

BACKGROUND

Fever is the most common reason infants and children are brought to the Quick Care clinic for evaluation. Misconceptions and fears based on fever phobia among parents can lead to an aggressive and dangerous practice, including over- and under-dosing with antipyretics (Patricia, 2014). There is a need for providers, nurses, and parents to understand common misconceptions regarding fever to promote safe and evidence-based practice (EBP) for fever management in pediatric patients.

PURPOSE

This project aims to ensure the provision of quality care to pediatric patients in Quick Care by summarizing the literature on current EBP on antipyretic use for pediatric patients. It also aims to educate staff and parents on best practice guidelines to address inconsistent treatment approaches and fever phobia.

METHODS

A systematic review of the literature using numerous search terms (ex. nursing, fever, pediatrics, urgent care) in PUBMED and CINAHL. Our group reviewed 12 articles and references regarding fever management among pediatric patients. All articles underwent a title, abstract, and full-text screening for relevance to the practice question.



RESULTS

The recommended oral dosage for acetaminophen for children and adolescents is 10 to 15 mg/kg every four to six hours. Liver and kidney failure are potential adverse effects of acetaminophen overused in children (Cooper et al., 2017). The recommended daily oral dose of ibuprofen is 10 mg/kg every 8 hours, and the cumulative dose should not exceed 30 mg/kg in 24 hours. Ibuprofen should not be taken on an empty stomach. The most frequent adverse reactions include gastrointestinal bleeding, acute kidney injury, and asthma exacerbation (de Martino et al., 2017). Encouraging parents to alternate doses of acetaminophen and ibuprofen can lead to confusion and a potential overdose. No evidence in the medical literature supports that alternating ibuprofen and acetaminophen effectively reduce fever and pain (Wong et al., 2014). Evidence consistently shows that antipyretics administration does not prevent febrile seizures (Fetveit, 2008). Relieving discomfort, avoiding dehydration, and observing the child for signs of serious illness should focus on fever management on a child (Crocetti & Serwint, 2005).

CONCLUSIONS

Based on the EBP research articles, the recommendations include standardization in fever management in the Quick Care centers, such as using a single antipyretic medication and ensuring that the child receives an age-appropriate, therapeutic, and safe dose. Aside from relieving discomfort and avoiding dehydration, the nurse should educate parents about warning signs to observe in a child with fever, such as difficulty breathing, rash, decreased urination, diarrhea, or blood in the stool (Crocetti & Serwint, 2005).

REFERENCES

- Cooper, T. E., Fisher, E., Anderson, B., Wilkinson, N. M., Williams, D. G., & Eccleston, C. (2017). Paracetamol (acetaminophen) for chronic non-cancer pain in children and adolescents. *The Cochrane database of systematic reviews*, 8(8), CD012539. <https://doi.org/10.1002/14651858.CD012539.pub2>
- De Martino, M., Chiarugi, A., Boner, A., Montini, G., & De' Angelis, G.L. (2017). Working towards an appropriate use of ibuprofen in children: An evidence-based appraisal. *Drugs*, 77(12), 1295–1311. <https://doi.org/10.1007/s40265-017-0751-z>
- Fetveit A. (2008). Assessment of febrile seizures in children. *European Journal of pediatrics*, 167(1), 17–27. <https://doi.org/10.1007/s00431-007-0577-x>
- Patricia C. (2014). Evidence-based management of childhood fever: what pediatric nurses need to know. *Journal of pediatric nursing*, 29(4), 372–375 <https://doi.org/10.1016/j.pedn.2014.02.007>
- Wong, T., Stang, A. S., Ganshorn, H., Hartling, L., Maconochie, I. K., Thomsen, A. M., & Johnson, D. W. (2014). Cochrane in context: Combined and alternating paracetamol and ibuprofen therapy for febrile children. *Evidence-based child health. A Cochrane review journal*, 9(3), 730–732. <https://doi.org/10.1002/ebch.1979>

