

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Barriers to, and facilitators of, eHealth utilization by parents of high-risk newborn infants in the NICU: a Scoping Review Protocol
AUTHORS	Zhang, Yao; Johnston , Linda

VERSION 1 – REVIEW

REVIEWER	Shirinabadi Farahani, Azam Shahid Beheshti University of Medical Sciences, Department of Pediatric Nursing, School of Nursing and Midwifery
REVIEW RETURNED	10-Feb-2023

GENERAL COMMENTS	<p>Scoping Review has several objectives: It examines the extent, scope and nature of the research activity. It evaluates the value of conducting a full systematic review. It summarizes and introduces the findings of previous researches. It identifies research gaps in the existing literature.</p> <p>In this manuscript, the manner or extent of achieving any of the above goals is not reported. The results of the literature review are not reported, and there is no clear discussion. The reader does not understand the purpose of the study and is confused in accessing the most important findings of the research.</p>
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REVIEWER	Burris, Heather Children's Hospital of Philadelphia
REVIEW RETURNED	10-Feb-2023

GENERAL COMMENTS	<p>This is a well-written and thoughtful protocol of eHealth in the NICU and it is impressive that both English and Chinese studies will be included (and is well-motivated given restrictions of parental presence in Chinese NICUs).</p> <p>Suggest adding "zoom" to the search criteria (where facetime and webcam are listed).</p>
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REVIEWER	Sarik, Danielle Altares Nicklaus Children's Hospital
REVIEW RETURNED	16-Feb-2023

GENERAL COMMENTS	This article provides a detailed approach to writing a systematic review. It is clear and concise. I have no concerns with the written language or thoroughness of the approach. However, I do wonder about the contribution to the published literature, as this does not outline any results, only a protocol.
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REVIEWER	Pinheiro, Joaquim
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	Albany Medical Center, Pediatrics
REVIEW RETURNED	20-Feb-2023

GENERAL COMMENTS	<p>Zhang and Johnston consider the contrasts among different cultural settings in allowing parental access to their infants in NICU, in addition to the recent changes in such practices forced by the COVID-19 pandemic, which provide opportunities to evaluate the utilization of eHealth technologies to facilitate such access and family engagement. Their manuscript details the protocol for a scoping review to simply describe eHealth utilization under these circumstances. The study protocol is relatively simple, and portions of it will necessarily be duplicated in the eventual manuscript with study results. One option for publishing additional details of the study protocol would be as supplementary material to the main article. However, if the results and analyses are extensive, a separate protocol publication may be useful.</p> <p>The methods follow accepted frameworks for conducting scoping reviews. A major limitation, listed by the authors, is the inclusion of articles with full text only in English or Chinese. Since the pandemic occurred recently and it is unlikely that major studies in this area were planned, conducted and already published, one might anticipate that most publications reporting local innovations will be small; this and the language limitation may conceal some important advances in a variety of sociocultural and economic contexts. A hint of the magnitude of this limitation may be discerned from the first line item of exclusions in the PRISMA-ScR diagram, but only if the authors' first search is not limited by language, and the language filter is only applied in a second search (which is not clear from the manuscript). The authors might consider creating a subcategory of excluded articles that are not in English or Chinese, but that have English abstracts; this could help other researchers evaluate the potential for extending this work with publications in additional languages.</p> <p>A related, curious matter is that the references for this protocol do not presently include publications in Chinese. Can the authors comment on this?</p> <p>Another aspect of the methods that needs further clarity is the plan for resolving differences in study eligibility and data charting between the 2 reviewers. Although the authors refer to the "research team" and "all reviewers" in various instances, will both authors review all articles "in depth" in both English and Chinese? This would appear to be the case, from page 10. If not, the effectiveness of detecting discrepancies will be rather limited.</p> <p>Under Inclusion criteria, can the authors clarify which criteria are linked by "AND" versus "OR" operators?</p> <p>It is likely that most analyses will be qualitative. In that case, the methods used for conducting thematic analyses should be addressed at least briefly, for the benefit of readers unfamiliar with such methods. In page 10, line 35, the meaning of "concepts and processes will be compared across approaches" is not clear; specifically, what does "approaches" mean?</p> <p>Minor issues:</p>
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	<p>Page 4, lines 39-41, "83-53%". This logically refers to a change from the first to the 2nd %, but it is usually expressed in the more unambiguous form of "##% to ##%".</p> <p>Page 11, line 6, correct to "refereed".</p> <p>Page 14, lines 7 and 12, correct to "Registries".</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer#1

Scoping Review has several objectives:

It examines the extent, scope and nature of the research activity.

It evaluates the value of conducting a full systematic review.

It summarizes and introduces the findings of previous researches.

It identifies research gaps in the existing literature.

In this manuscript, the manner or extent of achieving any of the above goals is not reported. The results of the literature review are not reported, and there is no clear discussion.

The reader does not understand the purpose of the study and is confused in accessing the most important findings of the research.

Response: Thank you for the comments. Our manuscript is a protocol of scoping review. This's why there is no results and discussion in our manuscript.

Reviewer#2

This is a well-written and thoughtful protocol of eHealth in the NICU and it is impressive that both English and Chinese studies will be included (and is well-motivated given restrictions of parental presence in Chinese NICUs).

Suggest adding "zoom" to the search criteria (where facetime and webcam are listed).

Response: We sincerely appreciate your positive comments and suggestions on our manuscript. We added "zoom" to the search criteria.

Reviewer#3

This article provides a detailed approach to writing a systematic review. It is clear and concise. I have no concerns with the written language or thoroughness of the approach. However, I do wonder about the contribution to the published literature, as this does not outline any results, only a protocol.

Response: Thank you for your comments. Our manuscript is a protocol of scoping review. That is the reason that there are not included any results in our manuscript.

Reviewer#4

Zhang and Johnston consider the contrasts among different cultural settings in allowing parental access to their infants in NICU, in addition to the recent changes in such practices forced by the COVID-19 pandemic, which provide opportunities to evaluate the utilization of eHealth technologies to facilitate such access and family engagement. Their manuscript details the protocol for a scoping review to simply describe eHealth utilization under these circumstances. The study protocol is relatively simple, and portions of it will necessarily be duplicated in the eventual manuscript with study results. One option for publishing additional details of the study protocol would be as supplementary

material to the main article. However, if the results and analyses are extensive, a separate protocol publication may be useful.

The methods follow accepted frameworks for conducting scoping reviews. A major limitation, listed by the authors, is the inclusion of articles with full text only in English or Chinese. Since the pandemic occurred recently and it is unlikely that major studies in this area were planned, conducted and already published, one might anticipate that most publications reporting local innovations will be small; this and the language limitation may conceal some important advances in a variety of sociocultural and economic contexts. A hint of the magnitude of this limitation may be discerned from the first line item of exclusions in the PRISMA-ScR diagram, but only if the authors' first search is not limited by language, and the language filter is only applied in a second search (which is not clear from the manuscript). The authors might consider creating a subcategory of excluded articles that are not in English or Chinese, but that have English abstracts; this could help other researchers evaluate the potential for extending this work with publications in additional languages.

Response:

We greatly appreciate your time in reviewing and providing feedback to our manuscript. We revised the inclusion that: "We will comprehensively search articles and grey literature published up to August 2022 in any language." We also revised the method part that: "An initial exploratory search strategy without any language limitation based on the PCC framework will be developed on PubMed to determine some relevant terms. Medical Subject Headings (MeSH) terms will be screened, and sorted by pertinence and frequency (Table 1). A second search strategy will be developed according to the most relevant MeSH terms, which will be filtered by language to either English or Chinese. We also will create a subcategory of excluded articles that are not in English or Chinese, but that have English abstracts, which could help other researchers evaluate the potential for extending this work with publications in additional languages."

A related, curious matter is that the references for this protocol do not presently include publications in Chinese. Can the authors comment on this?

Response:

This is a protocol of scoping review, in this stage, our references don't refer to the publications in Chinese. We are sure that there will be included with lots of Chinese publications in our final scoping review.

Another aspect of the methods that needs further clarity is the plan for resolving differences in study eligibility and data charting between the 2 reviewers. Although the authors refer to the "research team" and "all reviewers" in various instances, will both authors review all articles "in depth" in both English and Chinese? This would appear to be the case, from page 10. If not, the effectiveness of detecting discrepancies will be rather limited.

Response:

We revised that "qualitative analysis will involve two reviewers' in-depth review of all studies in both languages."

Under Inclusion criteria, can the authors clarify which criteria are linked by "AND" versus "OR" operators?

Response:

In our inclusion criteria, No3-No5 are linked by "AND", No1-No2 are linked by "OR".

It is likely that most analyses will be qualitative. In that case, the methods used for conducting thematic analyses should be addressed at least briefly, for the benefit of readers unfamiliar with such methods. In page 10, line 35, the meaning of "concepts and processes will be compared across approaches" is not clear; specifically, what does "approaches" mean?

Response:

We revised that “ Second, qualitative analysis will involve two reviewers’ in-depth review of all studies in both English and Chinese. A qualitative data management software system (NVIVO-11) will be used to facilitate data analysis. The research team will chart out the key concepts and processes used; Firstly, we will analyse the data using a descriptive summary to describe the characteristics of included studies and apply a content analysis approach to identify barriers to and facilitators of eHealth technologies in NICU. Two reviewers will undergo training on coding the extracted data using a broad-based coding scheme to achieve 80% coding agreement. Next, we will report the analysed results using themes and produce the outcomes with reference to our study purpose. Then, we will perform an overall interpretation of the relationships among the synthesized themes and subthemes and of the meaning of our findings as well as identifying the knowledge gaps. Implications for future research and clinical practice will also be discussed. Consistent with the framework proposed by Arksey and O’Malley, an assessment of the quality of individual studies and a risk-of-bias assessment will not be conducted. As appropriate, results will be presented in an aggregate and visual form (e.g., using tables and charts).”

Minor issues:

- (1)Page 4, lines 39-41, “83-53%”. This logically refers to a change from the first to the 2nd %, but it is usually expressed in the more unambiguous form of “##% to ##%”.
- (2)Page 11, line 6, correct to “refereed”.
- (3)Page 14, lines 7 and 12, correct to “Registries”.

Response:

We revised all minor issues in the manuscript.

VERSION 2 – REVIEW

REVIEWER	Pinheiro, Joaquim Albany Medical Center, Pediatrics
REVIEW RETURNED	03-Apr-2023
GENERAL COMMENTS	<p>The authors’ revision of the manuscript satisfactorily addressed most of the issues raised by reviewers. A couple of items remain, which could further improve the manuscript.</p> <p>Since the six Inclusion criteria are not uniformly linked by the “AND” and “OR” operators, the authors should specify the intended linkages, which they included in the response to reviewers but not in the manuscript. This would allow other researchers to reliably replicate the searches.</p> <p>In the PRISMA diagram, the term “registers” in lines 7 and 12, should be corrected to “Registries”.</p> <p>The lack of references from Chinese literature is not a major flaw at this point, though it is unsettling, as it gives the impression that the authors’ exploration of the potential literature may have been superficial. Even 1 or 2 articles from Chinese sources would easily change this impression.</p>

VERSION 2 – AUTHOR RESPONSE

Replies to Reviewers

Thank you for taking the time to review our manuscript (Manuscript ID: bmjopen-2022-068759.R2). The authors greatly appreciate your comments and recommendations. Our responses to your comments and recommendations are below. We have also revised our manuscript to reflect those changes.

We sincerely appreciate your positive comments on our manuscript, which further improves the paper.

Specific Comments:

Reviewer#4

Since the six Inclusion criteria are not uniformly linked by the “AND” and “OR” operators, the authors should specify the intended linkages, which they included in the response to reviewers but not in the manuscript. This would allow other researchers to reliably replicate the searches.

Response:

Thank you for your comments. We added the sentence in the manuscript: “In the inclusion criteria, No.1~No.2 are linked by “OR”, No.3~No.5 are linked by “AND”.”

In the PRISMA diagram, the term “registers” in lines 7 and 12, should be corrected to “Registries”.

Response:

We corrected the words in our figure.

The lack of references from Chinese literature is not a major flaw at this point, though it is unsettling, as it gives the impression that the authors’ exploration of the potential literature may have been superficial. Even 1 or 2 articles from Chinese sources would easily change this impression.

Response:

We added the Chinese references in our manuscript.

VERSION 3 – REVIEW

REVIEWER	Pinheiro, Joaquim Albany Medical Center, Pediatrics
REVIEW RETURNED	15-Apr-2023
GENERAL COMMENTS	Thank you for your responses to the comments.

VERSION 3 – AUTHOR RESPONSE

Replies to Reviewers

Thank you for taking the time to review our manuscript (Manuscript ID: bmjopen-2022-068759.R3). The authors greatly appreciate your comments and recommendations. Our responses to your

comments and recommendations are below. We have also revised our manuscript in blue to reflect those changes.

We sincerely appreciate your positive comments on our manuscript, which further improves the paper.

Specific Comments:

We revised the term “Western countries” to “Global North”. Global North include the United States , Canada , almost all the European countries, Israel, Cyprus, Japan , Singapore, South Korea , Taiwan, Australia , and New Zealand.