

11 A Survey of the Conduct and Reporting of Systematic Reviews Assessing Adverse Effects of Drug Interventions

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Background: Methodology for conducting and reporting systematic reviews (SR) to evaluate treatment effectiveness is well established, but methods for systematically reviewing adverse events are not. Previous research has highlighted problems such as: difficulty identifying studies with adverse event data, assessing likelihood of bias of relevant studies, and suitability of meta-analysis. Recently a framework for conducting systematic reviews of adverse events has been published but guidelines based on sound theoretical and empirical principles are required.

Objectives: To assess the conduct and reporting of recently published systematic reviews of adverse effects of drug therapies in order to determine methodologies used and to identify areas for further research.

Methods: To overcome the difficulty of identifying systematic reviews of adverse events, we surveyed drug safety, general clinical pharmacology and general medical journals for the year 2006. The title and abstract of each article were screened and included if it was: (1) a study of a drug intervention with a primary objective to assess adverse events, (2) included an electronic database search, and (3) summarized evidence from more than one study. Outcome data collected included those suggested in the PRISMA and MOOSE guidelines. Basic summary statistics were performed.

Results: 1628 abstracts in 16 journals were screened and 59 articles met the inclusion criteria. Few articles specifically defined themselves as a SR, and few attempted to collate or pool data. In the majority of SRs there was a lack of adherence to standard guidelines on conduct and reporting.

Conclusions: The usefulness of reviews which make no attempt to collate or summarize results is debatable. It is difficult for readers to assess the validity of the findings in such reviews due to poor reporting quality and lack of established methodology in the field of drug safety.

Conflicts of interest: None declared.