COCHRANE CORNER

Pharmacological interventions for self-harm in adults†

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†This review is an abridged version of a Cochrane Review previously published in the *Cochrane Database of Systematic Reviews*, 2015, Jul 6, Issue 7: CD011777 (see www.thecochranelibrary.com for information). Cochrane Reviews are regularly updated as new evidence emerges and in response to feedback, and the Cochrane Database of Systematic Reviews should be consulted for the most recent version of the review.

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See commentary on pp. 3–7, this issue.

Background

Self-harm (intentional self-poisoning or self-injury) is common, often repeated, and strongly associated with suicide. This is an update of a broader Cochrane review on psychosocial and pharmacological treatments for self-harm, first published in 1998 and previously updated in 1999. We have now divided the review into three separate reviews. This review is focused on pharmacological interventions in adults who self-harm.

Objectives

To identify all randomised controlled trials of pharmacological agents or natural products for self-harm in adults, and to conduct meta-analyses (where possible) to compare the effects of specific treatments with comparison types of treatment (e.g. placebo/alternative pharmacological treatment) for self-harm patients.

Search methods

For this update the Cochrane Depression, Anxiety and Neurosis Review Group (CCDAN) Trials Search Co-ordinator searched the CCDAN Specialised Register (September 2014). Additional searches of MEDLINE, EMBASE, PsycINFO and CENTRAL were conducted to October 2013.

Selection criteria

We included randomised controlled trials comparing pharmacological treatments or natural products with placebo/alternative pharmacological treatment in individuals with a recent (within 6 months) episode of self-harm resulting in presentation to clinical services.

Data collection and analysis

We independently selected trials, extracted data and appraised trial quality. For binary outcomes, we calculated odds ratios (ORs) and their 95% confidence intervals (CIs). For continuous outcomes we calculated the mean difference (MD) and 95% CI. Meta-analysis was possible for only one intervention (i.e. newer-generation antidepressants) on repetition of self-harm at last follow-up. For this analysis, we pooled data using a random-effects model. The overall quality of evidence for the primary outcome was appraised for each intervention using the GRADE approach.

Main results

We included seven trials with a total of 546 patients. The largest trial included 167 participants. We found no significant treatment effect on repetition of self-harm for newer-generation antidepressants (n = 243; k = 3; OR = 0.76, 95% CI 0.42–1.36; GRADE: low quality of evidence), low-dose fluphenazine (n = 53; k = 1; OR = 1.51, 95% CI 0.50–4.58; GRADE: very low quality of evidence), mood stabilisers (n = 167; k = 1; OR = 0.99, 95% CI 0.33–2.95; GRADE: low quality of evidence), or natural products (n = 49; k = 1; OR = 1.33, 95% CI 0.38–4.62; GRADE: low quality of evidence). A significant reduction in self-harm repetition was found in a single trial of the antipsychotic flupenthixol [flupentixol] (n = 30; k = 1; OR = 0.09, 95% CI 0.02–0.50), although the quality of evidence for this trial, according to the GRADE criteria, was very low. No data on adverse effects, other than the planned outcomes relating to suicidal behaviour, were reported.

Authors' conclusions

Given the low or very low quality of the available evidence and the small number of trials identified, it is not possible to make firm conclusions regarding pharmacological interventions in self-harm patients. More and larger trials of pharmacotherapy are required. In view of an indication of positive benefit for flupenthixol in an early small trial of low quality, these might include evaluation of newer atypical antipsychotics. Further work should include evaluation of adverse effects of pharmacological agents. Other research could include evaluation of combined pharmacotherapy and psychological treatment.

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