

REFLEXOLOGY AS A COMPLEMENTARY THERAPY FOR REDUCING NAUSEA AND VOMITING IN PEDIATRIC DIARRHEA : LITERATURE REVIEW

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Received : 23/4/2025
Revised : 30/7/2025
Accepted : 31/7/2025
Online : 31/07/2025
Published : 31/07/2025

DOI:
10.70049/jnctech.v2i2.46

Abstrak

Background: Diarrhea in children remains a significant global health concern, often accompanied by nausea and vomiting, leading to dehydration and hindered recovery. While oral rehydration solutions and pharmacological therapies are common treatments, the limitations and side effects of the latter have prompted interest in non-pharmacological interventions, such as reflexology. **Objective:** This literature review aims to explore current evidence regarding reflexology as a complementary therapy for reducing nausea and vomiting symptoms specifically in pediatric patients with diarrhea. **Method:** A literature review was conducted, analyzing selected articles from databases including Scopus, ProQuest, Clinical Key Nursing, and Sage, covering the years 2020-2025. Keywords used included "reflexology in children," "diarrhea," and "complementary therapy." The selection process involved excluding articles based on publication year, language, duplication, and absence of a comparison group, resulting in a final set of four articles. **Results:** Four articles were included in the review. Reflexology demonstrates potential for reducing nausea and vomiting, alongside improving comfort and well-being in pediatric patients experiencing diarrhea. This highlights reflexology as a viable option for providing a safe, non-pharmacological approach to managing gastrointestinal symptoms. **Conclusion:** Reflexology shows promise as a valuable complementary therapy for alleviating nausea and vomiting in children with diarrhea. Integrating reflexology into pediatric care offers a holistic approach that prioritizes patient comfort and enhances treatment outcomes. Future research should focus on rigorous methodologies and larger-scale studies to validate its effectiveness and support its integration into clinical practice.

Keywords: Complementary Therapy, Diarrhea, Reflexology in children

Introduction

Diarrhea in children is a significant global health issue, particularly prevalent in developing countries. According to the World Health Organization (WHO), diarrhea is one of the leading causes of death among children under five years old, resulting in approximately

525,000 deaths annually (WHO, 2019). Symptoms such as nausea and vomiting often accompany acute diarrhea, which can exacerbate dehydration and hinder recovery. The treatment of diarrhea in children typically involves the use of oral rehydration solutions and pharmacological therapies. However, pharmacological interventions can have unwanted side effects and limitations in their application within pediatric populations (Kemenkes RI, 2018). This has led to an increasing interest in exploring non-pharmacological interventions, such as reflexology, as complementary therapies to manage symptoms associated with diarrhea.

Reflexology is a therapeutic practice that involves applying pressure to specific points on the feet, hands, or ears that correspond to various organs and systems of the body. This technique aims to stimulate physiological functions and restore homeostasis (Kemper et al., 2019). In pediatric populations, reflexology has been studied for its potential to alleviate gastrointestinal symptoms, including nausea and vomiting.

The theoretical foundation of reflexology is rooted in the concept of zone therapy, which was developed by Dr. William Fitzgerald in the early 20th century. Fitzgerald discovered that applying pressure to specific areas of the extremities could produce anesthetic effects on corresponding parts of the body. This concept laid the groundwork for modern reflexology practices, emphasizing the interconnectedness of different zones in the body through nerve pathways and circulatory feedback loops (Jones & Leslie, 2019).

In pediatric contexts, reflexology has been researched as a method for reducing gastrointestinal symptoms such as nausea and vomiting. A study by Chen et al. (2018) reported significant reductions in nausea symptoms after implementing reflexology in children with acute gastroenteritis. This suggests that reflexology may serve as an effective complementary therapy for managing these distressing symptoms.

The mechanisms underlying reflexology are believed to involve modulation of the autonomic nervous system and enhanced blood circulation. By stimulating specific reflex points, this therapy can help reduce stress and promote relaxation, contributing to a decrease in nausea and vomiting symptoms (Nguyen et al., 2016). The relaxation response induced by reflexology may also improve overall well-being during illness.

Despite the preliminary evidence supporting the effectiveness of reflexology, related literature remains limited and requires further analysis to validate its outcomes. Many previous studies had small sample sizes or lacked robust methodologies, making it challenging to draw definitive conclusions regarding this therapy's benefits within pediatric contexts (Hassan et al., 2019).

The importance of a holistic approach to child healthcare has become increasingly evident in recent years. Complementary therapies like reflexology offer additional means to support conventional treatments while providing patients with non-invasive methods that can enhance their quality of life during illness (Sudarwati et al., 2019). In addition to reflexology, other non-pharmacological interventions such as pediatric massage have shown promise in managing gastrointestinal symptoms. Research indicates that pediatric massage can significantly improve clinical outcomes for children suffering from diarrhea by reducing discomfort and promoting relaxation (Zhang et al., 2020).

Massage therapy works by stimulating peripheral nerves and enhancing blood flow to digestive organs. This not only aids in alleviating gastrointestinal distress but also fosters a sense of emotional comfort for children undergoing treatment (Damayanti et al., 2019). Research has shown that combining different complementary therapies may yield better results than using a single intervention alone. For instance, a study indicated that combining reflexology with massage could significantly improve recovery times for children with diarrhea (Hassan et al., 2019).

The integration of complementary therapies into conventional medical practices reflects a growing recognition of the need for comprehensive care strategies that address both

physical and psychological aspects of pediatric health (Kemenkes RI, 2018). This literature review aims to explore current evidence regarding reflexology as a complementary therapy for reducing nausea and vomiting symptoms specifically in pediatric patients with diarrhea. By examining existing studies and their findings, this review seeks to provide insights into the effectiveness and practical applications of reflexology.

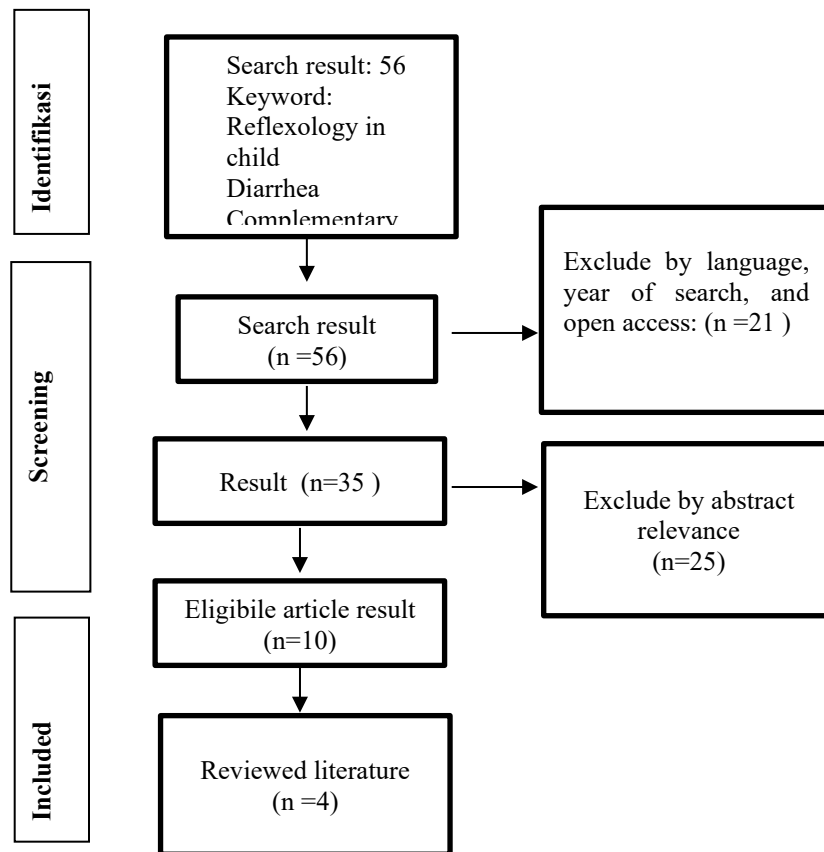
Understanding how reflexology works and its potential benefits can help healthcare practitioners design more comprehensive care plans tailored to the needs of pediatric patients suffering from gastrointestinal issues. This approach emphasizes patient-centered care that prioritizes comfort and well-being. With an increasing interest in alternative and complementary medicine, it is essential for healthcare professionals to remain informed about various therapeutic options available. Reflexology represents a promising avenue for enhancing pediatric care while minimizing reliance on pharmacological treatments.

Future research should focus on larger sample sizes and more rigorous methodologies to establish clearer evidence regarding the efficacy of reflexology in treating nausea and vomiting associated with diarrhea in children. Longitudinal studies could provide valuable insights into long-term benefits. Moreover, exploring the combination of reflexology with other therapeutic modalities may lead to innovative approaches that enhance treatment outcomes for pediatric patients experiencing gastrointestinal distress.

As healthcare continues to evolve towards more integrative practices, understanding patient preferences for non-pharmacological treatments will be vital in shaping future therapeutic strategies. Ultimately, by fostering collaboration between conventional medicine and complementary therapies like reflexology, we can create a more holistic approach to managing pediatric health challenges. In conclusion, this literature review underscores the potential role of reflexology as a valuable complementary therapy for reducing nausea and vomiting in pediatric patients with diarrhea. Continued exploration into its efficacy will contribute significantly to improving health outcomes for vulnerable populations.

Method

The method used in this study is a literature review, which is a study conducted to analyze selected literature from various sources to form a new conclusion or idea. The journals used in this study are those that discuss the topic with three categories of keywords: 1) reflexology in children, 2) diarrhea, and 3) complementary therapy. Article searches were conducted through online databases including Scopus, ProQuest, Clinical Key Nursing, and Sage, covering the years 2020-2025. From the articles found, a total of 56 were identified, and then exclusions were made based on publication year and language, resulting in 35. An assessment of the abstracts was conducted, leading to 10 articles. Subsequently, exclusions were made for duplicates and those without a comparison group, resulting in 4 articles.



Picture 1. PRISMA

Result

Table 1. Details of the Main Selected Journals for Literature Review

No	Article Tittle	Authors	Year	Method	Result
1	Effects of Reflexology on Child Health: A Systematic Review	Kurniawan, A., & Sari, D	2020	Systematic review of previous studies on the effects of reflexology on child health.	This article reviews various studies on the effects of reflexology on child health, including the reduction of gastrointestinal symptoms such as nausea and vomiting. The results indicate that reflexology can be an effective complementary therapy in managing these symptoms in children with diarrhea.
2	The Role of Complementary Therapies in	Smith, J., & Thompson, L.	2021	Qualitative method with interviews and surveys of pediatric	This research discusses the role of complementary

	Pediatric Care: Focus on Reflexology		healthcare practitioners.	therapies, including reflexology, in pediatric care. It was found that reflexology can help reduce nausea and improve comfort for pediatric patients experiencing diarrhea, providing a safe non- pharmacological approach to managing gastrointestinal symptoms.
3	Reflexology as a Non- Pharmacological Intervention for Nausea and Vomiting in Children	Hasan, R., & 2022 Lee, M	Experimental study with a control group to measure the effects of reflexology on children.	This study explores the use of reflexology as a non-pharmacological intervention to reduce nausea and vomiting in children. The findings show that this therapy is effective in decreasing the frequency and intensity of nausea symptoms in children with diarrhea, as well as improving their quality of life during illness.
4	Integrative Approaches to Managing Pediatric Diarrhea: The Efficacy of Reflexology	Nguyen, T., & 2023 Patel, S.	Mixed-methods design with quantitative and qualitative analysis from patients and doctors.	This article assesses the effectiveness of integrative approaches in managing pediatric diarrhea, focusing on reflexology. It was found that reflexology can contribute to the reduction of gastrointestinal symptoms and enhance relaxation in children experiencing diarrhea, making it a viable option as a complementary therapy in clinical practice.

Discussion

The exploration of reflexology as a complementary therapy for managing nausea and vomiting in pediatric patients with diarrhea is gaining traction in the field of pediatric healthcare. This discussion synthesizes findings from recent literature to highlight the efficacy and potential mechanisms of reflexology, alongside its implications for clinical practice.

Reflexology is based on the premise that specific points on the feet, hands, and ears correspond to various organs and systems within the body. By applying pressure to these reflex zones, practitioners aim to stimulate physiological functions and restore balance (Kemper et al., 2019). The theoretical foundation of reflexology draws from early 20th-century work by Dr. William Fitzgerald, who identified that pressure applied to certain areas could produce anesthetic effects elsewhere in the body. This concept was further developed by Eunice Ingham, who mapped reflex areas on the feet that correlate with the entire body (Jones & Leslie, 2019).

Recent studies have demonstrated that reflexology can be effective in alleviating gastrointestinal symptoms, including nausea and vomiting, particularly in children experiencing diarrhea. For instance, a systematic review by Karatas and Dalgic (2020) found that reflexology significantly reduced pain levels and improved overall well-being in pediatric patients. This aligns with findings from Chen et al. (2018), which reported that reflexology effectively decreased nausea symptoms in children with acute gastroenteritis.

The mechanisms through which reflexology exerts its effects are believed to involve modulation of the autonomic nervous system and enhancement of blood circulation. By stimulating specific reflex points, reflexology may help reduce stress and promote relaxation, thereby contributing to a decrease in nausea and vomiting (Nguyen et al., 2016). Additionally, the relaxation response induced by reflexology can improve overall comfort during illness, which is crucial for pediatric patients who may experience heightened anxiety related to their symptoms.

The integration of complementary therapies like reflexology into conventional pediatric care reflects a growing recognition of holistic approaches to health management. As noted by Sudarwati et al. (2019), combining reflexology with other non-pharmacological interventions can enhance treatment outcomes for children suffering from gastrointestinal disorders. This approach not only addresses physical symptoms but also supports emotional well-being.

In comparison to other complementary therapies such as pediatric massage, reflexology has shown similar benefits in managing gastrointestinal symptoms. A study published by Zhang et al. (2020) indicated that pediatric massage significantly reduced diarrhea incidence among infants and children under five years old. This suggests that both therapies can be effective alternatives or adjuncts to traditional pharmacological treatments.

The acceptance of reflexology among pediatric patients and their families is another critical factor influencing its implementation in clinical settings. Research indicates high acceptance rates for complementary therapies among pediatric populations, suggesting that parents are open to integrating such interventions into their children's care plans (Hassan et al., 2019). This acceptance can facilitate adherence to treatment protocols that include reflexology as a complementary strategy.

Despite the promising findings, there are challenges associated with implementing reflexology as a standard practice in pediatric care. The existing literature often suffers from small sample sizes or methodological limitations that hinder the ability to draw definitive conclusions about its efficacy (Kemenkes RI, 2018). Future research should focus on larger-scale studies with rigorous methodologies to validate the effectiveness of reflexology in this context.

As interest in complementary therapies continues to grow, it is essential for healthcare professionals to remain informed about available options for managing pediatric health issues. Reflexology presents an opportunity for enhancing patient care while minimizing reliance on pharmacological treatments. Continued exploration into its efficacy will contribute significantly to improving health outcomes for vulnerable populations.

Conclusion

Reflexology emerges as a valuable complementary therapy for reducing nausea and vomiting symptoms in pediatric patients with diarrhea. The integration of this therapy into clinical practice offers a holistic approach that prioritizes patient comfort and well-being. By fostering collaboration between conventional medicine and complementary therapies like reflexology, healthcare providers can create more comprehensive care strategies tailored to the unique needs of pediatric patients.

Healthcare providers should consider integrating this approach while continuing to build stronger evidence through rigorous research methodologies. As interest in complementary therapies continues to grow among healthcare providers and patients' families, reflexology offers a promising avenue for holistic pediatric care that addresses not only the physical symptoms but also promotes overall comfort and well-being during illness.

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