

# 20 years of Handsearching in Germany

## Results and future prospects

Anette Blümle, Laura Rehner, Claudia Bollig

Cochrane Germany, Medical Center - University of Freiburg, Faculty of Medicine, University of Freiburg, Germany

**Introduction** Over the last 20 years, Cochrane Germany (CG) has participated in the global retrospective manual page-by-page search of health care journals (handsearching) by covering journals published in German-speaking regions (Switzerland, Austria, Germany). Though researchers increasingly publish their study results in English and an increasing number of journals based in non-English-language countries switched to English, there might still be many important scientific medical trials (randomised controlled trials, RCTs, and quasi-randomised controlled trials, CCTs) which are published in national non-English-language journals. Moreover, many of the non-English-language journals and articles are not included in electronic databases such as Medline. Without handsearching these studies would not become accessible and, thus, clinical trials results would not be available for patients care, further research or inclusion in systematic reviews.

**Objectives** To find out to what extent German health care is still affected by insufficient electronic availability and indexing of journals and articles and is, therefore, prone to retrieval bias.

## Results

During the CG's involvement in the European handsearching project, 98 medical journals have been handsearched (Figure 1) and 22,009 RCTs and CCTs have been recorded (Figure 2). Of those, 9060 (41%) were included in Medline (PubMed). The most recent handsearching of five German-language journals in the medical fields allergology, nursing care, ophthalmology, pediatrics, and sport medicine in the years 2012-2014 that are not indexed in Medline resulted in 178 RCTs and CCTs. Most of them were published in sports medicine (132, 74%) and ophthalmology (43, 24%), 1% each in pediatrics and allergology, and none in nursing care. Most of the articles identified were conference abstracts (164; 92%).

**Methods** The results of the CG's handsearching since it began with a Europe-wide handsearching project in 1995 are shown, and a suggestion of the future needs for handsearching projects in Germany is given.

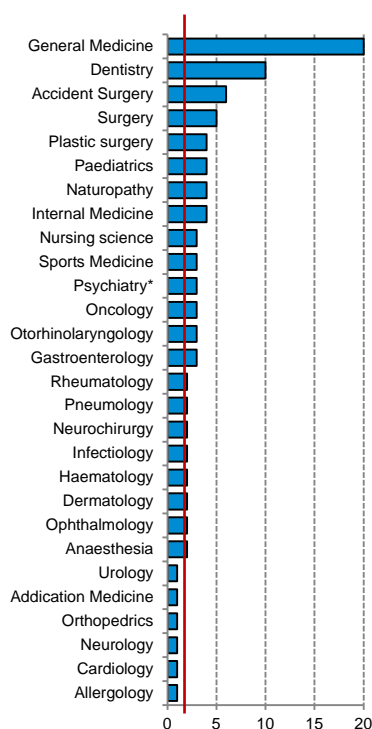


Figure 1: Number of handsearched journals in the specific medical fields (n=98). The red line indicates the median (2) of journals per field, handsearched within the last 20 years.

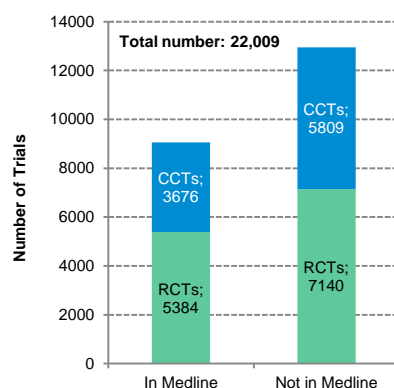


Figure 2: Number of handsearched results.

## Conclusions

Handsearching activities still reveal reports on RCTs and CCTs that are not electronically recorded in databases and can only be identified by searching manually print journals. There are still non-English-language journals not included in Medline publishing a large number of RCTs and CCTs (e.g. Deutsche Zeitschrift für Sportmedizin). Most of the articles identified were conference abstracts which are also important as they are possibly the only references to the clinical trial. As conference abstracts are mostly not included in biomedical databases such as Medline both, indexed and non-indexed journals should be handsearched further on.

Availability of German journal articles in biomedical databases is insufficient. Publishing handsearch-results in CENTRAL (Cochrane Library), tagged as RCT/CCT, may reduce retrieval bias.