

Chasing the Grey Evidence: A standardised Systematic Critical Literature Review approach

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Abstract

Goal: This paper advocates that the triangulation of evidence to give a direction for planning should include the distillation of experience and information that abounds in unpublished reports. Evaluating complex interventions using only high level of evidence from peer reviewed published papers may limit the ability to assess effectiveness, however there is a lack of a standard robust approach to reviewing the grey literature. The way forward is the development of a 'Systematic Critical Literature Review' SCLR (which was originally developed for trial data), applicable to such grey literature, which systematically collates the literature and has a validated framework to assess the quality of the evidence.

Methodology: To assess the need for developing a review methodology for grey literature, - a Grey SCLR, a standard SCLR on published literature on childhood malnutrition in humanitarian complex emergencies was undertaken and assessed for completion of the evidence base. A mechanism of systematically collating the grey literature within this subject was developed and yield assessed. This method was based on standard SCLR methodology and values, and key terms from a previous standard SCLR on published literature carried out by our research group were used. Secondary references and expert opinions were also sought. The theoretical quality assurance literature was reviewed to form a basis towards developing a quality framework applicable across the different types of un-published reports and studies.

Results/Conclusions: A standard SCLR is theoretically applicable to complex situations. But in such situations an evidence base cannot be created by even a highly sensitive standard SCLR on published literature. The majority of information is in the grey literature and a review of such should have the main values and the key steps equivalent to a standard SCLR for published literature.

Three stages were developed: 1. Review of peer-reviewed publications; 2. Application of key words to web based grey literature search; 3. Further refinement of search following identification of key organisations through stage 2; 4. Search through experts within key organisations identified. The value of the evidence found was assessed against the stages of the methodology developed and against the key steps of a standard SCLR.

The theories of quality assurance gave key concepts, which were developed into a quality framework for the un-published literature. This was then piloted and reliability and context validity sought. Grey literature is an essential part of the evidence base for practice in complex interventions, which may have multi-stakeholders, have multi-variables, have a lack of predictability and robust data and require a broad literature approach. An outcome from a standard SCLR in such a complex field is not robust and so this 'Grey SCLR' was further developed to increase the required effectiveness and breadth of a literature review, but based on the objectivity of a standard SCLR. A developed Grey SCLR should be transferable to inform evaluations of other complex interventions and can complement a review of the published studies.