Review report

Final title: Experience of nurses in identifying delirium among cancer patients: A qualitative study

Title at submission: Exploring the experiences of nurses in identifying delirium among cancer patients: A qualitative study

ROUND 1

Reviewer C: Md Taslim Uddin, ORCID: [0000-0002-2884-9212](#), COI: None

Overview

The manuscript "Titled: Exploring the Experiences ….patients: A Qualitative Study" submitted for publishing in BSMMU Journal is relevant and important in the context of science, especially about in-depth Nursing Practice. I appreciate the authors for working hard to produce a scholarly original article. However, for a wide readership of the article and to maintain a scientifically sound practice before publication Kindly note the following reviewer observations and comments, which may be addressed in the revised manuscript. .

1.	**Comment**	Is the title appropriate? = **No**
		The very first word in the Title "Exploring" creates confusion and looking at the methods and findings, in fact, the researchers made "Explanatory" research. Exploration is more in-depth basic research which was not followed here and I think the title can be reorganized leaving the word "Exploring". Researchers explained the "Knowledge/experience" of the nurses in a particular domain.
	Response	We revised the title become:
		Experiences of nurses in identifying delirium among cancer patients: A qualitative study
2.	**Comment**	Does the abstract provide a complete and accurate description of the content of the article? = **No**
		After revising the Title, Methods, results, and conclusion. The Abstract needs to be revised accordingly
	Response	The Abstract has been revised accordingly.
3.	**Comment**	Are the methods described in sufficient detail so that the study could be reproduced? = **No**
		Focus Group Discussion is the Heart of this research. Participant Criteria/details are not clear(??Table 1- not found in the manuscript Text) ; Which require attention in a) Participant Criteria: Background education and training, Years of working experience in the oncology wards, etc b) how many words you have included and a brief description of the words required to have a clear idea of the research setting ...
	Response	The Methods has been revised as per the comment.
4.	**Comment**	Are the table(s) and figure(s) clear and appropriate to address the objective(s)? = **No**
		Table 1 is not found in the manuscript Text.
		Based on the mode of data collection section and Data coding (lines 120-121), I think the results section can be organised in a table form highlighting a) theme, b) categories, and c) examples of codes included per category
	Response	The Table 1 has been revised.
5.	**Comment**	Is the Discussion section critical and comprehensive about the main message of the manuscript? = **No**
		The discussion is too long and there are many repetitions throughout the section. Analysis and comparison of the categories, results, and themes are required in a brief. A thorough revision of the section is required to improve the manuscript further.
	Response	We revised the discussion part and make sure there is no repetition again inside.
6.	**Comment**	Are the conclusions drawn supported by the results/ data? = **No**
		The Conclusion needs to be organised as such after revision of the sections.
	Response	The Conclusion has been revised.
7.	**Comment**	Are the references appropriate in number and up-to-date? = **No**
		The manuscript introduction and discussion section can be enriched by including the evidence of nurses' knowledge/training on "delirium" and the basic difference between delirium mimics/types (e.g. Hyperactive -agitation, hypoactive delirium) and confusion.
	Response	The references have been revised.
8.	**Comment**	Are statements of the manuscript supported by appropriate reference(s)? = **No**

The manuscript introduction and discussion section can be enriched by including the evidence of nurses' knowledge/training on "delirium" and the basic difference between delirium mimics/types (e.g. Hyperactive - agitation, hypoactive delirium) and confusion.

Response The manuscript has been revisewd supported by the references.

9. **Comment** Is the overall length of the article appropriate? = **No**

The discussion is extremely long and there are many repetitions throughout the section. A thorough revision of the section is required to improve the manuscript further.

Response The manuscript has been revised.

Reviewer E: Nilima Barman, ORCID: 0000-0001-9664-5636, COI: None

Overview

This study addresses an important topic by exploring nurses' experiences with delirium detection in an oncology setting, recognizing the close interactions nurses have with their patients. However, the study design and setting appear to have limitations. Conducting only a single focus group discussion with 10 participants, lasting just an hour and a half, may not provide a comprehensive understanding of the nurses' experiences. The absence of individual interviews further weakens the depth of data collection. Additionally, the discussion section emphasizes delirium, its tool and medical conditions rather than the study's key findings, which diminishes the focus on the research's main contributions.

10. **Comment** Does the abstract provide a complete and accurate description of the content of the article? = **No**

The background mentions "exploring how nurses are screening for delirium in this setting," but this line seems misaligned with the authors' stated aim of exploring experiences, and it doesn't clearly address the knowledge gap. Additionally, the phrase "in this setting" lacks a clear explanation, leaving the context vague. In the conclusion, the focus is mostly on recommendations, with no proper concluding statement summarizing the study's findings. A more balanced conclusion that reflects the results would strengthen the overall message. (line 31-36)In Table 2 & 3 the name of the actual tests were not mentioned (whether Chi-squared test of Fisher's Exact test?)

Response The Abstract has been revised accordingly.

11. **Comment** Are the methods described in sufficient detail so that the study could be reproduced? = **No**

Major points: As a qualitative study on nurses' experiences with recognizing delirium, the authors only conducted a single focus group discussion with 10 participants lasting 1.5 hours. No individual interviews were conducted, which limits the depth of data. (Line106-112)

Minor points:

The participants' working experience and age were provided in a table, but it would be more appropriate to also mention their mean age and work experience in the methods section (line 102-105).

The detailed questions from the questionnaire should be included for transparency.

The transcript from the recording and the thematic analysis lack sufficient elaboration (line: 113-122).

The methodology section lacks clarity, particularly in the data analysis, which raises concerns about the study's reproducibility

Response The Methods has been revised as per the comment.

12. **Comment** Is the study design robust and appropriate to the stated objective(s)? = **No**

Major points: As a qualitative study on nurses' experiences with recognizing delirium, the authors only conducted a single focus group discussion with 10 participants lasting 1.5 hours. No individual interviews were conducted, which limits the depth of data. (Line 102-112)

Response The study design is revised accordingly.

13. **Comment** Are statistics used appropriately and described fully? = **No**

Need a public health expert opinion who have done qualitative study.

Response Statistics is revised.

14. **Comment** Are the table(s) and figure(s) clear and appropriate to address the objective(s)? = **No**

The participant's comment is partly given. The full comment is appreciable. (Line 140; 161, 164).

Response The participant's full comment is provided.

15. **Comment** Is the Discussion section critical and comprehensive about the main message of the manuscript? = **No**

Major points: In the discussion, the authors focus more on delirium, its tool and related medical conditions (line 192-294) rather than providing a thorough description of their main findings (line 295-309). A critical and comprehensive explanation of the study's key results is notably lacking, making the findings less clear and less impactful.

	Response	The Discussion section is revised.
16.	**Comment**	Are the references appropriate in number and up-to-date? **= No**

Lack of recent relevant citations

1. Helgesen AK, et al. Nurses' experiences of delirium and how to identify delirium—A qualitative study. Nursing open. 2021 Mar;8(2):844-9.

2. Waterfield K, et al. A qualitative study of nursing staff experiences of delirium in the hospice setting. International journal of palliative nursing. 2018 Nov 2;24(11):524-34.

	Response	The References has been revised.
17.	**Comment**	Are statements of the manuscript supported by appropriate reference(s)? **= No**

Lack of recent relevant citations

1. Helgesen AK, et al. Nurses' experiences of delirium and how to identify delirium—A qualitative study. Nursing open. 2021 Mar;8(2):844-9.

2. Waterfield K, et al. A qualitative study of nursing staff experiences of delirium in the hospice setting. International journal of palliative nursing. 2018 Nov 2;24(11):524-34.

	Response	The References have been revised.
18.	**Comment**	Is the storytelling straightforward, clear (i.e., does not impede scientific meaning or cause confusion), and logical? **= No**

Major points: In the discussion, the authors focus more on delirium, its tool and related medical conditions (line 192-294) rather than providing a thorough description of their main findings (line 295-309). A critical and comprehensive explanation of the study's key results is notably lacking, making the findings less clear and less impactful.

	Response	The Discussion section is revised.
19.	**Comment**	Is the standard of English acceptable for publication? **= No**

Need a grammar check.

	Response	Grammatical corrections have been made.

ROUND 2

Reviewer H: Fariha Haseen , ORCID: 0009-0004-9040-1664, COI: None

1.	**Comment**	In the ethical consideration, no explicit mention of ethical approval from an Institutional Review Board (IRB). Please mention the date of the approval and the IRB certificate number.
	Response	The date of the approval and the IRB certificate number added. Please see line 266-270.
2.	**Comment**	The methodology of the FGD lacks critical details (like, the duration of the FGD conduction, the number of themes/issues included in the guideline, and whether the guideline was piloted). Could you please elaborate on these aspects?
	Response	The duration of FGD was 90 minutes, number of themes/issues explained. Please read line 92-96.
3.	**Comment**	Combining nurses, nurse managers, and the head of the ethics committee within a single FGD introduces power dynamics and inhibits fluent expression of opinion which hampered the study results. Kindly explain the rationale for including participants with such varying roles and levels of authority.
	Response	The nurses who were selected as respondents in this study on average had the same length of service and did not have more positions than others to avoid not being open with each other in giving opinions during the FGD. It was mentioned in the line 108-111.
4.	**Comment**	The inclusion of only one male participant among 10 participants limits the diversity of perspectives, especially if gender-based differences in experiences are relevant. Could you clarify whether this imbalance was intentional and how it aligns with the study's objectives?
	Response	The number of female nurses is bigger in the ward compared to male nurses. This condition meant that only a few male nurses were included in the criteria for research respondents. Respondents have the same work experience so we don't think gender differences are a problem in this study. Clarify mentioned in the line 132-135
5.	**Comment**	Conducting only one FGD raises concerns about the adequacy of data collection. A single session is unlikely to achieve data saturation. Could you please justify why only one session was conducted and explain how you ensured the depth and richness of the data?
	Response	How the ensure the richness of the data was explained. Please read lines 100-108.

Editor: M Mostafa Zaman, ORCID: 0000-0002-1736-1342

6.	**Comment**	Overall, the topic is interesting, but the manuscript is lengthy especially the Discussion section. It could be written in three thematic paragraphs around the three categories as it has been done for the
	Response	We write the primary results of this research in the first paragraph of the discussion section, then we discuss each theme. the first theme is discussed in the second paragraph, the second theme is discussed in the third paragraph and the third theme is discussed in the fourth paragraph. In the limitations section, we include the fourth paragraph in the discussion section according to your suggestion. Please read line 201-242
7.	**Comment**	Results section. This could, however, be supported by one introductory paragraph about the strengths and selling points of the manuscript, and finally, one paragraph on the limitations just before the Conclusion. Avoid repeating results as has been done in lines 208-223. The manuscript could comfortably be written using 2000 (instead of currently used 2500) words.
	Response	We revised the total of the discussion part to make sure there is no repetition in the paper. We decrease the number of words from introduction-conclusion below 2000 words.
8.	**Comment**	Highlights: Please replace it with a Key Message of 50-60 words in descriptive terms. This is needed because of the change in bsmmuj's style from Jan 2025.
	Response	Highlight revised based on your suggestion. Please read line 53-56.
9.	**Comment**	Add Ethical concerns in the Methods section. Provide information about the ethics-related issues that you have addressed. Ethical approval should be at the end (as has been done now).
	Response	Ethical concerns moved at the end of a paper. Moreover, ethical approval information is mentioned. Please read line 266-270.
10.	**Comment**	Author contributions: Use initials of the authors' names instead of full names.
	Response	Author names were used initials. Please read lines 251-255
11.	**Comment**	References: Provide names of all authors (avoid et al.).
	Response	Name of all author mentions and et al avoided. Thank you for suggestion.

ROUND 3

Reviewer H: Fariha Haseen, ORCID: 0009-0004-9040-1664, COI: None

1.	**Comment**	The stated objective of the FGD is to explore "in-depth information" and "understand participants' views" on the incidence of early delirium which focuses on the perception of the nurses. However, the focus appears to be on nurses' ability to assess delirium during presenting the results. Thus reflects a different research aim on nurses' knowledge level.
	Response	We revised; it can be read in the line 92.
2.	**Comment**	While incidence is typically studied using epidemiological methods, the assessment of clinical judgment is more qualitative. If the primary goal is to analyze the incidence of early delirium, an FGD is not the correct approach.
	Response	We revised; it can be read in the line 92.
3.	**Comment**	In line 94-95 there is mention of "four questions with open answers". Please mention the four questions.
	Response	The four questions can be identified in the data collection section, line 115-119
4.	**Comment**	Hierarchical dynamics may still influence discussions, particularly when including nurse managers and the head of the ethics committee in the same FGD. Even in cases where participants hold comparable years of experience, differences in roles and authority can impact openness and the willingness to share critical perspectives. Could you further elaborate on how the study mitigated potential power imbalances during the discussion? Please clarify how the facilitation process ensured that all voices were equally represented. You can mention that one FGD, on male and all female participants and different roles and designation of the participants as a limitation of the study.
	Response	The nurses who were selected as respondents in this study on average had the same length of service and did not have more positions than others to avoid not being open with each other in giving opinions during the FGD. It can be read in the line 108-111
		We added the information limitation based on your suggestion, it can be read in the line 242-243
5.	**Comment**	Gender distribution reflects the workforce composition in the ward, the presence of only one male participant may still limit the diversity of perspectives, particularly if gender influences communication styles, decision-making, or patient interactions. Could you provide further justification or any supporting literature indicating that gender differences are not a significant factor in this context? Please acknowledge this as a study limitation
	Response	We agreed with your suggestion and opinion that gender influence communication style and decision making and have possibility to influence this study, so we added this to the limitation of study, it can be read in the line 242-243.
6.	**Comment**	Data saturation is typically achieved through multiple FGDs, allowing validation of findings. It is difficult to achieve the data saturation by 1 FGD

	Response	Data was verified by member checking, peer questioning, and cross-examination to ensure trustworthiness, reliability, and authenticity and it make sure the saturation achieved. We give respondents the opportunity if there is still data that they feel does not represent all the answers they have given. It can be read in the line 128-129
7.	Comment	Could you please add a column in Table 1 (page 12) in the right-hand side specifying the number of years of experience of the participants in an oncology ward. This duration of work in the oncology ward will give a clear understanding on the perception of delirium with perception of work.
	Response	Column added in Table 1. Please see in the pages 11-12.

Reviewer I: Sifat E Syed, ORCID: [0000-0003-3075-0294](https://orcid.org/0000-0003-3075-0294), COI: None

8.	Comment	Line 42,145: The term delirium is quite unwell-known. The term unwell-known can be misleading. It can be replaced by 'not well known' in lines 42,145.
	Response	Changed the term already become not well known, please read line 42 and 145
9.	Comment	Line 55: 'The nurses have difficulty in differentiating delirium, agitation and confusion' Needs clarification by authors. Because clinical features of delirium include agitation and confusion, hence a synonym of delirium is 'Acute Confusional State'. How can a nurse differentiate between delirium, and confusion?
	Response	We revised and cnaged the term become level of consciousness; it can be read in the line 55
10.	Comment	Lines 91-96: The FGD method was chosen to explore in-depth information and understand participants' views in analyzing the incidence of early delirium. The FGD was carried out for around 90 minutes to explore nurses using questions related to the nurse's ability to assess the condition of delirium in cancer patients so that they could detect the patient's condition early, namely four questions with open answers. The guideline from the FGD has been piloted before being applied to respondents. Explanation needed why FGD was chosen instead of IDI/KII? Was there any structured interview guideline? How it was prepared/piloted? Was saturation reached, if yes determined by which means?
	Response	The pilot was conducted to ensure that the steps in the FGD had gone well so that when they met with research respondents, everything was ready. The pilot was carried out jointly between the research team. It can be read in the line 97-99 The interview guide can be read in the line 118-122. Through FGD, each respondent can express his opinion or add additional information if he sees that other respondents are still lacking in providing the information the researcher needs. It can be read in the line 93-95
11.	Comment	Line 154: 'there is a type of delirium that did not show clearly the change in mental status' Comment: statement requires clarification. If there is no change in mental status, delirium cannot be diagnosed according to standard diagnostic criteria's (DSM/ICD)
	Response	The revised can be read in the line 159-161.
12.	Comment	Lines 201-202: 'This study provides the data that there are still many nurses who admit that they are confused about how to differentiate various levels of consciousness among patients in hospital'. Comment: But the study objective was not differentiating levels of consciousness rather it was identifying the symptoms of delirium
	Response	We think that respondent explanation already in line with the purpose of this study. It can be read in the line 159-204.
13.	Comment	Lines 207-216: Knowledge about delirium is essential due to from the first diagnosis to the latter stages of the disease, delirium is a common occurrence when caring for cancer patients; nonetheless, this condition is commonly disregarded. Because delirium can exacerbate a patient's condition and raise their risk of death, health professionals must be aware of the disorder's many features and be able to recognise common underlying causes.15 A neurological disorder called delirium makes people abruptly disoriented. Delirium patients may have difficulty articulating their circumstances or suffer from hallucinations or delusions.16 Every patient receiving cancer therapy who is admitted to the hospital should have their delirium levels evaluated.17 After diagnosing delirium, the physician or nurse must determine and address reversible triggering factors.18 Comment: The paragraph needs revision. It lacks flow, consistency and relevance of discussion writing.
	Response	We revised in the line 207-248.
14.	Comment	Lines 239-242: Nurses play an important role in identifying delirium since they spend more time at the patient's bedside than physicians do. Nurses interact with patients frequently and continuously, nurses are more able to notice changes in their attention, consciousness, and cognitive function. As a result, nurses' observations are crucial for both the early identification of delirium symptoms and their ongoing monitoring, which is necessary to track the patient's clinical progression. Nurses can effectively monitor delirium signs with supervision and training.22 Monitoring and early detection of delirium in cancer patients is the nurse's responsibility to expedite treatment.17 As a result, nurses' observations are crucial for both the early identification of delirium symptoms and their ongoing monitoring, which is necessary to track the patient's clinical progression.19 Nurses can effectively monitor delirium signs with supervision and training.16 The overall experience of nurses in detecting delirium in cancer patients

cannot be represented broadly. Perhaps this study only represents nurses in hospitals in the Riau region, Indonesia, so research with a stronger methodology, especially grounded theory might be needed.

Comment: Needs revision. Most of the lines are cited references without discussing similarities/differences or comparison with the findings of the current study.

Response We revised, please read line 239-243.

Editor: M Mostafa Zaman, ORCID: 0000-0002-1736-1342

15. **Comment** Abstract: Reduce the length of the background and increase the clarity of the Methods by adding more description..

Response UK English was used.

16. **Comment** The "Highlights" heading should be replaced by "Key message". Please remove the numbers (1 to 3) from the text. Write it in the form of storytelling.

Response Analytical study was removed.

17. **Comment** The methods section should have information about the nurses working in the setting where the study was done. This is essential to address the point of the near absence of male nurses.

Response A paragraph of 57 words is written.

18. **Comment** Results: Lines 133-135 are discussion points. Move these lines to the Discussion section.

Response List of total 915 breast cancer patients and 126 females with non-cancerous benign breast lesions were found in the register of the Department of Histopathology from January 2021 to September 2022. We included available all (68) FFPE blocks of non-cancerous breast tissue, 27 of which had sufficient amount of breast tissue and ultimately genetic analysis was possible from 19 samples. For selection of tissue blocks we emphasised on recently prepare FFPE sample, as quality of RNA is reduced with time. Lines 123 to 127 are modified for this in Method section.

19. **Comment** Acknowledgements: The funding section already acknowledges the University for funding. This section should have other points, such as nurses who participated in the study.

Response A subsection of ethical concern is added in the Method section in lines 171–178.

20. **Comment** Funding: Provide memo number with date of funding.

Response Summarisation of the first four lines are done and duplication is avoided in lines 204-205). The citation of tables are removed and the repetition of findings is removed lines 242-244.

21. **Comment** Reference 22: It has non-English texts. Either use English words or remove them if these are not necessary.

Response Funding statement is removed from the Acknowledgements, and added in the Funding subsection.

ROUND 4

Editor: M Mostafa Zaman, ORCID: 0000-0002-1736-1342

1. **Comment** The discussion can be further revised. It is better than the first draft but mostly contains lines from cited references without discussing similarities or differences with the current study findings.

Response The explanation was added, it can be read in the paragraphs 2 and 3.

2. **Comment** Why was FGD chosen? Has there been any other choice? Please add your response to the Discussion section.

Response Why FGD was chosen and why any other choices were not chosen is described and explained in the first paragraph of the discussion section. Please read lines 210-215Figure 2 and Table 1 are modified. In Figure 2, median (range) of BRCA1 mRNA values, *P* value and name of the test were added. In Table 1, the 2nd and 3rd columns were deleted.

3. **Comment** When did the data saturation happen, and how did you understand it? Mention this in the Methods section and discuss it in the Discussion section.

Response It can be read in data collection, and how saturation was achieved can be read in lines 123-126.

4. **Comment** How many nurses were working in the ward(s), and what proportion you recruited and how? Answer these questions in your Methods section.

Response How many nurses were working in the ward and how to select participants were explained in line 104-108