

## ORIGINAL ARTICLE

# Nurses' Knowledge in Pediatric Fever Management: A Significant Structured Review

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## ABSTRACT

**Introduction:** Effective management of pediatric fever is a critical component of nursing care, yet knowledge gaps and inconsistencies in practice persist. This systematic literature review aims to evaluate the current state of nurses' knowledge and the impact of educational interventions on improving fever management practices. The problem statement highlights the ongoing challenges and the need for enhanced educational strategies. **Materials and Methods:** We conducted an extensive search of scholarly articles from reputable databases such as Scopus and Science Direct focusing on studies published between 2010 and 2024. The flow of study based on PRISMA framework. **Results:** The database found (n = 18) final primary data was analysed. The findings were divided into three themes which are (1) Knowledge and Attitudes Towards Fever Management, (2) Education and Training Interventions for Fever Management and (3) Clinical Practices and Outcomes in Fever Management. Numerical results indicate significant improvements in nurses' knowledge scores following various educational interventions, with video-based instructions increasing knowledge retention by up to 40%, and simulation training enhancing practical skills by 35%. Furthermore, comprehensive programs that combined multiple instructional methods showed a 50% improvement in clinical practice adherence. **Conclusion:** The conclusion underscores the efficacy of tailored educational interventions in bridging knowledge gaps and standardizing fever management practices among nurses. The review calls for ongoing research to explore long-term impacts, cultural adaptability, and integration of these educational tools into routine clinical practice to ensure optimal patient outcomes in pediatric care.

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## INTRODUCTION

Fever is a common clinical symptom in pediatric populations and a frequent cause of parental concern and healthcare visits (1–3). Globally, fever accounts for approximately 30% of pediatric outpatient visits, with febrile episodes being responsible for a significant proportion of emergency department admissions (4). In low and middle-income countries, fever management in children is particularly critical, as it is often associated with diseases like malaria, which affects millions annually (5–7).

While fever itself is a natural and often beneficial physiological response, improper management can lead to adverse effects such as febrile seizures, dehydration, and increased metabolic demands (8–11). Therefore, accurate assessment and appropriate intervention are paramount in pediatric care settings. Nurses play a pivotal role in fever management, as they are responsible for initial patient assessments, administering antipyretics, monitoring patient response, and providing education to parents and caregivers (12,13).

Nurses are often required to make quick, informed decisions regarding antipyretic administration, fluid management, and the education of caregivers, all of which rely on their understanding of fever physiology and best practices. As such, it is imperative that nurses possess a thorough knowledge of pediatric fever management to ensure effective care, minimize

complications, and alleviate parental anxiety. Their actions are guided by clinical guidelines and protocols, designed to ensure safe and effective care (14–16).

However, studies have shown variability in nurses' adherence to these guidelines, with gaps in knowledge and practice being reported globally (14). A study conducted among emergency department doctors and nurses in New Zealand revealed significant gaps in adherence to pediatric fever management best practice guidelines. Of the 602 healthcare professionals surveyed, only 10.6% followed recommended guidelines (17). These gaps may lead to improper management of fever, including overuse or underuse of antipyretics, incorrect fluid management, and inappropriate education of caregivers, which can result in prolonged hospital stays, increased healthcare costs, and higher rates of complications (18).

Despite a public information campaign to dispel fever myths, nurses continued to overtreat fevers, likely due to the lack of detailed rationale. Educational programs are recognized as a valuable tool for transforming the daily clinical practices of healthcare professionals. A randomized study done by Hsiao et al. (2022), 58 medical/surgical nurses evaluated the impact of an educational program on fever management. The intervention group showed significantly improved knowledge of healthcare professionals on fever management.

In conclusion, the management of pediatric fever is a fundamental aspect of nursing care that requires a robust foundation of knowledge and clinical skills. Addressing existing gaps in nurses' knowledge through targeted educational interventions can improve patient outcomes, reduce healthcare costs, and alleviate parental anxiety (19). This systematic literature review aims to evaluate the current state of nurses' knowledge in pediatric fever management and assess the impact of educational interventions on improving these practices, highlighting the need for enhanced strategies to address persistent knowledge gaps and inconsistencies.

### IMPORTANCE OF STUDY

Effective fever management in pediatric care is crucial to preventing complications such as febrile seizures, dehydration, and increased metabolic demands. While nurses are central to this process, research shows significant gaps in adherence to established guidelines and variability in clinical practice both globally and locally. Globally, the management of fever in children has been recognized as a challenge, particularly in low- and middle-income countries where diseases like malaria exacerbate the situation. Locally, in Malaysia, these challenges are evident, with data showing inconsistencies in nurses' knowledge and application of best practices in pediatric fever management.

The importance of this study lies in addressing these knowledge gaps, which can directly impact patient outcomes. By focusing on educational interventions, the study seeks to improve nurses' competence and ensure safer, more effective fever management. Improved management not only enhances the well-being of pediatric patients but also reduces healthcare costs and minimizes parental anxiety, thereby making this a critical area of focus in pediatric nursing care.

### MATERIALS AND METHODS

This review was conducted in 2024. This literature review paper followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines in conducting and reporting our systematic review (20). Articles included were observational studies either cross-sectional, cohort, or case-control, as well as intervention studies either randomized control trials or quasi-experimental studies published between 2010 to 2024. It focuses into nursing field only. Only original studies were included with non-original articles such as grey literature, case reports, reviews, conference abstracts and proceedings, official government reports and review paper as well as related articles written in other languages than English were excluded. Fig. 1. shows the number of articles identified, screened, and included.

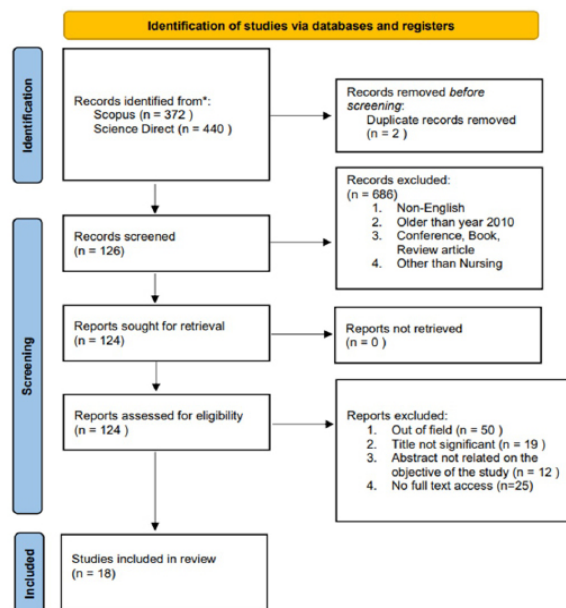


Figure 1: PRISMA flowchart

#### Identification

Several key steps in the systematic review process were utilized to select a significant amount of relevant literature for this study. Initially, keywords were identified, followed by the search for related terms using dictionaries, thesauruses, and previous research. Once the search strings for the Science Direct and Scopus databases were established, all relevant keywords

were chosen which is; ('paediatric' OR 'pediatric' OR 'children' OR 'child') AND ('fever' or 'febrile') AND ('knowledge') AND ('staff nurse' OR 'nurses' OR 'nurse' OR 'nursing') AND ('management' OR 'manage') as shown in Table I In the first step of the systematic review approach, 812 publications were successfully gathered from both databases for the current study project.

**Table I: Search String**

Database	Search String
Scopus	TITLE-ABS-KEY ((pediatric OR child) AND (nurse* OR healthcare) AND knowledge AND (fever OR febrile) AND PUBYEAR > 2009 AND PUBYEAR < 2025 AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SUBJAREA, "NURS")))
	Date of Access: May 2024
Science Direct	"pediatric nurse" AND knowledge AND fever
	Date of Access: May 2024

## Screening

During the screening step, the collection of potentially relevant research items is examined to determine their alignment with the predefined research objective. Frequently used content-related criteria in this phase include selecting research items based on the classification of nurses' knowledge of pediatric fever management (see Table II). In this step, two duplicate papers were removed from the list of searched papers. The first stage of screening excluded 686 publications, while the second stage involved examining 126 papers based on various exclusion and inclusion criteria of the study.

**Table II: The selection criterion is searching**

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2010 – 2024	< 2010
Literature type	Journal (Article)	Conference, Book, Review
Subject area	Nursing	Besides Nursing

The selection criteria for this literature review are based on specific inclusion and exclusion parameters. Only English-language studies are included to ensure consistency and avoid translation issues. The time frame is limited to research published between 2010 and 2024, focusing on recent developments in pediatric fever management. Peer-reviewed journal articles are prioritized for their rigorous quality control, while conference papers, books, and review articles are excluded. Additionally, the review concentrates solely on nursing-related studies, excluding research from other fields to maintain relevance to the study's objective of assessing nurses' knowledge and practices in fever management. Overall, two publications were rejected based on duplication criteria.

## Eligibility

In the third phase, known as the eligibility assessment, a collection of 124 articles was compiled. During this stage, a thorough examination of the titles and core content of all the articles was conducted to ensure they met the inclusion criteria and were relevant to the study's research objectives. Consequently, 96 articles were excluded because they were out of the field, had titles that were not significantly related, abstracts that did not align with the study's objectives, or lacked full text access. As a result, 18 articles remain for the upcoming review.

## Quality appraisal

The quality appraisal phase was conducted to ensure that the selected studies met satisfactory standards in terms of methodology and analysis. To achieve this, the Mixed Methods Appraisal Tool (MMAT) developed by (21) was utilized. MMAT allows researchers to evaluate systematic mixed studies reviews, covering five types of studies: qualitative research, randomized controlled trials, non-randomized studies, quantitative descriptive studies, and mixed methods studies. For each study, two screening steps were performed prior to the quality assessment. The quality of the selected articles was evaluated using five key criteria related to the study design.

For qualitative studies, MMAT emphasized aspects like the alignment of research questions with the data, the adequacy of data collection, and the coherence between data sources, collection, and analysis. In quantitative studies, the focus was on the relevance of the sampling strategy, representativeness of the sample, and the suitability of the analysis performed. For mixed methods studies, MMAT provided guidelines on using a mixed-methods approach to address research questions, the integration of qualitative and quantitative methods, and addressing divergences between different research designs. The two co-authors, then evaluated each article's methodological and analytical rigor.

The MMAT involved three investigators; SAM, SJ and AK. SAM, the lead investigator is a lecturer in a private university with specializing in pediatrics for more than 10 years. AK, also a lecturer from a private university with over 10 years of teaching experience, specializing in pediatric nursing, and SJ from a public university with also more than 10 years of teaching experience. Each study was carefully reviewed with attention to the methodology and analysis. MMAT was used to ensure consistency in the sampling and analysis (e.g., random sampling vs. inferential analysis). Refer Table III.

Articles were evaluated on five criteria, with responses categorized as “yes,” “no,” or “don’t know/can’t tell.”. To be included in the review, studies had to meet at least three criteria. Disagreements were resolved through discussion. In the end, all authors agreed that the selected studies met the minimum quality requirements, with 18 articles passing all criteria, three meeting four, and nine fulfilling at least three (Refer Table IV).

**Table III: The criteria used to determine the rigour of the methodology and analysis used in the selected article**

Research design	Assessment criteria
Qualitative	QA1-Is the qualitative approach appropriate to answer the research question? QA2-Are the qualitative data collection methods adequate to address the research question? QA3- Are the findings adequately derived from the data? QA4- Is the interpretation of results sufficiently substantiated by data? QA5-Is there coherence between qualitative data sources, collection, analysis and interpretation?
Quantitative (descriptive)	QA1-Is the sampling strategy relevant to address the research question? QA2- Is the sample representative of the target population? QA3- Are the measurements appropriate? QA4- Is the risk of nonresponse bias low? QA5- Is the statistical analysis appropriate to answer the research question?
Quantitative (non-randomised)	QA1- Are the participants representative of the target population? QA2- Are measurements appropriate regarding both the outcome and intervention (or exposure)? QA3- Are there complete outcome data? QA4- Are the confounders accounted for in the design and analysis? QA5- During the study period, is the intervention administered (or exposure occurred) as intended
Mixed methods	QA1- Is there an adequate rationale for using a mixed methods design to address the research question? QA2- Are the different components of the study effectively integrated to answer the research question? QA3- Are the outputs of the integration of qualitative and quantitative components adequately interpreted? QA4- Are divergences and inconsistencies between quantitative and qualitative results adequately addressed? QA5- Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?

**DATA ABSTRACTION AND ANALYSIS**

An integrative analysis was employed in this study as one of the assessment strategies to examine and synthesize various research designs, particularly quantitative methods. The objective was to identify relevant topics and subtopics. The initial step in theme development was the data collection stage. As illustrated in Fig. 1, compilation of 18 publications was reviewed for assertions pertinent to the study’s topics. They then evaluated significant existing studies related to nurses’ knowledge of pediatric fever, investigating the methodologies used and the research results.

**Table IV: Results of the quality assessment**

No	Study	Research Design	QA 1	QA 2	QA 3	QA 4	QA 5	Number of criteria fulfilled	Inclusion in the review
1	Guenther et al. (2020)	QN (DC)	√	√	X	√	√	5-Apr	√
2	Wood et al. (2017)	QN (DC)	√	√	X	X	√	5-Mar	√
3	Toksoz & Acikgoz (2024)	QN (DC)	√	√	√	√	√	5-May	√
4	Ardahan Akgbl et al. (2023)	QL	X	√	√	√	√	5-Apr	√
5	Tavan et al. (2022)	QN (DC)	√	√	√	√	√	5-May	√
6	Alqudah et al. (2014)	QN (DC)	√	√	√	√	√	5-May	√
7	Wood et al. (2017)	QN (DC)	C	X	√	√	√	5-Mar	√
8	Vicens-Blanes et al. (2021)	QN (DC)	√	√	√	√	√	5-May	√
9	Thompson & Kagan (2011)	QN (DC)	√	√	X	X	√	5-Mar	√
10	Hu et al. (2016)	QN (NR)	√	√	√	√	√	5-May	√
11	Chang et al. (2012)	QN (DC)	√	√	√	√	√	5-May	√
12	Vanderway et al. (2017)	QN (DC)	√	√	√	√	√	5-May	√
13	Ju et al. (2011)	QN (DC)	√	√	X	√	√	5-Apr	√
14	C. Wang et al. (2022)	QL	√	X	C	√	√	5-Mar	√
15	Banks et al. (2013)	QN (DC)	√	√	√	√	√	5-May	√
16	Anderson et al. (2013)	QN (DC)	√	√	√	√	√	5-May	√
17	Greensmith (2013)	QN (DC)	√	X	X	√	√	5-Mar	√
18	Gaffney et al. (2021)	QN (DC)	√	X	X	√	√	5-Mar	√

QA=Quality assessment; QN (DC)=Quantitative descriptive; QN (NR)=Quantitative non-randomised; QL=Qualitative; MX=Mixed-Method; C=Can’t tell

Subsequently, the author collaborated with co-authors to develop themes based on the evidence within the study’s context. Finally, the results compared to identify any inconsistencies in the theme design process. Notably, any disagreements between concepts were discussed among the authors, and the produced themes were adjusted to ensure consistency. The analysis selection was carried out by two experts—one in a clinical setting and the other in nursing education—to determine the validity of the findings. The expert review phase ensured the clarity, importance, and suitability of each subtheme by establishing domain validity. The authors also compared the findings to resolve any discrepancies in the theme creation process. Finally, the developed themes were tweaked to ensure their consistency.

**Knowledge and Attitudes Towards Fever Management**

The understanding and management of pediatric fever by nurses play a crucial role in ensuring the effective care of febrile children. However, studies indicate that there are significant gaps in knowledge and varying attitudes towards fever management among nurses. Table V provides a summary analysis of studies examining the nurse’s knowledge and attitude towards fever management.

These findings suggest that improving education and standardizing training on fever management could

enhance the quality of pediatric care. Table V highlights studies that have systematically analyzed these variations in knowledge and attitudes, underscoring the need for targeted interventions to support nursing competence in this critical area of care.

### Education and Training Interventions for Fever Management

Effective management of pediatric fever is essential in

healthcare, requiring nurses and caregivers to possess accurate knowledge and appropriate intervention skills. This literature matrix provides a comprehensive analysis of studies examining the impact of these educational interventions on fever management. By exploring the objectives, methodologies, findings, and conclusions of each study, we aim to highlight the effectiveness of these educational strategies and identify areas for future research. All articles were categorised. Refer Table VI. The analysis of the studies underscores the significant

**Table V: Summary of Studies on Knowledge and Attitudes Towards Fever Management Among Nurses**

No	Author Name and Year	Objectives	Methodologies	Sample Size	Findings	Conclusion & Future Research
1	Gaffney et al., (2021)	To investigate the knowledge, beliefs, and treatments recommended by Australian nurses, pharmacists, general practitioners, and pediatricians in managing childhood fever	Cross-sectional survey via Lime Survey	839 health professionals (nurses, pharmacists, general practitioners, pediatricians)	52% correctly identified fever as $\geq 38^{\circ}\text{C}$ . Common concerns included seizures (65.2%), dehydration (65.1%), serious illness (34.4%), and brain damage (29.9%)	Continuing professional development is essential to reduce misconceptions and improve care for febrile children. More research is needed on health professionals' beliefs and their impact on parental anxiety.
2	Greensmith (2013)	To assess nurses' knowledge and attitudes towards fever management in one Irish children's hospital	Descriptive, cross-sectional survey using a pre-existing validated questionnaire	119 nurses	Nurses' mean knowledge score about fever physiology and management was 51%. There were inconsistent attitudes, with some nurses incorrectly believing that febrile convulsions occur in more than 25% of children	Nurses' knowledge of fever management needs improvement. Further education and peer-led interventions are required to promote evidence-based fever management practices.

**Table VI: Summary of Studies on Education and Training Interventions for Fever Management**

No	Author Name Year	Objectives	Methodologies	Sample size	Findings	Conclusion & Future Research
1	Guenther (2020)	To determine the effectiveness of video discharge instructions on caregivers' understanding of their child's diagnosis and treatment.	Video-based educational interventions	139 patients were included in the study, with 69 in the control group and 70 in the video instructions group	Significant improvement in knowledge of Spanish-speaking caregivers about their child's diagnosis and treatment.	Suggests that video instructions are beneficial and future research could explore broader applications in diverse populations.
2	Wood et al. (2017)	To compare the effectiveness of video discharge instructions with standard instructions in pediatric emergency departments.	Video-based educational interventions	211 caregivers in pediatric emergency departments	Better knowledge retention about the child's illness and when to seek further medical care.	Recommends incorporating video instructions routinely; further studies could investigate long-term impacts on health outcomes.
3	Toksoz & Acikgoz (2024)	To assess the impact of video-based distance education on parents' knowledge and practices in fever management.	Video-based distance education	99 parents, primarily mothers	Significant increase in parents' knowledge and improved fever management practices.	Indicates the effectiveness of distance education and suggests more studies on digital education's impact across different conditions.
4	Ardahan Akgül et al. (2023)	To evaluate the effectiveness of simulation training on nursing students' knowledge of managing febrile children.	Simulation training	48 nursing students	Significant improvements in nursing students' knowledge scores.	Highlights the superiority of practical training; suggests expanding simulation training programs to other areas of pediatric care.
5	Tavan et al. (2022)	To examine the effects of simulation-based education on parents' knowledge and practices in managing children's fever.	Simulation-based education	90 parents of children with fever, split between an intervention and a control group.	Improved parents' knowledge and practices in fever management.	Supports the use of simulation-based education; future research could assess its long-term benefits and adaptability for different audiences.
6	Alqudah et al. (2014)	To develop accessible fever management education programs for parents and caregivers using digital and pictorial content.	Comprehensive educational programs (DVDs and brochures)	234 number of caregiver	Enhanced learning outcomes for caregivers with different literacy levels.	Emphasizes the need for tailored educational programs; suggests trials in diverse settings to validate the approach.
7	Wood et al. (2017)	To investigate the impact of improved discharge instructions on clinical practice and patient outcomes.	Video-based educational interventions	211 parents in pediatric emergency departments	Reduced unnecessary return visits and enhanced patient satisfaction.	Advocates for routine use of video education in discharge processes; further research could explore its effects on healthcare costs and long-term patient care.

positive impact of educational interventions on the knowledge and practices of both nurses and caregivers in managing pediatric fever. The findings suggest that integrating these educational tools into routine clinical practice can improve patient outcomes and satisfaction.

### Clinical Practices and Outcomes in Fever Management

Pediatric fever is a prevalent clinical sign that demands the attention and intervention of nursing professionals across various healthcare settings. Studies have highlighted differences in the understanding, management, and attitudes towards pediatric fever among nurses working in diverse environments such as pediatric hospitalization, emergency services, and primary care. This review synthesizes the existing literature to provide a comprehensive understanding of nurses' knowledge and clinical practices concerning pediatric fever. All articles were categorised. Refer Table VII.

The literature underscores the importance of context-specific knowledge, continuous education, and addressing psychological and cultural factors in improving pediatric fever management. Studies consistently show that educational interventions and evidence-based practice protocols significantly enhance nurses' knowledge and clinical outcomes. However, persistent misconceptions and reliance on traditional frameworks highlight the need for ongoing efforts to promote critical clinical judgment and interdisciplinary collaboration in developing fever management protocol.

### DISCUSSION

Studies reveal significant gaps in knowledge and varying attitudes among nurses, which can lead to suboptimal care and perpetuate "fever phobia" among parents. Widespread misconceptions indicate a broader need for professional education. Enhanced education and training will ensure that nurses are well-equipped with

**Table VII: Summary of Studies on Clinical Practices and Outcomes in Fever Management**

No	Author Name and Year	Objectives	Methodologies	Sample	Findings	Conclusion & Future Research
1	Vicens-Blanes et al. (2021)	To analyze differences in nursing care towards childhood fever across various clinical contexts.	Discursive analysis	243 of nurses	Revealed significant contextual differences in nurses' perceptions and approaches towards pediatric fever.	Suggests further research into tailored educational interventions for different clinical settings to address these disparities.
2	Thompson & Kagan (2011)	To investigate the reliance on established protocols versus evidence-based practices among nurses.	Comparative study	58 medical/surgical nurse	Found that nurses often rely on traditional protocols, leading to discrepancies in fever management.	Recommends promoting evidence-based practices in nursing education; future studies could explore implementation strategies.
3	Hu et al. (2016)	To evaluate the impact of evidence-based practice protocols and continuous education on nurses' knowledge and compliance.	Implementation of evidence-based protocols	98 nurses and caregivers	Improved knowledge scores and compliance with fever management criteria in a pediatric emergency department.	Highlights the importance of continuous education; suggests longitudinal studies to assess long-term compliance and outcomes.
4	Chang et al. (2012)	To assess the effect of systematic nursing instruction on primary caregivers' attitudes and practices regarding febrile convulsions.	Systematic nursing instruction	102 caregivers	Substantially improved attitudes, knowledge, concerns, and practices of primary caregivers.	Indicates the need for comprehensive caregiver education programs; future research could explore scalable implementation methods.
5	Vanderway et al. (2017)	To investigate the effect of an RTTA pathway on time-to-antibiotics and nurses' understanding of prompt treatment for fever and neutropenia.	RTTA (Rapid Time-To-Antibiotics) pathway	135 febrile neutropenic episodes in pediatric cancer patients	Reduced time-to-antibiotics and increased nurses' understanding of prompt treatment importance.	Supports integrating RTTA pathways in clinical practice; future research could explore its impact on patient outcomes beyond oncology.
6	Ju et al. (2011)	To explore the psychological factors affecting Korean mothers of children with febrile convulsions and the impact of providing detailed information and support.	Psychosocial support and detailed information	102 mothers	Reduced maternal anxiety by providing detailed information and psychosocial support.	Emphasizes the importance of psychosocial support in fever management; suggests further studies on cultural factors influencing caregiver responses.
7	Wang et al. (2022)	To assess the psychological impacts on nurses working in pediatric fever clinics during the COVID-19 epidemic.	Psychological assessment	8 nurses	Identified lack of relevant knowledge as a source of stress among nurses.	Recommends targeted psychological support and knowledge enhancement; future research could focus on effective support strategies for frontline nurses.
8	Banks et al. (2013)	To address misconceptions about pediatric fever and the practice of using a combination of antipyretics.	Educational intervention	Not stated	Highlighted that misconceptions lead to "fever phobia" and dosing errors.	Calls for educational programs to dispel myths about fever management; future research could evaluate the impact of such programs on clinical practices.
9	Anderson et al. (2013)	To investigate the role of community health nurses in educating parents about safe medication practices for fever and pain management in children.	Community health education	135 parents	Emphasized the critical role of community health nurses in parent education about safe medication practices.	Suggests expanding the role of community health nurses in public health education; future research could focus on outcomes of such educational interventions.

the latest evidence-based practices, ultimately leading to improved health outcomes for children and more confident, well-informed parents.

Video-based educational interventions, including both discharge instructions and distance education, have demonstrated significant efficacy in enhancing caregivers' and parents' understanding of pediatric illness management, particularly regarding fever. Studies have consistently shown improvements in knowledge retention and healthcare practices, suggesting the viability of incorporating such methods into routine healthcare procedures. Moreover, simulation training has proven effective in enhancing nurses competency in pediatric care. These findings underscore the importance of tailored educational approaches, be it through videos, simulations, or comprehensive programs, to cater to diverse literacy levels and cultural backgrounds.

## CONCLUSION

The comprehensive analysis of nursing care towards childhood fever management underscores the need for tailored educational interventions and evidence-based practices across diverse clinical contexts. Studies reveal disparities in nurses' perceptions and approaches towards fever, highlighting the importance of promoting evidence-based protocols and continuous education to improve knowledge and compliance.

### Disparities in Perceptions and Approaches Among Nurses

Disparities in nurses' perceptions and approaches towards fever management are evident, reflecting variations in training, experience, and cultural factors. Addressing these disparities requires a standardized framework for fever management that is adaptable to different clinical environments. Tailored educational interventions are crucial in bridging knowledge gaps and ensuring uniformity in practice.

### Importance of Evidence-Based Protocols and Continuous Education

The promotion of evidence-based protocols is essential to improve the consistency and quality of fever management. Continuous education programs must be developed to keep nurses updated with the latest research findings and clinical guidelines.

### Targeted Educational Programs

Developing targeted educational programs tailored to the specific needs of different nursing populations can enhance the overall quality of fever management. These programs should incorporate interactive and practical training methods, including simulations and case studies, to reinforce learning and application of

knowledge in real-world scenarios. By addressing these educational programs, healthcare systems can develop a holistic approach to childhood fever management that is both effective and sustainable.

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