their symptoms did not interfere ‘a lot’ (determined by the respondent) with their everyday life and activity; and those who...