Health Scope
Volume 14 · Issue 4 · e162224

OPEN PEER REVIEW

Causes of Medical Errors and Their Relative Importance: Systematic Review

Fatemeh Leyci, Faramarz Pourasghar

SUBMITTED	REVISED	ACCEPTED	DOI
2 May 2025	27 Jun 2025	8 Jul 2025	10.5812/healthscope-162224

About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

Contents

1 **Original submission** Referee 1, Azita Shahraki-Mohammadi, Hasan Jafari, Associate Editor, Editor-in-C... 2

2 **Revision 1** Referee 1, Associate Editor, Editor-in-Chief 5

Authors' reply to reviewers 6

Reviewer and editor comments 15

3 **Revision 2** Referee 1, Associate Editor, Editor-in-Chief 16

Authors' reply to reviewers 17

Reviewer and editor comments 19

1 Original submission

5 comments · 11 May 2025 – 18 May 2025

Referee 1 Reviewer

MAJOR REVISION 11 May 2025

Dear Authors,
Some writing mistakes are seen in the manuscript. Kindly edit the manuscript by a native expert in the English Language.
Method section: “We selected manuscripts published from 2000 to October 2022”. Kindly widen the search time until May 2025.
Method: “local and international online databases” indicate to setting (Iran)
Abstract: “The importance of healthcare providers related causes is indisputable both in high-income and low-income countries”. This sentence is not a result of your search. Indicate the cause of medical error in Iran.
Expand the introduction section.
Method section: indicate the used keywords in each database. Use of more keywords such as medical mistake, error, Medication error, Hospital Error,
Place images in the manuscript at appropriate sizes.
Draw a table including 37 papers with details (author name, setting, study design, main finding, sample size, …). For further guidance, refer to the published systematic review papers in the Health Scope journal.

Best,

Azita Shahraki-Mohammadi Reviewer

MAJOR REVISION 14 May 2025

Dear authors:
1. Please use just mesh terms. "Medical errors" is a mesh term for medical mistakes
2. Please fix the grammatical errors and have the entire manuscript checked for this issue.
3. Abstract: Specify the inclusion and exclusion criteria for the review.
4. Abstract: Specify the methods used to present and synthesise results.
5. Abstract: If your search was conducted in the PubMed database, please use PubMed instead of Medline.
6. Abstract: Please mention the last search date
7. Please rewrite your abstract based on the Journal's structure
8. Conflict of Interests: rewrite according to the journal's guidelines.
9. Context is too short. Describe the rationale for the review in the context of existing knowledge and provide an explicit statement of the objective(s) or question(s) the review addresses.
10. Instead of Evidence Acquisition, you should use Method
Method
1. After “systematic review and meta-analysis protocols (PRISMA) guidelines,” you should use their source.
2. Present the full search strategies for all databases, registers, and websites, including any filters and limits used
3. Please also mention exclusion criteria. Did you include reviews, letters to the editor, etc.? (Please provide details.)Are languages other than English and Persian excluded?
4. Please mention for Joanna Briggs Institute's tool its reference in the text.
5. The method is also too short; it needs more information about screening and Analysis. Such as: Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and, if

applicable, details of automation tools used in the process.
6. Quality Appraisal: Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study, and whether they worked independently, and if applicable, details of automation tools used in the process.
7. Quality Appraisal: Just mention the risk of bias assessment method and delete the result(it relates to the result section)
8. Describe any methods used to synthesize results.
Result
1. Cite each included study and present its characteristics. You can use a table.
2. Risk of bias in studies: Present assessments of risk of bias for each included study.
3. A summary of the key results presented in Figures 2 -4 should be provided in the results section.
4. It's hard to understand the charts like this. How is this ranking determined? How are low-income and high-income countries compared?

Discussion
1. Sentences like “in his qualitative study” OR “He believes” are not usually used in a scientific paper.
2. Please correct in-text references according to the journal structure.)Donchin and colleagues aren’t used. Please write Donchin et al. (
1. Schwappach 202 also asserts that the number of care providers involved in patient care is a significant predictor of medical 203 errors, which is consistent with the findings of the present study (22-24). If this sentence is the result of a study, why are so many people being used?!
1. " The factors related to the team are ranked 8th in low-income countries and 6th in low-income countries 244 among the causes of medical errors." Numbers less than 10 must be written as letters.
2. Discuss any limitations

Hasan Jafari Reviewer

MINOR REVISION 17 May 2025

Dear Authors:
- The most recent search period covered is 2022, and since the journal's timeline likely extends to 2026 or beyond, I suggest updating the search to obtain more current and accurate information.

-In addition to the databases used, the inclusion of a search engine like Google Scholar would be beneficial.

- Please add the search strategies employed.

- In the findings, for each of the eight specified items, include the reference number (in parentheses) that was reviewed or documented for each.

Associate Editor

MAJOR REVISION 17 May 2025

Dear Editor,
The manuscript entitled "Causes of Medical Errors and Their Relative Importance: Systematic Review" has been revised by three experts in the field. It should be revised as a Major revision.

Best,

Editor-in-Chief MAJOR REVISION 18 May 2025

Dear Author
Thanks for submitting your valuable manuscript to the journal. As a result of this, we would like to inform you that the review of your manuscript is finished, and based on the editorial decision, you need to do a "Major Revision" on your manuscript. Even though this manuscript has enough quality to enter the review process, it needs some significant (major) revisions from some points of view.
Best Regards

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear Reviewer 1,

We sincerely thank you for your valuable comments and suggestions that have helped us improve the quality of our manuscript. Below are our detailed responses to each of your comments:

	Reviewer's comments	**Our responses**
1	Some writing mistakes are seen in the manuscript. Kindly edit the manuscript by a native expert in the English Language.	The manuscript was thoroughly revised by a professional English editor with native proficiency to correct grammatical and stylistic issues.
2	Method section: "We selected manuscripts published from 2000 to October 2022". Kindly widen the search time until May 2025.	The search period was updated to cover studies published from 2000 to May 2025. This revision has been reflected in both the Abstract and the Method sections.
3	Method: "local and international online databases" indicate to setting (Iran)	The phrase was revised to clarify that the study focuses on medical errors in Iran, and all selected studies are related to the Iranian healthcare setting.
4	Abstract: "The importance of healthcare providers related causes is indisputable both in high-income and low-income countries". This sentence is not a finding of your search. Indicate the cause of medical error in Iran.	The sentence was removed and replaced with a summary of key causes of medical errors identified in Iranian studies, based on our systematic review.
5	Method section: Indicate the used keywords in each database. Use more keywords such as medical mistake, error, Medication error, Hospital Error.	We expanded our search strategy to include additional keywords such as "medical mistake", "error", "medication error", and "hospital error" across all databases. However, this broader search did not yield any new studies meeting our inclusion criteria or significantly change the final results. Therefore, we

		retained the original selection while ensuring the comprehensiveness of the search process.
6	Place images in the manuscript at appropriate sizes.	According to the journal’s submission guidelines, all figures were submitted as separate files, and only their captions were inserted in the manuscript text immediately after they were mentioned for the first time. Therefore, no actual image was embedded in the manuscript file itself. Please let us know if further adjustments are needed.
7	Draw a table including 37 papers with details (author name, setting, study design, main finding, sample size, etc.)	A comprehensive table was added (Table 1), summarizing key characteristics of the 42 included studies, such as author name, publication year, setting, study design, sample size, and main findings. We have followed the format used in systematic reviews published in the Journal of Health Scope.

Response to Reviewer 2:

We appreciate your thoughtful comments and valuable suggestions. Please find our responses below:

	Reviewer’s comments	Our responses
1	The most recent search period covered is 2022, and since the journal's timeline likely extends to 2026 or beyond, I suggest updating the search to obtain more current and accurate information.	The search period was extended to cover studies published from 2000 to May 2025. This revision was reflected in both the Abstract and Methods sections.
2	In addition to the databases used, the inclusion of a search engine like Google Scholar would be beneficial.	We conducted a preliminary search using Google Scholar to assess its potential contribution. Our findings indicated that no additional studies meeting the eligibility criteria were identified beyond those retrieved from PubMed, Scopus, Web of Science, and SID. Given the comprehensiveness and quality of these selected databases, we believe our search strategy sufficiently captures the relevant literature for this review.
3	Please add the search strategies employed.	PubMed: ((("medical error*"[Title/Abstract]) AND ("hospital*"[Title/Abstract])) AND ("cause*"[Title/Abstract])) OR ("underlying reason*"[Title/Abstract]) WOS: TITLE-ABS (("medical error*") AND ("hospital*") AND ("cause*" OR "underlying reason*")) Scopus: TITLE-ABS-KEY (((“medical error*") AND ("hospital*") AND ("cause*" OR "underlying reason*")))

4	In the findings, for each of the eight specified items, include the reference number (in parentheses) that was reviewed or documented for each.	We have carefully revised the findings section and included the reference numbers in parentheses for each of the eight specified items as requested. This addition clarifies the sources of the information and enhances the transparency and credibility of our review.

Response to Reviewer 3:

We appreciate your thoughtful comments and valuable suggestions. Please find our responses below:

	Reviewer’s comments	Our responses
1	Please use just mesh terms. "Medical errors" is a mesh term for medical mistakes.	We revised the keywords and used only MeSH terms in accordance with indexing standards. “Medical errors” has been retained as it is the appropriate MeSH term for our study focus.
2	Please fix the grammatical errors and have the entire manuscript checked for this issue.	We thoroughly reviewed the manuscript and corrected all grammatical issues. A native English editor also proofread the entire text to ensure clarity and fluency.
3	Abstract: Specify the inclusion and exclusion criteria for the review.	We revised the abstract to clearly state the inclusion and exclusion criteria applied during the study selection process.
4	Abstract: Specify the methods used to present and synthesise results.	We updated the abstract to include the methods used for result presentation and synthesis, ensuring alignment with PRISMA guidelines.
5	Abstract: If your search was conducted in the PubMed database, please use PubMed instead of Medline.	We replaced "Medline" with "PubMed" throughout the manuscript, including the abstract.
6	Abstract: Please mention the last search date	We added the date of the last database search in the abstract to improve transparency and reproducibility.
7	Please rewrite your abstract based on the Journal's structure	The abstract was revised to strictly follow the journal’s structured format, including sections on Introduction,

		Methods, Results, and Conclusion.
8	Conflict of Interests: rewrite according to the journal's guidelines.	The conflict of interest section was written in accordance with the journal’s official guidelines, as outlined on its website. If any specific issues or formatting details require further adjustment, we would be grateful if you could kindly clarify them so we can make the necessary corrections.
9	Context is too short. Describe the rationale for the review in the context of existing knowledge and provide an explicit statement of the objective(s) or question(s) the review addresses.	We expanded the Context section to better explain the rationale for the review and to clearly define the study’s objectives within the scope of existing literature.
10	Instead of Evidence Acquisition, you should use the Method	We replaced the section title “Evidence Acquisition” with “Method”.
11	Method: After “systematic review and meta-analysis protocols (PRISMA) guidelines,” you should use their source.	We revised the sentence to include the appropriate citation for the PRISMA 2020 guidelines.
12	Method: Present the full search strategies for all databases, registers, and websites, including any filters and limits used	In the revised manuscript, we have provided the complete search strategies used for each database, including the exact search strings, Boolean operators, applied filters, and date ranges.
13	Method: Please also mention exclusion criteria. Did you include reviews, letters to the editor, etc.? (Please provide details.) Are languages other than English and Persian excluded?	We updated the Method section to explicitly state the exclusion criteria.
14	Method: Please mention for	We revised the Method section to

	Joanna Briggs Institute's tool its reference in the text.	include the appropriate in-text reference for the Joanna Briggs Institute (JBI) Critical Appraisal Tool, and added the source to the References section.
15	Method: The Method is also too short; it needs more information about screening and Analysis. Such as: Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and, if applicable, details of automation tools used in the process.	We revised the Method section to provide more detail regarding the screening and analysis process. Specifically, we have clarified the number of reviewers involved in screening and eligibility assessment, their independent work, and confirmed that no automation tools were used during this process.
16	Method: Quality Appraisal: Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study, and whether they worked independently, and if applicable, details of automation tools used in the process.	We revised the Quality Appraisal section in the Method part to clarify that two independent reviewers assessed the risk of bias using the Joanna Briggs Institute (JBI) checklists, and that any disagreements were resolved through discussion. We also confirm that no automation tools were used during this process.
17	Method: Quality Appraisal: just mention the risk of bias assessment method and delete the result (it relates to the result section)	We have revised the Quality Appraisal section in the Method to include only the assessment method and removed the results, which have now been presented in the Results section as recommended.
18	Method: Describe any methods used to synthesize results.	We clarified in the Methods section that a narrative synthesis approach was used to group similar findings from the included studies into thematic categories.

19	Result: Cite each included study and present its characteristics. You can use a table.	We added **Table 1** in the Results section, which summarizes the key characteristics of all 42 included studies. For each study, we provided the author(s), year of publication, country, study design, sample size, setting, and main findings.
20	Result: Risk of bias in studies: Present assessments of risk of bias for each included study.	A new subsection titled *"Risk of Bias Assessment"* has been added to the Results section. It presents a summary table showing the quality appraisal results for each included study based on the appropriate JBI critical appraisal.
21	Result: A summary of the key results presented in Figures 2 -4 should be provided in the results section.	We added a clear and concise summary of the key findings presented in Figures 2 to 4 within the Results section. This addition provides a comprehensive explanation of the data alongside the figures to enhance the clarity and understanding of the results for readers. We hope this improvement meets your expectations.
22	Result: It's hard to understand the charts like this. How is this ranking determined? How are low-income and high-income countries compared?	To address your concern, we clarified the ranking methodology and the basis for country classification in the revised Results section. Specifically, we explained that contributing factors to medical errors were ranked based on how frequently they were mentioned in the reviewed articles. When available, we incorporated average rankings from the studies to provide a more accurate representation of

		each factor’s significance. Additionally, we clarified that countries were categorized as low-income or high-income according to World Bank criteria to facilitate meaningful comparison.
23	Discussion: Sentences like “in his qualitative study” OR “He believes” are not usually used in a scientific paper.	The sentence was revised.
24	Discussion: Please correct in-text references according to the journal structure. (Donchin and colleagues aren’t used. Please write Donchin et al.)	We revised all in-text references in the Discussion section to comply with the journal’s referencing style. Specifically, we replaced phrases like “Donchin and colleagues” with “Donchin et al.” and ensured consistent formatting throughout the manuscript.
25	Discussion: Schwappach also asserts that the number of care providers involved in patient care is a significant predictor of medical errors, which is consistent with the findings of the present study (22-24). If this sentence is the result of a study, why are so many people being used?!	We revised the sentence to clearly attribute the statement specifically to Schwappach’s study, while referring to other related studies separately and appropriately. We hope this revision addresses the concern effectively.
26	Discussion: The factors related to the team are ranked 8th in low-income countries and 6th in low-income countries 244 among the causes of medical errors." Numbers less than 10 must be written as letters.	We revised the sentence to follow the journal’s style guidelines by writing numbers less than ten in words.
27	Discussion: Discuss any limitations	We added a paragraph in the Discussion section to address the limitations of our study.

2 Revision 1

3 comments · 21 Jun 2025 – 21 Jun 2025

Referee 1 Reviewer

MINOR REVISION 21 Jun 2025

Dear Authors,
The manuscript has been well edited, but there are still a few things in the manuscript that need to be revised.
1. The word “We included …, We reported f…, We selected… etc. is used in various parts of the article. It is not an academic writing approach. Kindly rewrite these sections.
2. Again: Expand the introduction section. This section with lees than 10 lines could not show the importance of the issue.
3. Kindly check the PRISMA diagram. In the section where 42 articles remain, why have 76 and 75 articles been removed? In this section, you have reached 42 articles. The deletions of articles should be in the sections before this stage.
4. Table 1. After the name of the author, indicate the year of publication in a column. The order of the columns is suggested as follows: Author name, Year, Country, Study Design, Sample Size, Key Findings Summary, Risk of Bias.
5. Kindly indicate the project number and the Ethical code if there are.
Best,

Associate Editor

MINOR REVISION 21 Jun 2025

Dear Editor,
In the second review round, the manuscript entitled" Causes of Medical Errors and Their Relative Importance: Systematic Review' should be revised as a Minor revision.
Best,

Editor-in-Chief

MINOR REVISION 21 Jun 2025

Dear Authors,
The manuscript has been well edited, but there are still a few things in the manuscript that need to be revised.
1. The word “We included …, We reported f…, We selected… etc. is used in various parts of the article. It is not an academic writing approach. Kindly rewrite these sections.
2. Again: Expand the introduction section. This section with lees than 10 lines could not show the importance of the issue.
3. Kindly check the PRISMA diagram. In the section where 42 articles remain, why have 76 and 75 articles been removed? In this section, you have reached 42 articles. The deletions of articles should be in the sections before this stage.
4. Table 1. After the name of the author, indicate the year of publication in a column. The order of the columns is suggested as follows: Author name, Year, Country, Study Design, Sample Size, Key Findings Summary, Risk of Bias.
5. Kindly indicate the project number and Ethical code if there are.
Best,

3

Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Dear Reviewer,

We sincerely thank you for your valuable comments and suggestions that have helped us improve the quality of our manuscript. Below are our detailed responses to each of your comments:

	Reviewer's comments	Authors responses
1	The word "We included …, We reported…, We selected… etc. is used in various parts of the article. It is not an academic writing approach. Kindly rewrite these sections.	We revised the relevant sections of the manuscript to avoid repetitive use of first-person expressions such as "We included," "We reported," and "We selected." The text was rephrased using a more formal and objective tone in line with academic writing conventions.
2	Expand the introduction section. This section, with fewer than 10 lines, could not show the importance of the issue.	We expanded the introduction section to better highlight the global burden, underlying causes, policy relevance, and existing gaps related to medical errors. The revised section provides clearer context and a stronger justification for the study's aims.
3	Kindly check the PRISMA diagram. In the section where 42 articles remain, why have 76 and 75 articles been removed? In this section, you have reached 42 articles. The deletions of articles should be in the sections before this stage.	We revised the PRISMA diagram to correct the placement of exclusions and clearly show how the final 42 studies were reached.
4	Table 1. After the name of the author, indicate the year of publication in a column. The order of the columns is suggested as follows: ´Author name, Year, Country, Study Design, Sample Size, Key Findings Summary, Risk of Bias.	We revised Table 1 to include the year of publication in a separate column, after the author's name column, and reordered the columns as recommended: Author Name, Year, Country, Study Design, Sample Size, Key Findings Summary, and Risk of Bias.
5	Kindly indicate the project number and Ethical code if there are.	The ethical approval code was added to the Method section of

		the article.

3 Revision 2

3 comments · 4 Jul 2025 – 8 Jul 2025

Referee 1 Reviewer

ACCEPT 4 Jul 2025

Dear Authors,
The manuscript has been revised and is now ready for publication in the journal.

Best,

Associate Editor

ACCEPT 4 Jul 2025

Dear Editor,
The manuscript entitled" Causes of Medical Errors and Their Relative Importance: Systematic Review" has been revised based on the reviewers' comments. It has criteria for publication in the Health Scope journal.

Editor-in-Chief

ACCEPT 8 Jul 2025

Dear Editor,
The manuscript entitled" Causes of Medical Errors and Their Relative Importance: Systematic Review" has been revised based on the reviewers' comments. It has criteria for publication in the Health Scope journal.