Reviewer's report

Title: Understanding patient engagement in health system decision-making: A co-designed scoping review

Version: 0 Date: 09 Jan 2019

Reviewer: Pooria Sarrami

Reviewer's report:

Thank you for your work. It is particularly impressive that you have not just talked about patient engagement and have used co-design for this work as well. I hope you find my comments useful in improving the quality of the paper.

- There is lack of consistency on the wordings used to describe the focus of the study. In the title nothing is mentioned about investment or training. In the abstract, last lines of background are emphasising on 'training and skill development'. On the 'protocol and research question', the main research question is focused on investing in patients, and in line 134 again the main focus is on investment with education just as an example of that. It is important to be precise and consistent. Please revise the whole relevant parts of paper on a specific focus for the paper and be consistent on your description of it.

- in the abstract, line 64, as well as the study outcomes lines 265-7, you have referred to the training provided for students by patients which is out of the scope of this paper, which is focusing on investment on patients. Investment from patients (line 150) while is a related topic is not the scope of the paper and if you want to include that topic as well, you would need to include all other instances that patients assist health care in various forms. That will be a massive change in the research question and you would need to do the review again. I suggest, reword the training provision as a form of 'opportunity' provided for patients (if you think this is the case) and be consistent with such description (hence reword abstract and other places).

- In the background, line 86, you have referred to viability of having a cohort of qualified patients. While this situation can be useful in many cases, there are debates over such strategy. A cohort of patients cannot represent all patients. And there will be always a need to consult with other patients, if we are dealing with a rare health condition or a particular ethnicity. We cannot expect a particular cohort, no matter of their training, to be able to talk for all patients. If you invest on a group of patients to train them as 'expert patients', can they still have the perspective of 'normal' patients? These expert patients will have a better understanding of health care and their opinion would get closer to clinicians, and so their view might be different from 'lay' patients. So you need to modify the background, either to address the comments I made for using a group of 'qualified patients' or to take those claims out and make a broader instance, for
example suggesting that training/investment on patients may assist them in the process of engagement (without turning them to a particular group, like qualified patients).

- Similar to the previous comment, when authors discuss the importance of training for patients, line 91, it is assumed in order to make 'meaningful engagement' it is necessary to educate patients, however, we might be able to train health care professionals instead so they can engage 'untrained' patients more efficiently. I believe this point has to be addressed if the authors have reasons against this, or they can refer to this option but still keep the focus of their paper on investment/training on patients only, and those lines of background has to be modified accordingly.

- Background line 93: before asking 'how' health systems develop the ability of patients, it is necessary to address 'why' this is needed. For example, as mentioned before, in a healthcare system clinicians might be trained enough to engage patients properly, without the need for providing any educations for patients (just an example to illustrate the 'why' question is not obvious for everyone and you need to explain it before discussing 'how'). Also, it will be helpful to explicitly discuss what sort of capabilities are needed to make? (Though this can be expressed as an aim of the study and later address this matter based on the study findings. You can list the type of capabilities that included studies tried to build in patients).

- Line 153, it can be helpful to illustrate in more details how patient co-investigators were instrumental during the process of research (rather than just mentioning this). In this way, readers will see the benefits of co-design more vividly. Also Lines 314-5: it's great to see the co-design method provided benefits to participating patients, but it will be also helpful to mention benefits that the researchers obtained by involving them. This will encourage other researchers for choosing co-design method.

- Line 210-215, considering the small number of papers, I suggest not using percentage and just refer to numbers. Also take out emphasis on which country has more papers, as reader will get it themselves by reading the numbers and it is not a reliable findings with the small amount of papers (for example, if 3 more papers are published in a country it will change the whole order).

- Lines 257-267: This can be the most important part of paper, but it needs more details extracted from the included paper to illustrate how training helped patients. Also discuss the results based on themes, for example increasing confidence, enhancing skills, etc. and for each theme discuss studies you have found to support it. (Rather than discussing the results study by study).

- Lines 277-280: how the gaps were identified? Was it the case that the including papers referred to these as gaps? Or the authors identified them but couldn't find their answers in the papers? Please clarify.
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