Reviewer's report

Title: Communication Strategies for Rare Cancers: A Systematic Review Protocol

Version: 0 Date: 17 Dec 2018

Reviewer: Mohamad Saab

Reviewer's report:

ABSTRACT:

- Rare cancers comprise almost a quarter of all cancers, where?

- You mentioned that the literature up to July 2018 will be searched. What is the reason for not limiting your search to a certain year range? Maybe it is worth addressing this in the text

- MEDLINE is a subset of PubMed, I advise you search either/or and not both otherwise you will end up with a lot of duplicates. Please address this in the text as well

- PRISMA is a reporting checklist and not a guideline. Cochrane uses guidelines for SR. It is best if you differentiate those. You mentioned the BMC website in-text; mention this in the abstract as well.

- A narrative summary of the literature in the event of heterogeneity in outcomes and outcome measures sounds "weak." Check meta-narrative systematic reviews, which are quite recent. These are more structured and "sound" and look better. An example: DOI: 10.1002/pon.4506 see the first paragraph in the Methods section for guidance about meta-narrative SRs.

BACKGROUND:

- Overall, good section here. Please give examples of rare cancers and list those. I understand that the definition of those varies around the world but highlighting these cancers would strengthen your paper.

- Aims: your objective 'Determining what publications exist pertaining to strategies for rare cancer information communication' is better suited for a scoping review. I recommend rephrasing. SR objectives must be more specific.
METHODS:

- PICO: any age limit? Childhood rare cancers are different as compared to adult ones… You can have a comparator if you are including interventions. I recommend: "when applicable, comparison within a single group pre- and post-communication or comparison between different communication strategies/ groups" rephrase as you see fit. Make sure your outcomes mirror your aim and objectives. You must indicate in your eligibility criteria the cancers that qualify as rare. For example, gastric cancer is rare in some parts of the world and common in others (e.g. china) how will you account for this?

- Types of studies. I have a concern re the lack of restrictions. Will you include SRs? Will you include qual? Quant descriptive? RCTs? Not having a year limit and not specifying study types might cause you problems once you run the search

- See comment above re MEDLINE and PubMed

- You must specify what the Grey literature databases are. These must be listed

- I looked at your search strategy document and have a concern re combination of terms. For example, communication/ or "cell phone use"/ or information seeking behavior/ or literacy/ should be revised as these are very different concepts.

- Who will be cross-checking the data extraction table when the two reviewers extract the data? Please specify

- Please know the difference between risk of bias and quality appraisal. Again, since you will not have a study type you might need to incorporate a lot of tools here

- What is your definition of communication strategies? Are you looking for studies that communicate prevention? Treatment? Survivorship support? Please be specific. Also, what is your definition of rare cancers? How are you going to operationalise this quite broad concept?

Discuss all these under synthesis

- Incorporate findings from studies on rare cancers under the discussion instead of reiterating what your review is going to be about. This will give the reader a flavour of what he/she will be expecting from your review

Overall, this SR discusses a very important issue that I am personally interested in and that I have extensively published about. Having said that, my major concerns are: (i) lack of year limit; (ii) not specifying study type for inclusion; (iii) having very broad outcomes and objectives; (iv) some of the search terms mustn't have been combined within the same search string; (v) lack of definitions (i.e. communicating what? What are the rare cancers?); (vi) risk of bias vs. quality appraisal.

Best of luck
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Please indicate how interesting you found the manuscript:

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**Quality of written English**
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