Reviewer’s report

Title: Patient and Public Involvement in designing and conducting doctoral research: the Whys and the Hows

Version: 0 Date: 03 Jun 2019

Reviewer: Savant Singh Thakur

Reviewer's report:

In this well written review article manuscript, four case studies are presented by doctoral researchers in health/social care field discussing in detail the approaches they used to incorporate patient and public involvement (PPI) at different stages of their research studies from study design to validating findings. The authors demonstrate beneficial impact on research project progression, researcher self-esteem and alleviated researcher isolation during doctoral studies. However, minor changes will need to be made by the authors to enhance the article synthesis and readability.

Please note: Since the line numbers were not easily readable and did not match the lines in the pdf version of the manuscript, I have attached the word version with line numbers and the revisions below as comments or track changes.

Minor essential revisions (General)
1. Insert "public and" before "patient involvement" throughout the Plain English Summary to make terminology consistent with rest of the manuscript
2. Overall the Background is too lengthy and would benefit from being more concise
3. Third paragraph of Background would benefit from some direct examples of how PPI has previously been applied to research in general
4. There seems to be a great deal of overlap between table 1 & 2. Couldn't these be combined to save space?
5. Should there be a table detailing the evaluation of PPI in the four examples discussed here and the changes made given that this is such an important aspect of the article; This will definitely help others working with similar scenarios and add value to the field
6. How does PPI benefit the patients and the public? This aspect is missing from the conclusions

Minor essential revisions (Specific)
7. Line 87: Omit "together" before "joint decisions"
8. Omit Lines 110 & 111
9. Shift everything after "[2,5,6]…." in Line 128 Into a new paragraph
10. Line 149: The reader would benefit from knowing how and in what format the open questions were asked from the atrial fibrillation local support group. The author responsible (KM) should comment on this
11. Line 225-26: The author responsible (VC) should describe in greater detail the area of "medicines-related risks associated with hospital readmission of frail elderly patients". This is not clear
currently
12.  Line 231: The author responsible (VC) should better explain the term "home-based PPI activities". This is not clear currently
13.  Line 234: The author responsible (VC) should better explain what they mean by "housebound"-patient's own house or a nursing facility? This is not clear currently
14.  Line 276: The author responsible (VC) should better explain what they mean by "participant-facing materials". This is not clear currently
15.  Lines 276-77: The word "initial" should be inserted after "two weeks of the" and before "PIS"
16.  Lines 319-320: Omit "Although PPI can help ensure that patient-facing documents are written in plain English". Unnecessary information
17.  Line 320: Capitalise "translating" and omit "more"
18.  Line 323: Omit ", as the " and replace with a ".'
19.  Line 323: Capitalise "participant"
20.  Lines 366-68: Omit "Ways to manage this could be to pre-define the date and time of the meeting beforehand within the introductory email, although this may reduce the number of available members." Unnecessary information.
21.  Lines 396-397: Omit lines
22.  Line 398: Omit references and place them at the end of line 400
23.  Line 402: Replace "are" with "were"
24.  Lines 406-08: Omit "The group members decided to provide a brief overview of the study at their regular support group meetings and distributed the PIS."
25.  Lines 409-11: Omit "Although the pool of eligible participants was small and they could be more informed about their condition and medicines than participants not attending patient support groups,"
26.  Lines 425-27: Omit "The group was asked to discuss how those results resonated with their experience and if anything was missing."
27.  Line 427: Omit "result of the" and replace "led to refining" with "refined"
28.  Lines 430-32: Omit "(e.g. are patients pro-active in decision making consultations?). The same approach will be used in the analysis of patients' interviews"
29.  Table 3 is a very useful resource but the heading needs to be on top otherwise it should be labelled as Figure 1
30.  Lines 459-63: Omit "On other hand, undertaking this early work" and remove rest of the sentence.
31.  Lines 487-88: Insert "(especially in the scenario of smaller groups)" after "challenging"

Discretionary revisions
32.  The manuscript will benefit from a section on author credentials and research interests
33.  The section on "advisory group" should be before "online panel" for logical progression

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