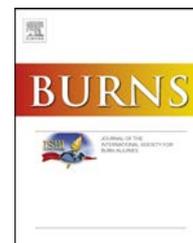


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Letter to the Editor

Is the burns research community committed to filling in the gaps in the evidence? An analysis of the burns section of the Cochrane Database of Systematic Reviews



Dear Sir,

Cochrane Reviews are high-standard systematic literature reviews on diverse aspects of human healthcare [1]. However, because the result of a systematic review depends on the available evidence, it is not uncommon for these to present inconclusive results. This last situation can be still useful, pointing out gaps in the evidence that the same research team that conducted the review could potentially address. The aim of this study was to identify the proportion of inconclusive articles in the burns section of the Cochrane Database of Systematic Reviews and to explore if the authors of these reviews have then published studies to improve the quality of the available evidence.

All the articles in the Burns section of the Cochrane Database of Systematic Reviews were independently scrutinised by two authors, to identify reviews stating inconclusive results due to lack of appropriate evidence. Then, MEDLINE searches were conducted for every author involved in these

inconclusive studies to find later publications on the same topic that contributed to improve the available evidence.

Seventeen articles were found on the Burns section of the Cochrane Database of Systematic Reviews (Table 1). Three of them were systematic review protocols and were excluded. The remaining fourteen studies were reviewed. Of these, nine (64.3%) were unable to draw conclusions due to limitations in the available evidence. A total of forty-six authors were involved in these inconclusive reviews, of which five (11.1%) later contributed with related publications to advance the understanding on these subjects. Three co-authored a randomised controlled trial [2] and the remaining two published a retrospective case series [3]. The average time from the publication of the Cochrane Review until our systematic search was 55.6 months.

The conclusion of a systematic literature review will depend on the availability of adequate studies for the same research question. Unfortunately, for burns related topics the lack of evidence has resulted in the majority of Cochrane Reviews not being able to establish useful recommendations. Even though these findings are able to point out areas for future research, only a small proportion of the authors that get involved in inconclusive Cochrane Reviews later contribute with further studies on the matter. Authors that write a systematic review gain a refined insight on gaps in the available evidence and are in a good position to address these gaps.

Table 1 – Summary of the findings of this study systematic analysis of Cochrane Systematic Reviews showing which studies were inconclusive. Cases in which authors participating on the systematic review then published relevant articles on the same topic are also mentioned.

Systematic Cochrane Reviews on Burns	Inconclusive?	Further authors contributions?	Articles published
Vermeulen et al. [4]	Yes	No	
Storm-Versloot et al. [5]	Yes	No	
Masters et al. [6]	No	–	
Dat et al. [7]	Yes	No	
Hoogewerf et al. [8]	Not applicable (study protocol)	–	
Hoogewerf et al. [9]	Yes	Yes	de Graaf et al. [10]
Wasiak et al. [11]	No	Yes	Tan et al. [3]
Barajas-Nava et al. [12]	Yes	–	
O'Brien and Jones [13]	No	No	
Barqouni et al. [14]	Yes	–	
Breederverld and Tuinebreijer [15]	No	No	
Dumville et al. [16]	Yes	–	
Tan et al. [17]	No	No	
Jull et al. [18]	Yes	–	
Henig et al. [19]	Not applicable (study protocol)	–	
Norman et al. [20]	Yes	No	
Wormald et al. [21]	Not applicable (study protocol)	–	

The majority of the Cochrane Reviews in the Burns section of the Cochrane Database of Systematic Reviews are inconclusive. Only a small proportion of the authors of these inconclusive studies later publish articles that increase the level of the available evidence. It raises the question of why such reviews are done if no mechanism exists to address deficiencies in the evidence. More importantly, we are concerned by the lack of good quality research being conducted in the burns arena. The burns community as a whole should support a more robust process to help address the lack of good evidence in burns care.

Disclosure

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