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Increasing value in research

This issue of the *British Journal of Dermatology (BJD)* includes a comprehensive and engaging report of a systematic review of randomised controlled trials of topical herbal medicines for atopic eczema.¹ Thandar et al have complied with the PRISMA guidelines for reporting systematic reviews, as required by the BJD.² They clearly explain their focus on topical herbal medicines for atopic eczema because there is a high level of patient interest. The authors also justify the need for this systematic review in order to fill a gap in existing and on-going reviews. They state the aims of their review; provide details about their search strategy; list their inclusion and exclusion criteria and provide a table of study characteristics. The risk of bias assessments are used to inform the discussion and the conclusions are supported by the evidence presented. The only thing missing is registration of a protocol.

One of the causes of 'waste' in research is a lack of transparency in research methods, of all study designs.³ For systematic reviews, as with trials, a protocol provides details of planned methods, reducing risk of biases. Making a review protocol publically available was until recently almost impossible. Within the last five years, a number of journals have started accepting protocols for publication, and PROSPERO a free to search, free to register international prospective register of systematic reviews has been launched.⁴ Journals are now asking for the protocol registration details with submitted manuscripts in line with item 5 in the PRISMA checklist.⁵ However, providing reporting guidelines, checklists and registration facilities only helps to improve the quality of published research if they are adhered to by authors, peer reviewers, and editors.⁶

Another advantage of a single open access database of registered protocols is in helping avoid duplication.⁷ Thander et al were able to set their clearly specified research question in the context of not only existing reviews, but on-going reviews of other treatment options.

One of the disappointing findings of the Thander et al review is that sample sizes were small, ranging from 12 (participants were their own controls) to 144. This is not unusual in systematic reviewing and highlights another potential area of waste in research. There is pressure on clinicians throughout their training and as part of their ongoing professional development to undertake research. Funding for large projects in collaboration with academic colleagues is limited and the processes for research ethics and governance daunting. While it is tempting to undertake small studies, it has recently been demonstrated that few pilot studies, often a justification for a small sample size, are well reported and only 8 out of 90 pilot studies identified in an earlier review had led to a main study.⁸

Increasing value and reducing waste in research is in everyone's interests and is the responsibility of authors, editors, publishers, peer reviewers and readers.

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Conflicts of interest

AB developed PROSPERO and has published and presented extensively on systematic review protocols and registration. CM has no conflicts of interest.

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