

ABSTRACT

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Title: Quality assessment in meta-analyses of diagnostic studies: what difference does email contact with authors make?

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Objective: To describe the impact of contact with authors on assessment of study quality in two diagnostic meta-analyses.

Methods: We conducted two meta-analyses to determine the accuracy of nucleic acid amplification tests in the diagnosis of 1) tuberculous meningitis (TBM); and 2) tuberculous pleuritis (TP). In both meta-analyses, since reporting was very poor, we contacted authors of the studies exclusively via email (usually twice). Additional information was obtained in 27/49 (55%) studies, and 25/40 (63%) studies in the TBM and TP meta-analysis, respectively.

Results: When we compared initial quality assessment with the final assessment that incorporated authors' inputs, we found major differences in three of six quality criteria: blinding, sampling of patients, and prospective design. In the TBM and TP meta-analyses, the proportion of blinded studies increased from 26% to 59%, and 20% to 55%, respectively. The proportion with consecutive/random sampling increased from 18% to 49%, and 30% to 53%, respectively. The proportion of prospective studies increased from 51% to 61%, and 42% to 53%, respectively.

Conclusions: Contact with authors can significantly improve quality assessment in diagnostic meta-analyses—the impact is large on some (but not all) quality criteria. Response rates >50% can be achieved with just repeated email contact.

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