Author's response to reviews

Title: Evidence for integrating eye health into primary health care in Africa: A health systems strengthening approach

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Version: 3 Date: 13 February 2013

Author’s response to reviews: see over
Reviewer's report

Title: Evidence for integrating eye health into primary health care in Africa: A health systems strengthening approach
Version: 2 Date: 31 October 2012 Reviewer: Karl Blanchet

Dear authors,

thank you very much for your submission. The issue of integration in eye care is of great interest for policy makers and practitioners. Providing evidence on the impact of integration could constitute a great instrument for policy makers to make informed decisions. However, such information should be clearly described and analysed. One key aspect would be to measure the strength of evidence and the quality of the studies on integration. Your paper is too descriptive and does not critically analyse available evidence.

Thank you for providing constructive comments, despite your reservations about publication. I agree that policy makers would be more likely to use this information if it is as clear as possible and presents a critical analysis. I have thus have addressed your comments in attempt to clarify and further analyse the information presented by the paper. I have done this by defining integration, complexity, and integration in the background section. In the results and limitations section further justifying the use of a scoping review and including more information about the papers selected. I have rewritten the results to provide clarity and expanded the discussion, further analyzing results and presenting the implications of these.
Major compulsory revisions: Background

The concept of integration is not clearly defined in your paper. You oppose vertical programmes to government supported programmes. I would suggest you review literature and unpack the concept of integration, which is more complex than a single vision. I would suggest a couple of papers:


Thank you very much for these two reference that are indeed very useful to explain the complexities surrounding integration. I have used these to discuss and define integration on p 5

The WHO considered integration as a key element of primary health care in 1978;[27] Integration remains a cornerstone of initiatives to revitalize primary health care.[29] The WHO defined it as “The management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs over time and across different levels of the health system.” There is however no consensus in the peer-reviewed literature on a common definition of integration.[35-37] This may be one of the reasons contributing the dearth of evidence about the effectiveness of this approach.[35, 38]

On p 14 and 15 (service delivery) I have expanded on these concepts

In most settings in Africa, eye care services are rarely solely horizontal or vertical: horizontal and vertical approaches are combined to create diagonal services. These may support the development of integrated health systems. [11, 37, 42, 118-124] In this way the routine services at primary and community level are sometimes augmented with specialist eye health outreach visits to more remote settings.[30, 125] In general, outreach services have been associated with improved access, health outcomes, more efficient and guideline-consistent care, in particular when delivered
as part of a multifaceted intervention that includes other services and education. There are some examples however, of eye health outreach services undermining local services and not always providing access to more vulnerable populations. If vertical programs are at odds with national health policy, this may limit scalability and there may be consequences due to the resource intensive nature of these interventions.

There is very little evidence to guide decisions about the most effective delivery strategy: how vertical programs affect horizontal efforts in strengthening health systems or how these can support each other effectively and efficiently or be combined into diagonal services. A systematic review found some evidence in low and middle-income countries that utilisation and outputs of healthcare delivery may improve when a service is added to an existing service. No evidence was available however to show that healthcare delivery or health outcomes are improved by a full integration of primary health care services. This has been attributed to the decrease the knowledge and utilisation of specific services that may accompany integration. There is insufficient evidence to show improvements in outcomes in patients with multimorbidity in primary care and community settings. The eye health program in Pakistan reported some challenges in aligning eye health with the national health systems, but attributes the success of their program to their health systems strengthening approach and integration into primary health care.

I have corrected the confusing reference to government services

A review, thirteen years earlier, had reported only anecdotal evidence of a few small well supported "mission-based" programs that seemed to be more successful than large "government supported" programs.

Methods

In relation with the limitations of a scoping review and the purpose of your paper to inform policy makers and practitioners, choosing a scoping review may not be appropriate. What is not clear is how you measure the strength of evidence. You rightly explain that this is not the objective of scoping reviews. However, in your results, you use expressions such as "little evidence" or "insufficient evidence". It would have been important to explain in your method section how the quality of evidence has been
measured, which represents a crucial indicator for policy makers. They need to know with confidence which evidence is supported by robust research, which is not described in your paper.

The authors should also justify the choice of their method. How do you justify choosing a scoping review? Why not another type of method?

I have expanded on both the methods and the limitations section to justify the choice of a scoping review. I have also rewritten the results section to clarify where I am referring to the findings of a systematic review about “insufficient evidence”. I have also referenced Shepperd’s paper ‘Can We Systematically Review Studies That Evaluate Complex Interventions?’

There is however limited information to guide the review of complex interventions: about the best approach to the synthesis of data and issues such as the standardization of study selection, and techniques for the quality assessment of less conventional study designs. [184]

On p 8 I added

Eye health interventions occur within complex health systems and are largely context dependent.[64] We therefore used a scoping review because this method provides an opportunity to survey the whole profile of information available for this topic. The use of a scoping review is new to eye care but has been used to address questions related to health systems.[65, 66] Scoping reviews on this large scale have a limited utility value for planners / stakeholders at a country level. This paper aimed to identify evidence for pragmatic guidance for planners and policy makers on the implementation of eye health interventions within a primary health care system.[66, 67] Further a scoping review method can provide greater clarity about this area where limited evidence exists, and identify gaps in the evidence. [67, 68]

Scoping reviews, though broad in nature, are intended to guide more focussed lines of investigation.[67] Information gathering and analysis was thus theory based and guided using a HSS perspective and WHO frameworks that underlie much of the policy in Africa. [56, 62, 63, 69, 70]

We attempted to identify relevant theory and information regardless of study design, and included both quantitative and qualitative data to obtain a broad overview, but with sufficient depth to facilitate policy lessons. Scoping studies do not discriminate
between studies based on methodological criteria. [68] Systematic reviews were however prioritised for inclusion, especially where these contained information from low- and middle-income countries, as were articles pertaining to eye health in Africa.

An iterative process followed to synthesise the information: emerging priorities in eye health in Africa were identified from published information. This was augmented information from review articles and with anecdotes from the authors’ experiences in various African countries. The articles were categorized into the nine priority areas of the framework recommended for the implementation of HSS and primary health care in Africa: human resources for health, health technologies, equipment and supplies, health services delivery, health financing, leadership and governance for health, partnerships for health development, community ownership and participation, health information systems, and research for health.[63]

The results are presented as per the HSS framework categories,[55] as a synthesis from the iterative process of analysis.

Results:

Your result is very descriptive and is a list of evidence collected through your review. There is no detail on:

- the strength of the evidence
- the quality of studies
- the types of studies
- the focus of the studies (eye care or other areas)

Your results also present without distinction evidence from eye health and from the general health system.

As previously mentioned I have further justified my use of a scoping review that does not call for an analysis of the strength of the evidence of the papers.

In addition to clarifying whether the results are from a systematic review, I have added the focus of studies throughout the results. I have summarized this in Table 1 on p 10.

Discussion

The limitations of the methodology have been well described but should have used by the authors to choose a more
appropriate methodology.

In the discussion section, your reader would expect to read more about the implications of your study. It could have been interesting to demonstrate whether evidence available in eye health is comparable to other health sectors.

I have expanded on the discussion section and have mentioned evidence available in eye health vs. other health sectors

Minor essential revisions

The references related to quotes should mention the page number.

I have included this on p25

You mention HSS perspective. The paper could gain clarity if this concept was explained.

The concept of complexity should also be defined. I hope these comments will be helpful.

I agree, I have defined HSS and a complexity perspective pp 6-7

It has been recommended that health systems should be strengthened to enable most interventions to be delivered in an integrated way, where feasible. [37] The importance of a health systems strengthening approach has been recognized in the eye health literature. [52-54] Many countries have thus adopted policies using priority health interventions as an entry point to strengthen health systems (health systems strengthening: HSS), based on a primary health care approach. [55-57]

Although there is broad consensus about its importance, there is also no common definition of health systems strengthening. [58] The WHO defines health systems by six building blocks but recognizes that these are interdependent. [56] A complexity perspective is thus used to view the interconnectedness and continuous interaction of the components of health systems, and the non-linear effects of the system’s dynamic adjustment. [59-61]
Thank you for your time and comments

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Not suitable for publication unless extensively edited  

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

**Declaration of competing interests:**

I declare that I have no competing interests
**Review report**

Title: Evidence for integrating eye health into primary health care in Africa: A health Systems strengthening approach

Overall, this is an interesting and extensive piece of work, which captures the situation as it stands in eye health in Africa, at present. Whilst highlighting the challenges it also provides the opportunity to explore beyond vertical approaches in eye care service delivery. It is also a very tricky paper to review as the paper has a very broad remit.

Thank you for the care and consideration that you took to review this paper, that we agree is a ‘tricky paper’. It was tricky to write as well. We appreciate your comments and have tried to address these as fully as possible. We believe this has contributed to clarifying and highlighting some important concepts, and strengthened the paper. This will no doubt improve the utility to the reader.

1. The question posed by the authors is relevant and valuable to the field of eye care, particularly as the focus is now shifting to HSS approaches.

2. The methodology of scoping review is new to eye care but has been used more commonly in addressing questions related to health systems.

I have drawn attention to this on p7

The use of a scoping review is new to eye care but has been used to address questions related to health systems.[67]

The framework adopted by the authors of linking Vision 2020 pillars with HSS building blocks and additional parameters set by the Ouagadougou declaration on primary health care and health systems, is good and directly linked with areas of action required for eye health. The authors need to provide some additional details on how this framework was used to identify literature, organize and categorize the information extracted. What was the timeline for the literature search? E.g. from 1985 to 2012 or less. What was the volume of evidence under each category? E.g. literature extracted under the theme of human resources / technology. It is appreciated that whilst this is not a systematic review, the literature search process also provides clues to identify key gaps in research. This methodology provides an opportunity to look at the whole profile of information that is available for this topic. Perhaps even a chart/ table to summarize the volume of literature per category would be invaluable.
I have added details to the methods and a table on p9

Table 1 shows that most of the 171 papers included in this review, 43 of which are reviews, contain information from sub-Saharan Africa (75) or from low- and medium-income countries (46).

3. The data extracted and reported provides an interesting insight into challenges/achievements within each of the blocks (categories studied). Health system strengthening blocks are best understood when they are seen as interlinked as not inspected wholly as individual work packages. This should be highlighted in the discussion.

I have added to p7

Although there is broad consensus about its importance, there is also no common definition of health systems strengthening. The WHO defines health systems by six building blocks but recognizes that these are interdependent. A complexity perspective is thus used to view the interconnectedness and continuous interaction of the components of health systems, and the non-linear effects of the system’s dynamic adjustment. Figure 1 shows the relationship of eye health to health systems and HSS strategies.

4. The manuscript adheres to the required standards for reporting.

5. Discussion and conclusion are appropriate.

6. Limitations are clearly explained. Scoping reviews on this large scale have a limited utility value for planners/stakeholders at a Country level. This should be explained and this therefore becomes a stronger reason for expanding (detailing) the methods section of this paper.

Thank you, I have clarified the methods on p7

We therefore used a scoping review because this method provides an opportunity to survey the whole profile of information available for this topic. The use of a scoping review is new to eye care but has been used to address questions related to health systems. Scoping reviews on this large scale have a limited utility value for planners/stakeholders at a country level.

7. Authors have clearly acknowledged all work used published and
produced through iterative process.

8. Title and abstract are well written and in keeping with the paper.

Detailed comments below:

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Comment</th>
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<tr>
<td></td>
<td>I have clarified the sections below</td>
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<td></td>
<td>“Variation in terms of eye care needs” - this is not clear and may be misleading. The main causes of avoidable blindness are not that varied globally except for infective conditions. Rephrase.</td>
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<td></td>
<td>While the main causes of avoidable blindness and visual impairment may be similar, there is considerable variation in eye care needs, services and numbers and cadres of eye care personnel [5, 6] available across Africa, and even in regions within countries.[7, 8]</td>
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<td>At a primary level in many settings the main provider is a traditional healer. Private sector provision is still mainly within urban settings. While health care in SSA is structured through a primary, secondary and tertiary level and not all places have a public health approach - it is largely a curative/ clinical management basis. Clarity of terminology is needed about health care delivery system, which is not necessarily public health as suggested here.</td>
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<td>Consider including preventive measures under the key</td>
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**Background**

Paragraph 1
Paragraph 2
Paragraph 5 “this included appropriate ....”
Paragraph 8 “The integration of ...”
eight PHC objectives. It is essential that this point is raised clearly as it was the first step towards "integration" into the PHC mechanism of care.

Primary health care however proposed an approach that enabled a full range of health care, with prevention equally important as cure, from households to hospitals.[27] After 30 years, the importance of this approach emerged again.[28, 29]

“enjoys an enabling environment” is perhaps a very optimistic outlook - some clarity required to explain this point

The concept of integration of eye health into primary health care thus enjoys an enabling policy environment, but there is little information about the implementation of these policies.

<table>
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<th>Methods</th>
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<tr>
<td><strong>Paragraph 3 and 4 – expand details</strong></td>
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<td>What was the timeline for articles reviewed? □ Inclusion and exclusion criteria are unclear. □ Were both qualitative and quantitative articles reviewed? □ Further information on how the literature was reviewed. □ How were the articles categorised and applied to the framework? □ Once categorized how was the literature analysed and even compared for emerging issues. This section needs clarity especially as it may provide a profile for scoping for utility at a country level.</td>
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<th>Results</th>
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<td><strong>Paragraph 1</strong></td>
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<td>Unclear what is being defined here as integrated and implemented. Was integration being implied at a policy level and implementation based on outcome indicators?</td>
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<tr>
<td><strong>Paragraph 2</strong></td>
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<td>No time limits were set for the search, initially conducted in 2011 and updated in February 2013..</td>
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</table>
Some clarity on results its narrative presentation style is required, as it is not in the traditional format and is very much a synthesis from the iterative process.

We attempted to identify relevant theory and information regardless of study design, and included both quantitative and qualitative data to obtain a broad overview, but with sufficient depth to facilitate policy lessons. Scoping studies do not discriminate between studies based on methodological criteria. [68] Systematic reviews were however prioritised for inclusion, especially where these contained information from low- and middle-income countries, as were articles pertaining to eye health in Africa.

An iterative process followed to synthesise the information: emerging priorities in eye health in Africa were identified from published information. This was augmented information from review articles and with anecdotes from the authors’ experiences in various African countries. The articles were categorized into the nine priority areas of the framework recommended for the implementation of HSS and primary health care in Africa: human resources for health, health technologies, equipment and supplies, health services delivery, health financing, leadership and governance for health, partnerships for health development, community ownership and participation, health information systems, and research for health.[63]

The results are presented as per the HSS framework categories,[55] as a synthesis from the iterative process of analysis.

**Sub Section on Human resources**: This section raises a number of interesting points that go beyond the issues of numbers. Many of the points raised here are beyond the primary health care level and raise a systems weakness in referral. This section needs to clarify what is being referred to as eye care at a primary level (which lends to task sharing / shifting). A summary table / key points would be invaluable.

I have added to p 12

**Table 2. Key points: Human Resources**

| Both general health personnel working in the community or front line facilities, and community members can provide eye health as part of the primary care system. To develop a functional and sustainable process: |
A functional referral pathway to accessible specialist eye care services is essential.

Mid-level cadres with adequate equipment and supplies may be best placed to receive referrals, especially if they practice in rural and remote areas.

If mid-level cadres are expected to have a training and supervisory role, they need training as trainers, resources and support.

Realistic expectations about which eye care services can most appropriately be implemented and learnt by different cadres in the limited time available during either in-service training or as part of a pre-service course. [44, 48, 104]

Effective training and assessment to enable individuals to develop competencies appropriate to the context to which they are returning.

Enabling environment and ongoing support for example for continuing education, quality improvement, equipment, guidelines/protocols promotion of teamwork and supportive supervision to enable them to provide quality care. [105, 106]

Sub Section on Service delivery: Paragraph 2 indicates there is little evidence on provision, efficacy and impact of eye health promotion. It raises the question on what is the little we do know and can this be supported with an example.

I have added on p13

Trachoma elimination provides an example of the scant information available about health promotion and its potential impact. It also illustrates the comprehensive approach that is required rather than reducing health promotion the isolated provision of eye health education messages. A systematic review included only one study that showed that health education was effective in reducing the incidence of trachoma at six months. Longer-term outcomes were not provided. The scope of the health education intervention was however extensive: it targeted women and school children and included community participation and information, supported by posters and booklets, on personal hygiene, household sanitation, trachoma and its complications, elements of primary health care; and was repeated one week per month for six-months. [107]

Health education programs however often increase knowledge, but behaviour change does not necessarily follow. [109] The lack of environmental support was identified as a reason for the lack of implementation of messages about trachoma in a Tanzanian school curriculum. [116] Further a systematic review did not find evidence of the effectiveness of a change in behaviour, i.e. face washing, to reduce trachoma, when not combined with antibiotic treatment. [108] In addition, a decline in trachoma has been shown without any trachoma-specific interventions, however education, access to health care, water and sanitation had improved in a village in the Gambia. [117]
**Sub section on Health financing**; point on indigent and those in rural areas are least likely to subscribe – this is unreferenced this needs clarity if it is from the iterative process.

<table>
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<th>Discussion</th>
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<td>I have added the reference Paragraph 1 – “…everyone…” . HSS is not focused on &quot;everyone &quot; but more on the connections/ linkages / relationships between each of the blocks and its players across all levels of the health system. This needs to be clarified.</td>
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<td>Discussion is limited and should further highlight how the challenges /weakness within HSS blocks leads to breakdown in integration.</td>
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<td>Please see additions to discussion on p22 and p23</td>
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<th>Conclusion</th>
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<td>This section is very well done. Only point to raise here is that whilst the authors suggest there is a need to test the application of meaningful indicators,- which I agree with but would like to draw their attention of the eye health systems assessment tool – which has already developed indicators and is in use</td>
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<tr>
<td>Thank you for drawing my attention to this, I have added it on p 26</td>
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Thanks again for your time and the depth of your comments