

BRIEF COMMUNICATION

Abstracts of trials presented at the Vth World Congress of
Psychiatry (Mexico, 1971): a cohort study

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ABSTRACT

Background. Systematic reviews should identify all relevant trials in order to minimize the potential for bias and the play of chance in their results. Other specialities have shown that conference proceedings are a rich source of trials, but many of these trials are never fully published.

Methods. All clinical trials presented at a single conference (Vth World Congress of Psychiatry, Mexico, 1971) were identified by hand searching. Full publications of these abstracts were then sought on five databases by searching for the authors or relevant key words.

Results. Full publications were found for 46% of the abstracts. The odds of publication decreased for abstracts that were from a non-Anglophone country or that failed to mention randomization.

Conclusions. Anyone wishing to undertake a systematic review of a mental-health care topic should search relevant conference proceedings for trials.

INTRODUCTION

The randomization controlled trial is the gold standard of evaluation of health care (WHO, 1991). Many such trials are published each year, but it is difficult for health professionals to keep track of their results. Health professionals often depend on reviews of trials to guide practice (Peto, 1987). Most reviews are subjective, lack any methods section whatsoever (Mulrow, 1987) and may provide erroneous advice for treatment (Antman *et al.* 1992). A systematic review attempts to identify all relevant trials to minimize bias and the play of chance (random error) (Chalmers, 1989). However, finding all the trials is difficult as the various electronic databases cover different, small fractions of the 20000 health-related journals and many periodicals, dissertations, book and conference abstracts are not put into electronic form.

There is evidence from other specialities that some of this difficulty can be overcome by hand

searching conference proceedings. They are a rich source of trials and, on average, 51% may not be fully published (Scherer *et al.* 1994). There is also some evidence that smaller studies with negative results are less likely to be fully published and that there is a large publication bias towards studies with positive results (Dickersin *et al.* 1987; Dickersin, 1990; Easterbrook *et al.* 1991).

This study looked at a well-defined cohort of trials in order to identify the proportion that became easily accessible in widely used electronic databases. It also investigated whether trials from Anglophone countries and trials that mentioned randomization were more likely to be fully published.

METHOD

The Vth World Congress of Psychiatry took place in Ciudad de Mexico (22 November–4 December, 1971). The conference abstracts book included 1204 entries. This volume was independently hand-searched by K. D. and C. E. A. All randomized or possible randomized trials

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were identified. MEDLINE (1966–1996) and PsycLIT (1974–1996) were then searched for possible full publications of the same work using the authors names and relevant key words within the title or abstract. EMBASE and Biological Abstracts were not available to the authors for the period (1967–1976) when papers presented at the conference were most likely to be published but EMBASE (1980–1995) and Biological Abstracts (1985–1996) were searched. Citations of all abstracts were sought on the ISI social sciences database (1981–1996). Finally, the fully published versions of the studies were sought on the Cochrane Controlled Trials Register within the Cochrane Library (Cochrane Library 1996–1998). This register contains citations to 175000 controlled trials identified by methodological electronic searches supplemented by hand-searching.

RESULTS

A high proportion of the Vth World Congress abstracts found by hand searching were trials (7.9%: total = 95). Only 46% ($N = 44$) of these

were identified by searching Biological Abstracts, EMBASE, MEDLINE and PsycLIT. Those that were not identified by database searching had greater odds of being from non-Anglophone countries (Table 1). Most studies that achieved full publication did so within 2 years of the conference (see Fig. 1).

Only eight abstracts, all from non-published trials, were found to have been cited on the ISI database. Seven of these were not cited by the original author. In addition to the 44 full reports identified on Biological Abstracts, EMBASE, MEDLINE and PsycLIT, The Cochrane Library Controlled Trials Register contained 10 more studies.

CONCLUSIONS

As with other specialities, conference proceedings are rich sources of trials (Clarke & Greaves, 1995; Counsell & Fraser, 1995). This study adds to an increasing body of evidence suggesting that a high proportion of trials either never achieve full publication or are difficult to identify by use of conventional databases. The study however, was limited to one 25-year-old abstract book and since then the situation may have improved. One conference is an inadequate sampling frame for definitive conclusions but can be used to generate hypotheses. It is proposed to replicate this study on several cohorts of abstracts across two decades.

Some fully published papers may not have been identified. This may have due to inadequate

Table 1. *Country of origin*

	Unpublished	Published	Total
Non-Anglophone	25	12	37
Anglophone	26	32	58
Total	51	44	95

If a study was from a non-Anglophone country the odds of remaining unpublished were increased (OR = 2.56, 95% CI 1.0–6.7). The relative risk of non-Anglophone trials not being published was 1.51 (95% CI 1.05–2.2).

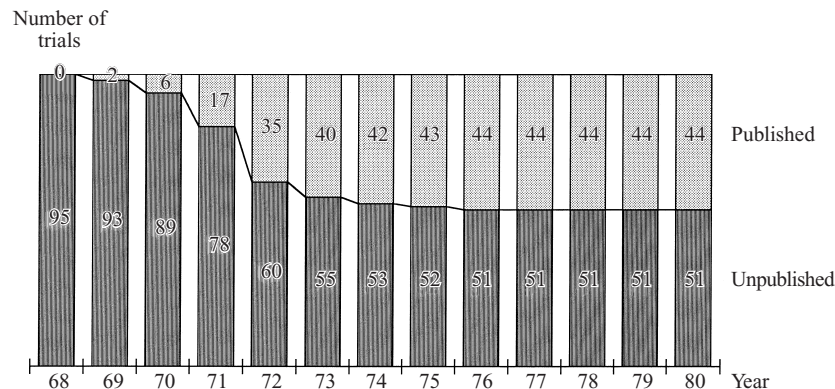


Fig. 1. 'Survival' curve: Vth World Congress of Psychiatry. (Total numbers of trials = 95; databases searched to 1996.)

information in the abstract, or the fact that the databases covering the 1970s often contain only authors and titles, or the authors presenting the abstract may not be the final authors or they may decide to publish under a collective title. Nevertheless, the low level of full publication is in keeping with findings from other specialities (Scherer *et al.* 1994).

Abstracts originating from Anglophone countries (Australia, Canada, South Africa, the USA and the UK) were more likely to be identified as being fully published (Table 1). MEDLINE and PsycLIT are likely to be Anglophone-biased. EMBASE, based in the Netherlands, may contain more information on non-Anglophone material but it was not accessible for the most relevant decade (1967–1976). Egger *et al.* in an elegant study, have shown that non-Anglophone researchers published negative trials in their home language and positive work in English (Egger *et al.* 1997).

Even if the non-Anglophone studies were published and not identified by this study, their accessibility was poor. The authors aimed to determine accessibility within the most widely used electronic databases (Biological Abstracts, EMBASE, MEDLINE and PsycLIT). That the Cochrane Controlled Trials Register contained 10 more citations to full publications may be due to the considerable hand-searching that has helped create this Register. At present the mental health journals that have been searched for this Register are mainly in the English language. As further searching is undertaken, more of the unidentified trials may come to light. The Cochrane Library may be the best source of controlled clinical trials but at present its accessibility is limited.

There is some evidence that reporting of randomization is indicative of the overall quality of the trial (Chalmers *et al.* 1983; Schulz *et al.* 1994). This study attempts to identify the word 'randomized' within the abstract as some measure of the quality of the study. The non-published material may have been of such poor quality that it did not merit full writing up. If randomization was not explicitly mentioned in the abstract it decreased the odds of being easily identified in electronic databases (Table 2). This decrease was not statistically significant but the sample size was small. This is a weak finding using a crude proxy-measure of quality.

Table 2. *Mention of randomization*

	Unpublished	Published	Total
Randomization			
Not mentioned	30	33	63
Mentioned	21	11	32
Total	51	44	95

Not mentioning 'randomization' decreased the odds of becoming published (OR = 0.48, 95% CI 0.18–1.25). The relative risk of trials that did not mention 'randomization' failing to achieve full publication was 0.73 (95% CI 0.51–1.04).

It is likely that many excellent and important studies are never published (Clarke & Greaves, 1995; Counsell & Fraser, 1995). Most researchers gain informed consent from study participants before they are entered in a trial. It is feasible that potential trial participants would not consent to take part in studies if they knew that the information produced might remain unreported or inaccessible.

Those wishing to undertake systematic reviews of health care should attempt to identify all relevant studies. Searching standard electronic databases may not meet this requirement. Scrutiny of conference proceedings may identify important material that is inaccessible by any other means.

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