

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)	Cervical cancer survivors' perceived cognitive complaints and supportive care needs in mainland China: A qualitative study
AUTHORS	Zeng, Y; Cheng, Andy; Liu, Xiangyu; Chan, Chetwyn

VERSION 1 - REVIEW

REVIEWER	Charlene Treanor Queen's University Belfast, United Kingdom
REVIEW RETURNED	25-Sep-2016

GENERAL COMMENTS	<p>I believe this manuscript addresses an important area of research (cancer-related cognitive impairment) among an under-studied cancer population. However, I cannot recommend it for publication due to a number of inherent limitations. I hope the following comments are useful to authors to improve the reporting of their findings.</p> <p>My main concern is with reference to the reporting of the methods: there is insufficient information regarding aspects important to the reporting of qualitative studies (See the COREQ checklist for guidance). For example, there is no mention of the epistemological perspective used to guide data collection and analysis. Was data collected until saturation was reached? What are the characteristics of the interviewer? Would any of their beliefs, biases or preconceptions have influenced the direction of interviews and the data collected? Did you attain respondent validation? What were the steps involved in your content analysis? Did data collection and analysis occur simultaneously and the topic guide evolve accordingly? Addressing the aforementioned aspects would greatly improve understanding of the quality of data and analysis.</p> <p>The current format of the results is quantitative and very descriptive, for a qualitative study I would like to have seen an in-depth exploration of the rich data collected and the identification of emergent themes.</p> <p>Moreover, until the end of the results there was no previous mention of developing a model from the study findings, this should be reported in the methods. It is not clear how the model arose from the study findings. Furthermore, there have been a few models already published in this area that are more comprehensive than the one reported in this manuscript (see Myers 2009 for an example) and should at the very least be referenced and discussed in this manuscript.</p> <p>The discussion should reference the growing number of a range of intervention studies relating to cancer-related cognitive impairment</p>
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	<p>(including a recently completed Cochrane Collaboration review).</p> <p>It would also be useful to have a report of the response rate of women approached and thus participated in the study and the reasons for refusal.</p> <p>There is an absence of reporting of worry, fatigue and pain in the written results although they are documented in the table.</p> <p>There are a number of qualitative studies of cancer-related cognitive impairment (albeit not cervical cancer) including a review of qualitative studies (see Myers 2013) and the discussion would have been strengthened greatly with reference to this literature and how the current study compares.</p> <p>The written English is good, however, there are a number of spelling errors.</p>
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REVIEWER	Grigorios Kotronoulas University of Surrey, UK
REVIEW RETURNED	29-Nov-2016

GENERAL COMMENTS	<p>Thank you for the opportunity to review this manuscripts that reports on a cross-sectional, qualitative study that examined the experiences of cognitive difficulties/deficits among Chinese women post-treatment for a diagnosis of cervical cancer. The findings are interesting and add on the existing body of evidence about the effects of treatment on patients' cognitive functioning, and the consequences of reduced cognitive functioning, thus highlighting the need for additional support for this debilitating issue. I believe the manuscript is well-written, but I do have a couple of comments that require the authors' attention. First, this was a qualitative study, but at times it feels like it was conducted as a very small survey – I understand this may be because of content analysis of findings. However, why didn't the authors focus on those 20 women who did report cognitive difficulties to examine their experiences in greater depth? How did the 11 women without cognitive difficulties contribute to the study, especially as the interview guide asked questions that pre-supposed the existence of such problems? The sample for this study should be the 20 women who reported cognitive difficulties, and I suggest that the paper is revised accordingly (e.g. in terms of demographic/clinical characteristics, % of people falling under thematic categories etc.) In addition, there should be some sort of justification for the need to interview women with no reported cognitive deficits – why was that necessary? What are the ethical implications? Second, I'd like to know what the authors believe their unique findings were in relation to women with cervical cancer. How do women with cervical cancer differ from other cancer patient populations? I believe that an extended discussion is required. Last, could the authors give more details about their recruitment process? E.g. how many patients were invited? How many refused and why?</p>
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VERSION 1 – AUTHOR RESPONSE

Response to Reviewer #1

Comment 1: “My main concern is with reference to the reporting of the methods: there is insufficient information regarding aspects important to the reporting of qualitative studies (See the COREQ checklist for guidance). For example, there is no mention of the epistemological perspective used to guide data collection and analysis. Was data collected until saturation was reached? What are the characteristics of the interviewer? Would any of their beliefs, biases or preconceptions have influenced the direction of interviews and the data collected? Did you attain respondent validation? What were the steps involved in your content analysis? Did data collection and analysis occur simultaneously and the topic guide evolve accordingly? Addressing the aforementioned aspects would greatly improve understanding of the quality of data and analysis.”

Response: thanks for your valuable advice! In this revised manuscript, we have thoroughly revised the Method section and followed the COREQ checklist (Appendix 1).

Comment 2: “The current format of the results is quantitative and very descriptive, for a qualitative study I would like to have seen an in-depth exploration of the rich data collected and the identification of emergent themes.”

Response: According to Sandelowski (2000), a descriptive qualitative design was selected because that methodology is suited to obtaining straightforward answers of interest to practitioners, and written narrative belongs to asynchronous communications so that give participants enough time to thoughtfully reflect on the questions. This qualitative study do fully identified common cognitive complaints and supportive care needs, how these complaints and unmet needs impacts patients' QOL, and also obtained information about coping strategies to ameliorate cognitive complaints. [Sandelowski M (2000). Focus on research methods: Whatever happened to qualitative description? Research in Nursing Health, 23, 334–340.]

Comment 3: “Moreover, until the end of the results there was no previous mention of developing a model from the study findings, this should be reported in the methods. It is not clear how the model arose from the study findings. Furthermore, there have been a few models already published in this area that are more comprehensive than the one reported in this manuscript (see Myers 2009 for an example) and should at the very least be referenced and discussed in this manuscript.”

Response: thanks for your valuable advice! We have followed your advice and Myers's conceptual model in the Method section as study framework, and discussed refined this model by a synthesis of qualitative findings in this study. In this revised manuscript, we added one paragraph to describe this model, in the result and discussion section, we refined and discussed this model accordingly.

Comment 4: “The discussion should reference the growing number of a range of intervention studies relating to cancer-related cognitive impairment (including a recently completed Cochrane Collaboration review).”

Response: in this revised manuscript, we have added relevant information in Discussion section. "In particular, a recent Cochrane review indicates that cognitive training may be effective in improving patients' cognitive function, as well as quality of life (Treanor et al. 2016)."

Comment 5: “It would also be useful to have a report of the response rate of women approached and thus participated in the study and the reasons for refusal.”

Response: in this revised manuscript, we have added details about recruitment process in the beginning of Result section. "A total of 50 patients with cervical cancer were approached, thirty-one of them were agreed with participating in this written narrative interview. Those women rejected to join in this study were due to having no interests in participating in any research. Their characteristics in terms of age, cancer state and types of treatment were comparable to patients who were completed written interviews."

Comment 6: "There is an absence of reporting of worry, fatigue and pain in the written results although they are documented in the table."

Response: in this revised manuscript, we discussed these issues in Discussion section. "In consistent with previous studies (Hart et al. 2003, Myers 2009), participants in this study also reported that symptoms of worry, fatigue and pain seem to be related to cognitive impairment in cancer patients".

Comment 7: "There are a number of qualitative studies of cancer-related cognitive impairment (albeit not cervical cancer) including a review of qualitative studies (see Myers 2013) and the discussion would have been strengthened greatly with reference to this literature and how the current study compares."

Response: thanks for your advice! In this revised manuscript, we have cited this useful reference in Discussion section.

"The patient experience of cancer-related changes in cognition may be the commonalities of the phenomenon across tumour types (Myers 2013), as this study did not find unique cognitive deficits in women with cervical cancer. Yet this study did identify some unique cultural issues for Chinese women in terms of coping strategies for cognitive impairment...". In addition, the review by Myers (2013) provided useful suggestions for discussing clinical implications in this revised manuscript.

Comment 8: "The written English is good, however, there are a number of spelling errors."

Response: before resubmission of this revised manuscript, we carefully checked these spelling errors edited by a professional English language editor.

Responses to Reviewer #2

Comment 1: "First, this was a qualitative study, but at times it feels like it was conducted as a very small survey – I understand this may be because of content analysis of findings. However, why didn't the authors focus on those 20 women who did report cognitive difficulties to examine their experiences in greater depth? How did the 11 women without cognitive difficulties contribute to the study, especially as the interview guide asked questions that pre-supposed the existence of such problems? The sample for this study should be the 20 women who reported cognitive difficulties, and I suggest that the paper is revised accordingly (e.g. in terms of demographic/clinical characteristics, % of people falling under thematic categories etc.)"

Response: thanks for your advice! We have revised Table 1 accordingly in this revised manuscript. Table 2 only reflects those 20 women with cognitive impairment falling under thematic categories.

Comment 2: "In addition, there should be some sort of justification for the need to interview women with no reported cognitive deficits – why was that necessary? What are the ethical implications?"

Response: So far there is a lack of golden criteria or assessment tool for the diagnosis of cognitive impairment, so that it's difficult to make an accurate assessment who had cognitive deficits and who had not. All participants were voluntarily joined in this study and could withdraw from this study at any time, and written interview question guide is open-ended format, so they could write freely to reflect what they were truly suffering. Hence, the whole study process had limited ethical implications.

Comment 3: "Second, I'd like to know what the authors believe their unique findings were in relation to women with cervical cancer. How do women with cervical cancer differ from other cancer patient populations? I believe that an extended discussion is required?"

Response: As suggested by previous research Treanor et al. (2016), there is a need to conduct research into cognitive impairment among cancer groups other than breast cancer. This study investigated cognitive impairment issues among Chinese cervical cancer patients. According to a review by Myers (2013), the patient experience of cancer- and chemotherapy-related changes in

cognition may be the commonalities of the phenomenon across tumor types and gender. While this study did not find unique cognitive deficits in women with cervical cancer, this study do identified some unique cultural issues among Chinese women with cervical cancer as follow in the discussion section:

"'Doing nothing' as a common coping strategy for cognitive complaints could be related to the Chinese Taoist philosophy: "Accepting the fact that a situation cannot be changed, and telling oneself that one should do little, as things will be all right at the end of the day" "

Comment 4: "Last, could the authors give more details about their recruitment process? E.g. how many patients were invited? How many refused and why?"

Response: in this revised manuscript, we have added details about recruitment process in the beginning of Result section. "A total of 50 patients with cervical cancer were approached, thirty-one of them were agreed with participating in this written narrative interview. Those women rejected to join in this study were due to having no interests in participating in any research. Their characteristics in terms of age, cancer state and types of treatment were comparable to patients who were completed written interviews."

Overall, we have responded and addressed the Reviewers' comments well in this revised manuscript. Thanks for your kind reconsiderations!

VERSION 2 – REVIEW

REVIEWER	Grigorios Kotronoulas University of Surrey, UK
REVIEW RETURNED	22-Dec-2016

GENERAL COMMENTS	<p>Thank you for submitting a revised version of the manuscript. The authors have taken into consideration the reviewers' suggestions, which has improved the paper. I only have a few minor points that need additional consideration.</p> <ol style="list-style-type: none"> 1. Abstract (Results): If the sample size for this study is now n=20, then % should reflect this. So, e.g. it's 17/20 (85%) women now, not 17/31 (54.8%). Please correct all % accordingly. 2. Results: As above, see page 9 (lines 15-22) and page 10 (lines 4-12) for a revision of all %. 3. Page 7, lines 18-20: If "data saturation was achieved much earlier than the final sample size", what was the rationale for continuing recruitment of women in the study? Please revise. 4. Table 1: I would suggest that the authors add another column to indicate what the demographic/clinical characteristics of the 11 women with no perceived cognitive impairment were. This will nicely give the reader the chance to eyeball potential differences in the two groups. 5. Table 2: Should the n now be 20, not 31? Relatedly, % should now reflect this n=20. 6. Page 9, line 2: "written interviews" Change to semi-structured interviews. Line 4: Please change to: "...of women with and without perceived cognitive impairment are listed in Table 1." 7. Please check a few grammar errors, e.g. Page 11, line 6: "Yet since..." and Page 11, line 16 "in cognition... types".
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VERSION 2 – AUTHOR RESPONSE

Responses to Reviewer #2

Comment 1: “Abstract (Results): If the sample size for this study is now n=20, then % should reflect this. So, e.g. it’s 17/20 (85%) women now, not 17/31 (54.8%). Please correct all % accordingly.”

Response: thanks! We have revised the % correctly in this revised manuscript both in the Abstract and Result section.

Comment 2: “Results: As above, see page 9 (lines 15-22) and page 10 (lines 4-12) for a revision of all %.”

Response: Within the Result section, we have revised all % accordingly.

Comment 3: “Page 7, lines 18-20: If “data saturation was achieved much earlier than the final sample size”, what was the rationale for continuing recruitment of women in the study? Please revise.”

Response: we would like to explain more for this sentence of “data saturation was achieved much earlier than the final sample size”: as data collection and analysis of this study were performed simultaneously, when we recruited 28 participants, this study seemed achieving data saturation. In order to ensure that data saturation of this study was truly achieved, we recruited 3 more participants in the next day. Hence, we haven’t continuing recruitment of women in this study, and we have only recruited 3 more participants to ensure the degree of data saturation.

Comment 4: “Table 1: I would suggest that the authors add another column to indicate what the demographic/clinical characteristics of the 11 women with no perceived cognitive impairment were. This will nicely give the reader the chance to eyeball potential differences in the two groups.”

Response: in this revised manuscript, we have added one column to present the demographic/clinical characteristics of the 11 women with no perceived cognitive impairment.

Comment 5: “Table 2: Should the n now be 20, not 31? Relatedly, % should now reflect this n=20.”

Response: thanks! This revised manuscript has taken “n” as 20, and changed those “%” accordingly.

Comment 6: “Page 9, line 2: “written interviews” Change to semi-structured interviews. Line 4: Please change to: “...of women with and without perceived cognitive impairment are listed in Table 1.”

Response: thanks for your advice! We revised them accordingly in this revised manuscript.

Comment 7: “Please check a few grammar errors, e.g. Page 11, line 6: “Yet since...” and Page 11, line 16 “in cognition... types”.”

Response: very grateful to the reviewer! We revised these grammar errors accordingly.

Overall, we have responded and addressed the Reviewer’s comments well in this revised manuscript. Thanks for your kind re-considerations!

VERSION 3 – REVIEW

REVIEWER	Grigorios Kotronoulas University of Surrey, UK
REVIEW RETURNED	23-Jan-2017

GENERAL COMMENTS	Thank you for submittiing a second revision of this manuscript. I am happy for the paper to be published in BMJ open.
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