Reviewer's report

Title: Community based public health interventions to improve reproductive health for young married couples in resource-constrained settings: A systematic review

Version: 2 Date: 23 October 2014

Reviewer: Zulfiqar Bhutta

Reviewer's report:

The topic of review is very timely and of profound public health interest. However, the authors need to better organize and present the paper. A few suggestions are as follows:

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

  • Abstract: Results and Conclusions in the abstract needs to be re-written to reflect the actual findings more comprehensively.

  • Methods: Although the review has already been completed, there is a probability that the authors might have missed some programs and project reports, based on the list of databases searched. Since the authors aimed to include programmes/project reports, it would have been a better idea to assess country specific/ministry of health websites as well. Furthermore, limiting study designs to only randomize and quasi trials would also restrict the inclusion of large scale program evaluations reported as pre-post design and controlled before after studies.

  • The authors have used ‘Mirza and Jenkins checklist of eight items’ for study quality assessment. They do provide a reference for it (Mirza I and Jenkins R: Risk factors, prevalence, and treatment of anxiety and depressive disorders in Pakistan: systematic review. BMJ 2004, 328(3): 1-5); however the reference does not relate to the scope of this review. Any reason/justification for using this checklist? Also since the authors have limited the study designs for inclusion to only randomize and quasi randomized trials; it would be a better idea to use some standard quality assessment tools like Cochrane risk of bias assessment tool.

  • The authors have mentioned that they have restricted their inclusion to only RCT and quasi studies; however in Table 1, study designs for two of the included programmes are stated to be pre-post and end line/baseline comparisons (KEM and ACQUIRE). Please recheck and correct.

  • Results: The results section need to be better organized. Currently it appears as a hodgepodge of description of included studies and effectiveness of interventions. Suggest reporting all the results under 3 main headings:

    - Characteristics of the included studies
- Intervention Components

- Outcomes

• Under the ‘project area and population’ section, it would be interesting to see details on the population as well. For e.g. the target areas were urban/rural, disadvantaged, etc..

• Although the author clearly stated in the methodology section that meta-analysis was not considered due to the heterogeneity in interventions, outcomes, study methodologies, and populations; it would be interesting for the readers if the results could be presented more comprehensively under the “behavioral outcomes section”. Some form of quantification of the results will add some perspective to the findings. Currently the results are all over the place. Authors should consider providing some estimates for example, “Ranges” for the outcomes reported to be significantly improved to give the readers an idea of variation in impact rather than providing intervention and control estimates from every included program.

• A figure or a matrix depicting the impact of interventions directed at three levels (direct, family members and community and health system) would be very beneficial in presenting the results so that the readers can get the gist of it in a glimpse and this would also help highlight the gaps and areas for future research. Table 3 summarizes the results; suggest presenting it in a better way to depict effectiveness of various interventions reviewed using a life cycle approach (interventions targeting preconception period (contraception), ANC, delivery, PNC and abortion care).

• If the authors could add a component under the results section on the contextual factors (if reported) reported in the included programs that might give more perspective to the review findings. Since this review is more of a descriptive analysis from a very limited pool of included studies, the authors could extract data on the reported program enablers and barriers. This would add an insight on the existing programs and a roadmap for future implementation in low resource settings.

• Discussion: Are there any existing similar systematic reviews? It would be interesting to compare their findings with the author’s findings in the discussion section.

• Conclusion: Under the conclusion, authors report that “……..reducing maternal and neonatal mortality in resource-constrained settings …”; however no data on neonatal mortality has been presented in results section. Please correct.

- Minor Essential Revisions (such as missing labels on figures or the wrong use of a term which the author can be trusted to correct)

• The methods section in the abstract mentions that studies targeting “young married women aged 15-24 years” will be considered while reproductive health interventions targeting young married couples (both men and women) have been reviewed. Please correct for uniformity.

• The introduction starts with the objective of the review. Suggest moving it towards the end of the introduction once the case is made for conducting the
review.

- Spell out the acronyms used for the projects in text and also with the tables

  - Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

  - The current title of the review includes redundant terms like “community based” as well as “public health”. Consider simplifying the title to: “Community based reproductive health interventions for young married couples in resource-constrained settings: A systematic review”. I think it delivers the same message more precisely and without redundancy.

- Throughout the text, authors have used “studies/project reports” to refer to the included programs. Authors may choose to refer to these included studies as “programs” or “projects” for better readability.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

My group works in comparable areas of community interventions and knowledge synthesis