Systematic reviews of hand hygiene in patient care post 2010

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Sir,

We read the recently published article: ‘Hand hygiene-related clinical trials reported since 2010: a systematic review’ (1) with interest as we look forward to publishing the second update of our own Cochrane review addressing the same topic later this year. Another angle on this perennially important issue is always welcome. We have identified a number of surprising omissions and shortcomings in the above paper, however.

We note that only two databases were searched (PubMed and CINAHL) resulting in the retrieval of 57 articles which the authors acknowledge is low. It is likely that this restricted search and choice of databases might have resulted in the omission of other relevant papers: improving hand hygiene compliance has remained highly topical during the timeframe of the review. Perhaps a more thorough search including for example CENTRAL and EMBASE in line with recommendations from the Cochrane Collaboration (2), would have retrieved additional potentially eligible studies.

As in our previous review (3) the authors acknowledge that much of the published work lacks rigour with regard to study design. Kingston et al (1) state that their focus is on clinical trials. However, they do not offer any definition of what constitutes a clinical trial and have included articles adopting uncontrolled before and after (4) and interrupted time series (5) studies.

The review provides a useful descriptive account of the geographical locations and clinical settings of the included studies. In line with the findings of previous reviews (3, 6, 7), the selected studies focus primarily on hand hygiene practices of nurses, doctors and healthcare assistants, highlighting a continuing omission of other health care workers but unfortunately there is no critical appraisal. Consideration of potential sources of bias is a key part of any critical review and is essential to evaluate the validity and reliability of findings (2). It is not explored here. We note that some of the included
papers (8) included those where statistical analysis was inappropriate, making it difficult to draw meaningful conclusions. Restricting the review to only those papers demonstrating greater rigour of study design and those that were analysed correctly would have enabled the authors to make stronger recommendations for future research in an area of immense clinical interest where many new publications are being generated.

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References