Reviewer's report

**Title:** Integration of priority population, health and nutrition interventions into health systems: systematic review

**Version:** 1  **Date:** 8 June 2011

**Reviewer:** Helena Legido-Quigley

**Reviewer's report:**

Discretionary Revisions

I commend the authors for their work on synthesizing the findings of their systematic review. This paper makes a very relevant contribution to health systems research with particular focus on the debate which discusses the merits of integrating health services into health systems functions. Too often this debate has been driven by opinions and descriptive studies (as the authors acknowledge), so I really welcome the efforts the authors have made to explore systematically what is the available evidence in this important research area.

The authors have extended research in this area by including both developed and developing countries which is very much appreciated, as normally reviews are separate in these two broad geographical categories. I particularly welcome the introduction of mental disorders and mental health-related conditions into the review. The authors embark in assessing the integration of health services and how this impacts on patient health outcomes and effective health systems. They do this by comparing studies that include integrated and non-integrated health programmes. I found this strategy very reliable in terms of the conclusions that can be derived in the results and discussion section. Therefore, the question posed by the authors is well defined.

The title and the abstract accurately convey what has been found and the writing is of very good quality. The methodology of the systematic review is appropriate and well described, although it would be useful for the reader to know what is the inclusion and exclusion criteria and how this was applied in the title stage. It is not clear what is the premise for reviewers not going through all titles independently. I would welcome more information on this process particularly on how titles were screened. If both reviewers looked at 60% of titles it means that some titles have been screened by both. Did they check at some stage whether they had agreement in the screening process?

Also, I would welcome further explanation on the choice of databases. The search would have benefited from including other databases such as EMBASE (which includes more journals from Europe), or Africa-Wide information (covering aspects of African development and health). I am not suggesting to redo the review methods or to add more databases but I would like more information (if word limit allows) on how these decision were made. The first part of the search strategy which is based on an earlier review by Briggs and Garner is sound. The
terms chosen in the second part of the search also reflect appropriately the information the authors are looking for.

I liked that the authors included all type of outcome measures reported in the studies. In the data extraction section it would be good to know where this has been done independently by two reviewers. It is not clear from the paper whether this has happened. I welcome that the paper uses the GRADE quality criteria and how the GRADE statement is reflected in the results section.

The discussion and conclusions are well balanced and adequately supported by the data. The authors clearly acknowledge the work which they are building on (Briggs et al’s findings). In my opinion the biggest contribution of this paper is how the findings of the systematic review illustrate how the evidence on the benefits of integration is limited and weak and urgent research is needed in this area. The authors conclude by suggesting that studies with robust designs should be conducted in order to improve the evidence base and to move on from viewpoints and experts’ opinions. I would not hesitate in recommending this paper for publication as it will be a very important addition to the literature on health systems in general and on integration in particular.

I would suggest some discretionary revisions which I described earlier. In summary:
• Describe in more detail how titles were assessed and compared by the two reviewers.
• Include the inclusion and exclusion criteria (if word limit permits).
• Explain why authors did not consider other databases or defend the ones chosen.
• Discuss whether data extraction has been conducted by two authors independently.

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.