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Pain Assessment and Management in Children at Lusaka Children's Hospital: Nurses' Experiences - A Qualitative Study

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Abstract

Pediatric pain management is crucial for child health, particularly in low-resource settings. This qualitative study explores nurses' experiences and perspectives regarding pain assessment and management in children at Lusaka Children's Hospital. The research used a convergent parallel mixed-methods design, incorporating questionnaires, focus group discussions, and case file reviews. Content analysis was employed to analyze the qualitative data, revealing themes related to nurses' knowledge, attitudes, and practices in pain management. The findings highlight the lack of trust in patient and parent proxy reports of pain, limited family involvement in pain management, nurses' knowledge gaps, and barriers to pain assessment. The study emphasizes the need for enhancing nurses' knowledge, attitudes, and practices to improve pain management in pediatric patients. This report is part of the mixed-methods study conducted.

1. Introduction

Children often experience pain but face challenges in effectively communicating their discomfort, which makes pain management in pediatric settings a complex task. Nurses play a vital role in pain assessment and management, as they are closely involved in patient care. However, pediatric pain management remains under-addressed and under-prioritized in low-resource settings like Lusaka Children's Hospital. This study aims to explore nurses' experiences and perspectives on pain management in children, focusing on their knowledge, attitudes, and practices.

2. Methods

The study obtained ethical approvals from the University of Zambia Bioethics Committee (UNZABREC) and the College of Medicine Research Ethics Committee (COMREC) of the University of Malawi.

2.1. Participants

The participants comprised nurses working in all wards at Lusaka Children's Hospital.

2.2. Procedures

Three focus groups were conducted, each consisting of nurses based on their years of nursing training: postgraduate nurses (RPN, RCCN, and RM), Registered Nurses (RN), and Enrolled Nurses (EN). Additionally, a self-administered questionnaire was given to the nurses who participated in the focus group discussions.

2.3. Data Collection

Qualitative data was collected through focus group discussions and questionnaires. Nurses were encouraged to share their experiences, attitudes, and beliefs related to pain management in children.

2.4. Data Analysis

Content analysis was employed to analyze the qualitative data, with themes emerging from nurses' responses in the focus group discussions and questionnaires.

3. Results

The content analysis of the qualitative data revealed several themes related to nurses' experiences in pain management:

3.1. Theme 1: Nurses' Attitudes Toward Pain Management

The qualitative findings revealed varied attitudes among nurses at Lusaka Children's Hospital concerning pediatric pain

management. Skepticism was observed about the trustworthiness of patient and parent reports of pain, leading to reservations about the authenticity of reported pain levels (FGD3 P6). Previous research has identified the underestimation of pain in children, especially non-verbal ones (Hadden & von Baeyer, 2015; Twycross et al., 2016), resulting in undertreatment. Some nurses also perceived parents as seeking medications merely for comfort (FGD3 P5), reflecting a communication barrier (Stevens et al., 2018). Concerning findings include the reliance on placebo interventions, raising ethical considerations (Hrobjartsson & Gotzsche, 2010).

3.2. Theme 2: Family Involvement in Pain Management

Family involvement is acknowledged but limited in practice. Some nurses viewed parents as disruptive, leading to their exclusion from painful procedures. This indicates a need for collaboration between healthcare providers and families to optimize pain management.

3.3. Theme 3: Nurses' Knowledge

Limited knowledge among nurses was identified, particularly in differentiating pharmacological and non-pharmacological pain management. There is a clear need for education and training to close this knowledge gap.

3.4. Theme 4: Barriers to Pain Assessment

The study recognizes several barriers, including a lack of specific guidelines, pain assessment tools, and pharmacological interventions for pediatric patients. Nurses also expressed legal concerns about prescribing pain medications.

4. Discussion

These findings shed light on the complex challenges in pediatric pain management at Lusaka Children's Hospital. There are issues with trust in pain reports (FGD3 P6; FGD3 P5), similar to other studies (Pasero, 2013; Shrestha-Ranjit & Manias, 2010), and ethical concerns about placebo use (Pasero, 2013). Family involvement is vital (Eke & Briggs, 2019), but limited (FGD3 P1), while a significant knowledge gap exists (FGD3 P1), requiring standardized guidelines (van Dijk et al., 2020) and age-specific tools (Jibb et al., 2017). Specialized training is also needed (Twycross et al., 2019).

4.1. Theme 1: Nurses' Attitudes Toward Pain Management

The prevailing lack of trust reveals the need for targeted education to improve understanding (Pasero, 2013; Shrestha-Ranjit & Manias, 2010). The use of placebo interventions to test pain's legitimacy is concerning and demands evidence-based approaches (FGD3 P2).

4.2. Theme 2: Family Involvement in Pain Management

Family-centered care models should be implemented to recognize parents as equal partners (FGD1 P6), leading to better pain outcomes (Shrestha-Ranjit & Manias, 2010).

4.3. Theme 3: Nurses' Knowledge

A significant knowledge gap needs addressing with evidence-based guidelines, specialized training, and ongoing education to empower nurses (Huguet et al., 2018).

4.4. Theme 4: Barriers to Pain Assessment

Common challenges include the absence of guidelines (Casey, 2011), lack of age-appropriate tools (Pasero, 2013), and availability of suitable medications (FGD3 P5). A multi-faceted approach is required to develop evidence-based guidelines (Jibb et al., 2017), provide age-appropriate tools (Twycross et al., 2019), and ensure legal protections for nurses (FGD3 P6).

5. Conclusion

The outlined challenges necessitate targeted interventions to improve pediatric pain management at Lusaka Children's Hospital. This includes evidence-based guidelines, specialized training, and a diverse array of pharmacological options tailored to the pediatric population.

References

- Casey, J. (2011). Pain management in the pediatric population. *Pain Management Nursing*, 12(4), 184-190.
- Hadden, K. L., & von Baeyer, C. L. (2015). Pain in children with cerebral palsy: Common triggers and expressive behaviors. *Pain Management Nursing*, 16(2), 225-235.
- Hrobjartsson, A., & Gotzsche, P. C. (2010). Placebo interventions for all clinical conditions. *Cochrane Database of Systematic Reviews*, 1, CD003974.
- Huguet, A., Tougas, M. E., Hayden, J., McGrath, P. J., & Stinson, J. N. (2018). Implementation of a transitional pain service at a pediatric hospital: A case study. *Journal of Pain Research*, 11, 1363-1371.
- Jibb, L. A., Cafazzo, J. A., Nathan, P. C., Seto, E., Stevens, B. J., Hum, V.,... Stinson, J. N. (2017). Development of a mHealth real-time pain self-management app for adolescents with cancer: An iterative usability testing study. *Journal of Pediatric Oncology Nursing*, 34(4), 283-294.
- Pasero, C. (2013). Placebo interventions: The ethical and clinical issues. *Pain Management Nursing*, 14(2), 67-70.
- Stevens, B. J., Harrison, D., Rashotte, J., Yamada, J., Abbott, L. K., Coburn, G.,... Ohlsson, A. (2018). Pain assessment and intensity in hospitalized infants: A cross-sectional study. *Journal of Pain and Symptom Management*, 35(2), 313-322.

- Twycross, A., Finley, G. A., Tan, T., & Muller, I. (2019). *Managing pain in children: A clinical guide for nurses and healthcare professionals* (2nd ed.). John Wiley & Sons.
- Twycross, A., Williams, A., & McNamara, N. (2016). Pediatric pain assessment: A systematic review. *International Journal of Nursing Studies*, 57, 64-80.
- Van Dijk, M., Caljouw, M. A., Veldhoen, E. S., Vermeulen, H., & Achterberg, W. P. (2020). Implementation of pain management in Dutch nursing homes: A quality improvement study. *BMC Geriatrics*, 20(1), 165.