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

TITLE (PROVISIONAL)	Barriers faced by healthcare professionals when managing falls in older people in Kuala Lumpur, Malaysia: A qualitative study
AUTHORS	Loganathan, Annaletchumy; Ng, Chirk Jenn; Tan, Maw Pin; Low, Wah Yun

VERSION 1 - REVIEW

REVIEWER	Jagnoor Jagnoor The George Institute for Global Health, Australia
REVIEW RETURNED	28-May-2015

GENERAL COMMENTS	Reviewer: Jagnoor Jagnoor This is a relevant qualitative study exploring barriers associated with management of falls among older adults by the HCP's. In-depth interviews and focus group discussions have been used. However results section is repetitive and needs more insight. 1) Title- methods say IDI with policy makes and title states only HCP's. I think title needs to be revised to reflect on the broader stakeholder group 2) The "What the study adds" section is presented as Strengths and limitations and can be better written with respect to finding/novelty of the study 3) Data on burden should be early in the introduction. More details like population demographics of Malaysia, incidence of falls, related morbidity and mortality would improve the background and support the rationale for the study. 4) Intro Line 21- what is meant by "In a qualitative study, primary care physicians who received an academic outreach visit reported barriers were the physicians themselves, perceived older people's factors, logistic and system related factors." This is not clear? Is perception of physicians an issue or that it is different from actual problem? 5) All references 5-8 are not from Malaysia; then how are the findings of these studies relevant to the Malaysian setting? The authors draw on developed vs developing countries (perhaps high income countries vs Low and middle income countries) but needs more details on how falls is a common problem in the settings and what has been achieved and like 6) Page 4, line 41- "several people"? number of people need to be defined 7) Page 5, line 5 Relevance of ethnicity and gender? 8) Methods- details on "policymakers" their role in context 9) Results- "role" should be given in brackets for each verbatim, missing in first couple. It should be standardised. 10) Themes need to be explained well, more context is needed. 11) Perhaps subtitle/sections as host, environment and vector will give better structure to the MS

	12) Did participants not discuss issues related prescription to diet/vitamin D supplements. Secondly was management of co-morbid conditions not seen as a challenge- like multiple medications? 13) Discussion is well written

REVIEWER	Sebastiana Kalula University of Cape Town South Africa
REVIEW RETURNED	15-Jun-2015

GENERAL COMMENTS	The study addresses a common problem in the management of falls particularly in low- and middle-income countries. The study employed a qualitative research design and was well executed in terms of selection of data collection techniques, data management, and adherence to the ”rules” for qualitative research in general. However, this reviewer questions a number of relatively minor, apparent oversights of the authors in writing up the study and preparing the manuscript, which need either clarification or explanation, or indeed revision of those statements. • Participants in this study were healthcare professionals who in the course of their practice managed falls in older people. However, contradictorily, on page 7, line 52 the authors state “number of older people with a fall seen per week 0 – 30.” Should this be changed to per month in order to show the extent of the experience of study participants in managing falls? It is not clear otherwise whether study participants were indeed involved in managing people with falls. • Page 3 line 23: The authors should indicate what an “Academic outreach visit” entailed – and perhaps use another term for such "visits”. The same term is repeated in lines 50 and 54. • Conflicting statements appear on page 5, lines 32 and 36: “ANN” was competent in English and Malay language, hence managed transcribing in both languages;” line 36 states “All interviews were conducted in English”. Methods section: The methods section is not presented clearly. In Table 2, page 7 it is shown there were 20 participants who presumably were interviewed and two focus group “involving several people” (page 4, line 41). In the text (page 7, line 8) it is stated that 10 participants were interviewed individually but no indication is given that the remaining 10 participated in focus groups (presumably), or the size of the groups; nor which categories of participants were in a focus group and which interviewed individually. Such information should be shown. Focus group discussions usually include 6 – 10 participants; five or fewer participants in a group may have rendered the group dynamic less than ideal. It is stated that [policy makers participated in in-depth interviews; who were these policy makers? Were they Executive level staff members of the hospital, or government officials? In the case of the latter, in which government department were they based? Study limitation: Limitations of the study stated by the authors should refer to the small sample size (n = 20). Was the study intended to be exploratory, to inform the conducting a larger study, or indeed survey? In table 2 it is shown that only a single representative of

	each of a number of specialties was interviewed, which limits generalizability of study findings both locally and nationally. Clinical recommendations: Page 21, line 39 states “older people reported that they face access problems to fall prevention interventions.” Yet no older people were interviewed in this study, Page 4 line 57. In sum: The manuscript is well crafted. The methodology employed is sound overall – albeit in need of some tidying up in the reporting of findings, etc. The small sample size is unfortunate. The study outcome and the manuscript make a helpful contribution to knowledge in this area in a developing country. Although the use of the English language is reasonably acceptable, the manuscript needs line editing.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1-Dr Jagnoor Jagnoor (The George Institute for Global Health, Australia)

1. Title- methods say IDI with policy makers and title states only HCP’s. I think title needs to be revised to reflect on the broader stakeholder group

Reply to reviewer:
In this study the ‘policymakers’ are also the HCPs (geriatrician, family medicine specialist and gerontologist) who have experience in managing falls among older people. Their role in this study appears to be more of an HCP rather than a policy maker. Therefore, we have removed the role of the policy maker from this manuscript. The term ‘policymakers’ has been changed to ‘HCPs’ in the marked copy page 5, line 11 and in, page 8, Table 2. We would therefore like to retain the title.

2. The “What the study adds” section is presented as Strengths and limitations and can be better written with respect to finding/novelty of the study

We revised as following:
• The strength of this study lies in the recruitment of HCPs from different disciplines, which provides in-depth understanding of the barriers to managing falls from different perspectives.
• This study found that issues such as trivialization of falls, lack of clinical skills in managing falls and lack of inter-professional communication are important barriers to suboptimal fall management among HCPs.
• Only HCPs’ perspectives were included in this study. Older people’s views and perceptions towards falls and fall prevention should be captured in future studies.

3. Data on burden should be early in the introduction. More details like population demographics of Malaysia, incidence of falls, related morbidity and mortality would improve the background and support the rationale for the study.

Reply to the reviewer:
We have moved the data on burden details of Malaysia early in the introduction:
“The prevalence rate of falls among older individuals in lower to middle income countries varies from 10.1 % in China to 54% in India, with 46% of the individuals in India requiring medical attention following an incident fall.(1) Malaysia is a middle-income country facing a rapid increase in the number of older people in its population,(2) and additional health care services are needed to meet the increasing demand.(3) Alongside population ageing, the number of older individuals presenting with falls in these communities are also expected to increase exponentially. Forty-seven percent of older Malaysians attending a primary care clinic at a teaching hospital reported falls, with 60% of

fallers experienced resultant injury that needed medical attention in the preceding 12 months.(4) In a separate rural population, 27% of older individuals living in a rural community reported falls in the previous year with 67% of falls occurring indoors.(5) Falls are associated with increased dependency and mortality. A ten year follow-up study of 198 older individuals presenting with falls at the emergency department of a teaching hospital revealed one, three, five and 10 year mortality rates of 22%, 33%, 49% and 80% respectively, with significant deterioration in physical function reported after one year(6)."

4. Intro Line 21- what is meant by "In a qualitative study, primary care physicians who received an academic outreach visit reported barriers were the physicians themselves, perceived older people's factors, logistic and system related factors." This is not clear? Is perception of physicians an issue or that it is different from actual problem?

Reply to the reviewer:
We have revised the sentence as follows:
"In a qualitative study primary care physicians who received an academic outreach education intervention reported barriers were factors related to the physicians themselves, older people, logistics and systems."

5. All references 5-8 are not from Malaysia; then how are the findings of these studies relevant to the Malaysian setting?

Reply to the reviewer:
The findings from the references, though not from Malaysia, attempt to highlight some of the barriers faced by primary care doctors across the world. We are uncertain whether these barriers are relevant to the Malaysian setting, and we hope that this study would shed light on whether these barriers are applicable to the local setting.

6. The authors draw on developed vs developing countries (perhaps high income countries vs Low and middle income countries)

Reply to the reviewer:
We have changed the terms "developed countries" and "developing countries" to "high-income countries" and "middle-income countries".

7. but needs more details on how falls is a common problem in the settings and what has been achieved and like..

Reply to the reviewer:
We have added the following references to demonstrate that falls is a common problem in our setting:
"In a separate rural population, 27% of older individuals living in a rural community reported falls in the previous year with 67% of falls occurring indoors.(5) Falls are associated with increased dependency and mortality. A ten year follow-up study of 198 older individuals presenting with falls at the emergency department of a teaching hospital revealed one, three, five and 10 year mortality rates of 22%, 33%, 49% and 80% respectively, with significant deterioration in physical function reported after one year(6)."

"Rizawati, M. and S. Mas Ayu, Home environment and fall at home among the elderly in Masjid Tanah Province. Journal of Health and Translational Medicine 2008. 11(2)."

"Tan M, Kamaruzzaman S, Zakaria M, Chin A, Poi P. Ten-year mortality in older patients attending the emergency department after a fall Geriatric & Gerontology International. 2015;[Epub ahead of

print]"

8. Page 4, line 41- "several people"? number of people need to be defined

Reply to the reviewer:
We have revised the sentence to 'six to 11 people'.

9. Page 5, line 5 Relevance of ethnicity and gender?

Reply to the reviewer:
We agree with the reviewers that ethnicity and gender are not relevant in terms of management of falls. We have therefore removed 'ethnicity and gender' from the text.

10. Methods- details on "policymakers" their role in context

Reply to the reviewer:
As mentioned in point 1 above, there are overlapping roles between the HCP and policy makers. The participants were speaking from the perspective of an HCP rather than a policy maker. We have therefore removed 'policymakers' from this manuscript.

11. Results- "role" should be given in brackets for each verbatim, missing in first couple. It should be standardised.

Reply to the reviewer:
We have revised accordingly and the role for each quotation has been included:
page 11, line 8 & 16;
page 12, line 1, 9 & 15;
page 13, line 4, 13 & 21;
page 14, line 4, 14 & 22;
page 15, line 3, 6 &16;
page 16, line 1, 10 & 21;
page 17, line 12 & 20;
page 18, line 8, & 15;
page 19, line 1, 10 &16

12. Themes need to be explained well, more context is needed.

Reply to the reviewer:
We have elaborated on the context, including the age, years of experience and HCP's role, in the respective quotations:
page 11, line 8 & 16;
page 12, line 1, 9 & 15;
page 13, line 4, 13 & 21;
page 14, line 4, 14 & 22;
page 15, line 3, 6 &16;
page 16, line 1, 10 & 21;
page 17, line 12 & 20;
page 18, line 8, & 15;
page 19, line 1, 10 &16

13. Perhaps subtitle/sections as host, environment and vector will give better structure to the MS

Reply to the reviewer:
We are unclear about the reviewer's comment. We hope the reviewer could clarify on this comment.

14. Did participants not discuss issues related prescription to diet/vitamin D supplements. Secondly was management of co-morbid conditions not seen as a challenge- like multiple medications?

Reply to the reviewer:
In this study, the HCPs did not raise the issues related to prescription of diet/vitamin D supplements in the management of falls. The management of co-morbid conditions and multiple medications also did not emerge from the discussion. Although we had probed during the interview, HCPs did not find these issues challenges.

Reviewer (2) – Dr. Sebastiana Kalula (University of Cape Town, South Africa)

1. Participants in this study were healthcare professionals who in the course of their practice managed falls in older people. However, contradictorily, on page 7, line 52 the authors state "number of older people with a fall seen per week 0 – 30." Should this be changed to per month in order to show the extent of the experience of study participants in managing falls? It is not clear, otherwise whether study participants were indeed involved in managing people with falls.

Reply to reviewer:
We don't have data on the number of older people with falls seen per month. However all the participants have experienced in managing older people with falls previously. Therefore we have removed 'number of older people with falls seen per week' is in the marked copy page 9, Table 2.

2. Page 3 line 23: The authors should indicate what an "Academic outreach visit" entailed – and perhaps use another term for such "visits". The same term is repeated in lines 50 and 54.

Reply to reviewer:
We have changed the term to 'academic outreach education interventions' in the manuscript.

3. Conflicting statements appear on page 5, lines 32 and 36: "ANN" was competent in English and Malay language, hence managed transcribing in both languages;" line 36 states "All interviews were conducted in English".

Reply to reviewer:
We have made necessary correction and the sentence was revised as follows:
'Eleven interviews were conducted in English and one was in both the Malay and English languages.'

4. Methods section: The methods section is not presented clearly. In Table 2, page 7 it is shown there were 20 participants who presumably were interviewed and two focus group "involving several people" (page 4, line 41). In the text (page 7, line 8) it is stated that 10 participants were interviewed individually but no indication is given that the remaining 10 participated in focus groups (presumably), or the size of the groups; nor which categories of participants were in a focus group and which interviewed individually. Such information should be shown.

Reply to reviewer:
We have included the number of participants in the IDI and FGD as follows:
'In total, 10 IDIs and two FGDs (n=4; n=6) were conducted; the category participants in the FGDs included internal medicine (n=4) and primary care (n=6).'

5. Focus group discussions usually include 6 – 10 participants; five or fewer participants in a group may have rendered the group dynamic less than ideal.

Reply to reviewer:
As five or fewer participants in a group may have rendered the group dynamic, we captured this as in our study limitation. As per stated in the marked copy page 23, line 2-4,
“Furthermore, the group size for one of the FGD was small (n=4) and this may affect the group dynamics.”

6. It is stated that [policy makers participated in in-depth interviews; who were these policy makers? Were they Executive level staff members of the hospital, or government officials? In the case of the latter, in which government department were they based?

Reply to reviewer:
In this study the ‘policymakers’ are also the HCPs (geriatrician, family medicine specialist and gerontologist) who have experience in managing falls among older people. Their role in this study appears to be more of an HCP rather than a policy maker. Therefore, we have removed the role of the policy maker from this manuscript.

7. Study limitation: Limitations of the study stated by the authors should refer to the small sample size (n = 20). Was the study intended to be exploratory, to inform the conducting a larger study, or indeed survey?

Reply to reviewer:
This is an exploratory study and we determined the sample size by data saturation. We found that the no new themes emerged after conducting the 10 IDIs and 2 FGDs. Therefore, we feel that this is not a limitation of the study.

8. In Table 2 it is shown that only a single representative of each of a number of specialties was interviewed, which limits generalizability of study findings both locally and nationally.

Reply to reviewer:
We agree with the reviewer and have included this as a limitation of the study.
“Some disciplines, such as rehabilitation physician, occupational and physiotherapists, were represented only by a single participant. This may limit the transferability of the study.”

9. Clinical recommendations: Page 21, line 39 states “older people reported that they face access problems to fall prevention interventions.” Yet no older people were interviewed in this study, Page 4 line 57.

Reply to reviewer:
We agree with the reviewer that this is the perception of the HCPs rather than those from older people themselves. We have revised the sentence to:
“HCPs perceived that older people faced access problem to fall prevention interventions”

10. Although the use of the English language is reasonably acceptable, the manuscript needs line editing.

Reply to reviewer:
We have copyedited our manuscript.

VERSION 2 – REVIEW

REVIEWER	Jagnoor Jagnoor The George Institute for Global Health, Australia
REVIEW RETURNED	07-Aug-2015

GENERAL COMMENTS	The reviewer completed the checklist but made no further comments.

REVIEWER	Sebastiana Kalula University of Cape Town South Africa
REVIEW RETURNED	05-Aug-2015

GENERAL COMMENTS	Please read through the manuscript again, e.g., page 3 line 21 does not make sense. Line 9 page 6 has a typo error.

VERSION 2 – AUTHOR RESPONSE

Reviewer 1 - Jagnoor Jagnoor (The George Institute for Global Health, Australia)

I did not see supplementary material in the file I downloaded and noted that the manuscript with all revisions was as one file, so could have missed.

Reply to reviewer: There was no supplementary file attached. All revisions were made in one file.

Reviewer 2 – Dr Sebastiana Kalula (University of Cape Town)

Please read through the manuscript again, e.g., page 3 line 21 does not make sense.
Line 9 page 6 has a typo error.

Reply to reviewer: Correction has been made as in the marked copy page 3, line 21.

Despite there being effective interventions for preventing falls among older people, such as multi-component exercises, home hazard modifications, medication reviews, and multi-faceted fall intervention programs,(9) HCPs may not be ready to manage them in the community due to various challenges.

The correction has been made as in the marked copy page 6, line 9.

The new nodes that emerged during coding were added to the list of codes upon consultation with NCJ and LWY.