

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	The competencies necessary for becoming a leader in the field of community medicine :a Japanese qualitative interview study
<b>AUTHORS</b>	KAINUMA, MOSABURO; Kikukawa, Makoto; Nagata, Masaharu; Yoshida, Motofumi

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Shabir Moosa University of Witwatersrand South Africa
<b>REVIEW RETURNED</b>	22-Oct-2017

<b>GENERAL COMMENTS</b>	<p>Leave "Typical quotes" out.</p> <p>A key limitation is the term "Community Medicine"/"Primary Care Physician". It needs definition, especially in relation to its international use. It needs correlation to international use of family physician / general practitioner and the discipline of public health, interchangeably referred to as community medicine. These would help contextualise the discussion better and appreciate its use in Japan. The use of international literature seems selective, considering the huge overlap in the concepts above. It would also address many of the "No"s in the Review List.</p>
-------------------------	---

<b>REVIEWER</b>	Treeyaphan Supamanee Faculty of Nursing Chiang Mai University Thailand 50200
<b>REVIEW RETURNED</b>	04-Nov-2017

<b>GENERAL COMMENTS</b>	<p>The manuscript's strengths are:</p> <ul style="list-style-type: none"> <li>- Contribute to the new and existing knowledge of leadership competencies of doctors in community medicine.</li> <li>- Use an appropriate method.</li> </ul> <p>Comment to the authors</p> <ul style="list-style-type: none"> <li>- Abstract</li> </ul> <p>@ The authors should present the background separate from objectives.</p> <p>@ Setting and participants in abstract are not clear. Inside your article the authors present that participants are candidates to be administrators.</p> <p>@ May be have to cut a key word, "medical education"</p> <p>@ If you need to explain the meaning of themes, you will describe all of themes.</p> <ul style="list-style-type: none"> <li>- Introduction</li> </ul> <p>@ Add what are the problems about leadership of doctors in</p>
-------------------------	---

	<p>community medicine?</p> <ul style="list-style-type: none"> <li>- Setting</li> </ul> <p>@ I don't understand. Grounded theory is the research design???????</p> <ul style="list-style-type: none"> <li>- Interview and analysis</li> </ul> <p>@ Please summarize.</p> <ul style="list-style-type: none"> <li>- Results</li> </ul> <p>@ Some typical quotes don't support the themes. Example: "I think that the task is most important....." don't support "Long term perspective". Please revise and take the data that relates the themes.</p> <ul style="list-style-type: none"> <li>- Discussion</li> </ul> <p>@ What are the difference between leadership competencies themes from your country and other countries?</p>
--	--

<b>REVIEWER</b>	<p>Seitaro Iguchi  Division of Community Medicine  Department of Community Medicine  Niigata University Graduate School of Medical and Dental Sciences</p>
<b>REVIEW RETURNED</b>	08-Nov-2017

<b>GENERAL COMMENTS</b>	<p>In this article, M Kainuma et al. indicated very interested outcome. As the authors said that there have been few reports about the competencies as a leader in community medicine, and probably, this article is the first report to describe the competencies.</p> <p>However, authors ought to revise the following point for more improvement.</p> <ol style="list-style-type: none"> <li>1. Author ought to show more detail of analysis, using such as schema. I could not understand, how authors narrowed the theme down for only six.</li> <li>2. Author described that six themes emerged from analysis, and numbered 1 to 6; 1. Long term perspective, 2. Team building, 3. Ability to negotiate, 4. Medical Ability, 5. Management capability, 6. Enjoy oneself. Is there any purpose for this order? If there is some intention for this order, author ought to describe it.</li> </ol>
-------------------------	---

### VERSION 1 – AUTHOR RESPONSE

To the Editor

1. Please revise the title of your manuscript to include the research question, study design and setting. This is the preferred format of the journal.

AS suggested, we changed the title to "The competencies necessary for becoming a leader in the field of community medicine :a Japanese, qualitative interview study.

2. Please revise the 'Strengths and limitations' section of your manuscript. This section should relate specifically to the methods, and should not include a general summary of, or the results of, the study.

As suggested, we changed the 'Strengths and limitations' section as below.

This study qualitatively explores competencies through the perceptions of real leaders of community medicine.

Individual interviews contribute to capturing the perceptions of the individual regarding the competencies needed by a leader in the field of community medicine.

Limitations include the relatively smaller sample size than necessary for significance in a quantitative study

3. Along with your revised manuscript, please include a copy of the COREQ checklist indicating the page/line numbers of your manuscript where the relevant information can be found (<https://academic.oup.com/intqhc/article/19/6/349/1791966/Consolidated-criteria-for-reporting-qualitative>)

According to the Editors comment, we attached the copy of the COREQ checklist including page/line numbers of our manuscript.

To Reviewer 1

1. Please leave your comments for the authors below

Leave "Typical quotes" out.

As suggested, we left the "Typical quotes" out.

A key limitation is the term "Community Medicine"/"Primary Care Physician". It needs definition, especially in relation to its international use. It needs correlation to international use of family physician / general practitioner and the discipline of public health, interchangeably referred to as community medicine. These would help contextualize the discussion better and appreciate its use in Japan. The use of international literature seems selective, considering the huge overlap in the concepts above. It would also address many of the "No"s in the Review List.

As suggested, we added to the definition of community medicine in the introduction, as below. However, we did not use the term "Primary Care Physician" in this paper, so we do not need to add the definition. Further, we defined a community leader as a doctor who meets the needs and problems of the whole community in a suburban or rural setting, in the discussion.

The term Community medicine, as defined in this paper, is the branch of medicine that is concerned with the health of the members of a community, municipality, or region.

To Reviewer 2

Comment to the authors

- Abstract

@ The authors should present the background separate from objectives.

As suggested, we left the background out of the study.

@ Setting and participants in abstract are not clear. Inside your article the authors present that participants are candidates to be administrators.

As suggested, we changed the Setting and participants, as below.

Setting: All six regions of Japan, including urban and rural areas.

Participants: Nineteen doctors (male 18, female 1) who play an important leadership role in their communities participated in semi-structured interviews (mean age 48.3 years, range 34-59; mean years of clinical experience 23.1 years, range 9-31).

@ May be have to cut a key word, "medical education"

As suggested, we cut a key word, "medical education"

@ If you need to explain the meaning of themes, you will describe all of themes.

- Introduction

As suggested, we added the meaning of the "ability to negotiate" and "Management ability" as below.

3) "Ability to negotiate": The ability to negotiate with others to insure that programs and visions progress smoothly

5) "Management ability": The ability to run a clinic, medical unit, or medical association.

@ Add what are the problems about leadership of doctors in community medicine?

-

As suggested, we added that it is also problematic that little research has been done in Japan into the competencies necessary for leaders in community medicine, in the introduction

Setting

@ I don't understand. Grounded theory is the research design???????

As suggested, we changed the subheading from Setting to Design.

- Interview and analysis

@ Please summarize.

As suggested, interview and analysis was too long, and not easily understood.

Therefore, we added subheadings including sampling, interview, data analysis, and data collection.

- Results

@ Some typical quotes don't support the themes. Example: "I think that the task is most important....." don't support "Long term perspective". Please revise and take the data that relates the themes.

Although the reviewer pointed out that some of the typical quotes don't support the theme, we include the culture of the doctors and staff in the long term perspective, so we think that "I think that the task is most important....." supports "Long term perspective".

Discussion

@ What are the difference between leadership competencies themes from your country and other countries?

This is the first report about the competencies necessary for leaders in community medicine, therefore it is not possible to provide the data about the difference of leadership competencies between our country and other countries. Therefore, we described this point as a limitation in the original manuscript.

To Reviewer: 3

1. Author ought to show more detail of analysis, using such as schema. I could not understand, how authors narrowed the theme down for only six.

As suggested, we added a figure to make the results easier to understand.

2. Author described that six themes emerged from analysis, and numbered 1 to 6; 1. Long term perspective, 2. Team building, 3. Ability to negotiate, 4. Medical Ability, 5. Management capability, 6. Enjoy oneself. Is there any purpose for this order? If there is some intention for this order, author ought to describe it.

There is no special meaning attached to the numbering order of the six themes.

**VERSION 2 – REVIEW**

<b>REVIEWER</b>	Shabir Moosa University of Witwatersrand South Africa
<b>REVIEW RETURNED</b>	08-Jan-2018

<b>GENERAL COMMENTS</b>	<p>Very important subject matter.          Useful research approach          The abstract is very basic and can be improved, especially with introduction and clarity on method.          There are many spelling, grammar and formatting issues - see some noted.          Literature in the discussion should be used in the introduction to show the gap in the research question, if only to show that nothing has been done in Japan. The literature also appears dated (e.g. no reference to WHO Report on PHC 2008)          Participants should be part of results. Results could be clarified with better sentence structure and links of quotations to theme. The element of how to teach/learn/develop these competencies does not emerge in the themes.          The discussion is very weak and needs to be strengthened after dealing with introduction          Limitations need greater reflection          Conclusion fine.          References very problematic          - The reviewer also provided a marked copy with additional comments. Please contact the publisher for full details.</p>
-------------------------	--

<b>REVIEWER</b>	Treeyaphan Faculty of Nursing, Chiang Mai University, Thailand
<b>REVIEW RETURNED</b>	20-Jan-2018

<b>GENERAL COMMENTS</b>	This manuscript makes a useful contribution to leadership competencies for community medicine. I have questions to ask you: 1) Page 6, line 5, what is CBME? 2) Page 7, line 4, Please explain setting in more detail. 3) Page 12, line 8-9, This sentence didn't support theme " team building". 4) Page 16, line 9-19, What do you want to present? This paragraph does not relate your finding.
-------------------------	--

<b>REVIEWER</b>	Seitaro Iguchi Department of Community Medicine, Niigata University Graduate School of Medical and Dental Sciences. Japan
<b>REVIEW RETURNED</b>	21-Jan-2018

<b>GENERAL COMMENTS</b>	An addition of figure, it become easy to understand, how authors narrowed the theme down for six. Although the author described there is no special meaning attached to the numbering order of the six themes, I think that "Medical ability" is most basic ability as a doctor
-------------------------	---

## VERSION 2 – AUTHOR RESPONSE

Reviewer 1

Comment (SM1)

According to the Authors guidelines of BMJ open, no introduction is needed.

Comment (SM2)

According to the authors guidelines of BMJ open, An Article Summary, should be placed after the abstract, consisting of the heading 'Strengths and limitations of this study', thus I think that the style we used doesn't need to change. This is also true of the section on participants, thus we have kept the original form.

Comment (SM3)

We added the dated references as follows.

2 .WHO. Global strategy for health for all by the year 2000 (No.3), p.15 Health For All Series: World Health Organization;1981 (accessed 7 July 2017).

Comment (SM4)

Although a community setting includes both rural and urban areas, this reference reports on clinical leadership only at an academic medical center. Further, this previous data described not competencies but important elements of clinical leadership. Therefore, we think that this is not sufficient to answer our research questions.

Comment (SM5)

We have changed the sentences as follows.

The study design was descriptive qualitative research using in-depth interviews.

Comment (SM6)

As suggested, we added the number: Ethics Committee (26-217)

Comment (SM7)

We attached the Table after in the references. Please, see the Table

Comment (SM8)

As suggested, the interview was done by only a first author. Therefore, we changed interviewers as follows.

interviews were flexible and allowed the participants to take the discussion in any direction they wished.

Comment (SM9)

As suggested, we changed the sentences as below.

- • • transcribed verbatim and double checked by our well trained technicians.

Comment (SM10)

As suggested, we changed using a framework of four key elements to openly, and changed interviewer to author.

Comment (SM11)

Focusing on the competencies proposed in the interviews, we analyzed and coded the data, which resulted in the six competencies. We believe that the results captured the competencies required of a leader in the field of community medicine.

Comment (SM12)

We used maximum variation sampling, considering the balance of doctors from rural and urban area. Therefore, we believe that we could capture wide variation of the perspectives of community medicine.

Comment (SM13)

As suggested, we changed the sentences as below.

“Long term perspective” refers to .....

Comment (SM14)

As suggested, we changed the sentences as below.

“Team building” means that.....

Comment (SM15)

That means use language effectively. As reviewers comment, it was not clear, we changed the words to word usage.

Comment (SM16)

As suggested, Binding the roots of the community was not clear, so we changed to developing close relations in the community.

Comment (SM17)

This means standard medical ability is needed, but it needs not to be specialized of medical ability. Therefore, we changed the sentences as below.



All Japanese doctors can do standard treatment and management, and thus specialized medical ability is not necessary.

Comment (SM18)

As suggested, these sentences will be deleted.

Comment (SM19)

As suggested, we moved the sentences to the introduction.

Comment (SM20)

As suggested, we also moved the sentences to the introduction.

Comment (SM21)

As suggested, we deleted these sentences, and we added a limitation as below.

The interviewer belongs to the General Medicine Department. Thus, there is potential bias in his perception of community medicine.

Comment (SM22), Comment (SM23)

According to the authors' guidelines of BMJ open, an Article Summary is placed after the abstract, consisting of the heading 'Strengths and limitations of this study'.

Comment (SM24)

As suggested, we rechecked the references and changed several points.

To Reviewer 2

1) Page 6, line 5, what is CBME?  
CMBE is Competency Based Medical Education.

Therefore, we changed to Competency Based Medical Education (CMBE)

2) Page 7, line 4, Please explain setting in more detail.  
As suggested, we changed setting to setting in both rural and urban areas.

3) Page 12, line 8-9, This sentence didn't support theme " team building".

Because the sentence was not clear, we changed to the sentence as below.

*"The ability to understand resources and the occupational ability of other medical professionals and to organize professionals is important."*(P8)

4) Page 16, line 9-19, What do you want to present? This paragraph does not relate your finding.

WHO included community leader in its proposal for a five star doctor, however the details were obscure, which led to our research. We moved this paragraph to the introduction (P6 L18~P7 L12).

To Reviewer: 3

An addition of figure, it become easy to understand, how authors narrowed the theme down for six. Although the author described there is no special meaning attached to the numbering order of the six themes, I think that "Medical ability" is most basic ability as a doctor not only for leaders in community medicine, so "Medical ability" should be numbered first.

We discussed this with the co-authors, and narrowed the theme down to six.

As suggested, we changed the competency "Medical ability" to the first position.

We changed the abstract, results, and figure.

### VERSION 3 – REVIEW

<b>REVIEWER</b>	Seitaro Iguchi Devison of Community Medicine, Department of Community Medicine, Nligata University School of Medical and Dental Sciences.
<b>REVIEW RETURNED</b>	27-Feb-2018
<b>GENERAL COMMENTS</b>	I think the manuscript is getting better through minor revision, so I decide that manuscript corresponds to "Accept".