Peer Review File

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Reviewer A:

This article addresses an important and often underemphasized aspect of neonatal care: the early administration of mother's own milk (MOM) to preterm infants. One of its major strengths is its recognition of MOM as both a nutritional source and a personalized therapeutic intervention. This dual perspective reflects an advanced understanding of neonatal physiology and immunology, contributing significantly to the growing literature advocating for early colostrum use, especially through colostrum oral immune therapy (COIT).

The study's conceptual framework is grounded in a systematic approach to evidence gathering, employing the "6S" search pyramid. This methodology enhances the credibility and comprehensiveness of the findings by ensuring that a broad spectrum of literature—from clinical guidelines to expert consensus—is considered. The use of structured evidence hierarchies is particularly relevant in fields where randomized controlled trials may be ethically or practically difficult.

Moreover, the article effectively synthesizes evidence into eight practical categories, each relevant to MOM management in NICU settings. This thematic organization allows for the identification of actionable insights, such as the need for staff training, standardized breast milk transfer protocols, and improved COIT implementation. These practical considerations provide a valuable roadmap for NICU teams seeking to optimize feeding strategies for preterm infants.

The study also succeeds in highlighting the complexity of initiating early MOM feeding. By framing this challenge as one that demands coordination among various healthcare professionals and systems, the authors acknowledge the real-world barriers to evidence implementation. This systems-thinking approach is commendable, as it invites multidisciplinary solutions and

underscores the importance of institutional support.

However, the study has notable limitations. A key weakness lies in its heavy reliance on secondary evidence, such as guidelines and consensus statements, with an admitted lack of high-quality original research. While this reflects a broader issue in the field, the study could have better addressed this gap by proposing specific research agendas or methodological frameworks for future investigation.

Reply 1: We've addressed this point in the revised Conclusions section, where we spell out why evidence from original research wasn't incorporated and map out concrete avenues for future primary studies.

Changes in the text: In the first paragraph of the Conclusions section (lines 294-302), these revisions are highlighted in blue.

Additionally, the article would benefit from a more explicit evaluation of the quality of the included sources. Although evidence was "graded," the criteria used for grading are not clearly described in the summary. Without this transparency, it becomes difficult for readers to assess the reliability and applicability of the 68 synthesized recommendations.

Reply 2: We recognized the lack of clarity in our evidence grading methodology and have addressed this by adding corresponding descriptions in Section 2.6 (Evidence Extraction, Integration, and Recommendation Level Assessment).

Changes in the text: These revisions appear in the Methods section (lines 135–159), highlighted in blue.

Another area for improvement involves the lack of detailed discussion on the implementation challenges of COIT. While COIT is acknowledged as effective, the study does not delve deeply into barriers such as parental hesitancy, staffing constraints, or logistical hurdles. Addressing these issues would enhance the practical relevance of the findings and offer more comprehensive guidance for clinical translation.

Reply 3: We recognized the insufficient description of COIT implementation challenges. Section 4.4 has been retitled to 'Clarify the Benefits, Implementation Methods, and Challenges of COIT,' supplemented with main factors identified through literature of COIT implementation. We also

acknowledged existing issues in COIT research, as documented in the second paragraph of Section 4.4.

Changes in the text: These revisions appear in the Discussion section (lines 275–279 and 282–287), highlighted in blue.

Furthermore, the article could have drawn more comparisons between national and international standards of breast milk management, offering a global perspective. Given the variability in NICU protocols worldwide, a more nuanced discussion of how cultural, economic, and regulatory contexts affect MOM use would enrich the paper's relevance across different settings.

Reply 4: We recognized the inadequate comparative analysis of MOM management discrepancies and have augmented Sections 4.2 (Milk Expression and Lactation Support as Foundations for Early MOM Application) and 4.3 (Strict Adherence to MOM Storage, Transportation, and Handling Standards) with targeted discussions. These additions explicitly contrast policy frameworks, NICU management protocols, and clinical practices between developed and developing nations."

Changes in the text: These revisions appear in the Discussion section (lines 235–245 and 260–268), highlighted in blue.

The authors' call for adapting existing evidence through theoretical models or frameworks is insightful, yet underdeveloped. Mentioning specific implementation science frameworks—such as the Consolidated Framework for Implementation Research (CFIR) or the Knowledge-to-Action (KTA) model—would provide clearer direction for translating research into practice and facilitate broader engagement with implementation scientists.

Reply 5: We rectified the lack of theoretical framing by detailing prominent implementation science frameworks in the Conclusion section.

Changes in the text: In the second paragraph of the Conclusions section (lines 303-308), these revisions are highlighted in blue.

In conclusion, this article makes a valuable contribution by consolidating current evidence on early MOM use for preterm infants and proposing a structured approach to improving clinical practice. While it is well-structured and grounded in a strong conceptual framework, its impact could be

amplified through deeper exploration of implementation challenges, clearer evidence grading, and the integration of theoretical models for clinical translation. Future work in this area should prioritize original research and consider diverse healthcare contexts to drive global improvements in neonatal care.

Reply 6: We have meticulously incorporated all previous recommendations into the revised manuscript. Should any additional modifications be required, we sincerely welcome your expert guidance and will implement corrections promptly to meet the highest academic standards.

Reviewer B:

This is a valuable review of the current evidence including meta analyses, clinical decision, guidelines, and evidence summaries to create a novel bundle to improve colostrum oral immune therapy use for preterm infants. It summarises the grade of evidence and recommendation for each piece of evidence and thus identifies gaps in the evidence base and recommendations for further research.

Minor comments only:

Line 40 take out word quality

Reply 1: We have made a modification according to this suggestion.

Changes in the text: We have removed the word 'quality' in Line 40.

LIne 49 take out word ect

Reply 2: We have made a modification according to this suggestion.

Changes in the text: We have removed the word 'ect' in Line 49.

Line 50 replace become with is

Reply 3: We have made a modification according to this suggestion.

Changes in the text: Located at line 52 and highlighted in red

Line 73 take out word ect

Reply 4: We have made a modification according to this suggestion.

Changes in the text: We have removed the word 'ect' in Line 73.

Line 74 take out word ect

Reply 5: We have made a modification according to this suggestion.

Changes in the text: We have removed the word 'ect' in Line 74.

Otherwise few minor formatting issues with spaces required between words.

Reply 6: We have made modifications according to this suggestion.

Changes in the text: We've validated the manuscript formatting using automated tools, resolving inconsistent word spacing throughout.