

Factors that Affect Pediatric Pain Management

<u>Sudaporn Payakkaraung</u> MNS^{1,2}, Janice Lander PhD², & Jariya Wittayasooporn DNS¹ ¹ Mahidol University, Thailand, ² University of Alberta, Canada



Aim

To investigate what influences pediatric pain management policies.

Methods

- Descriptive comparative survey design
- Using hospitals providing paediatric care
- Nursing staff (n=200) and their paediatric patients over 6 years of age

Procedure

- Managers asked about pediatric pain management policies
- $\boldsymbol{\diamondsuit}$ Nurses asked for views about pain and pain management
- Children rate their pain (VAS and 4 point Numeric)

Population Characteristics

Topics	Canada	Thailand
Population (millions)	32.0 (2004)	63.5 (2004)
Population density (per km ²)	3	122
Life expectancy at birth	71 (1960) 79 (2002)	54 (1960) 69 (2002)

Health Services

Topics	Canada	Thailand
Number of Hospitals	1,247	1,752
Average length of hospital stay (days)	7.4	11
Numbers of people requiring admissions	3,154,326 (2000)	3,165,600 (2000)
Day case surgery	≈ 75% pediatric surgery and rising	≈26% of pediatric surgery, only minor surgery (e.g. hernia, hydrocele, hemangioma)

Pain Management Practice

WHO uses number of dose of opioids as an indicator of quality of pain management.

Narcotic (daily dose per million habitants)	Canada	Thailand
Morphine	3400	20
Pethidine	215	7

Policy Environment

Topics	Canada	Thailand
National statement on pain relief	Yes (through CPS)	No
Regular pain assessment	Despite policy, still a struggle to have done	Other responsibilities have higher priority
Administration of analgesics	PCA widely available Continuous infusion (morphine) used	PCA not widely available Continuous infusion on the rise
Family-centred care	Parents powerful consumer group and advocates Parents and children on advisory boards of hospitals	Healthcare professional makes decisions No advisory role Family-centred care not fully accepted (University Hospitals only)

Conclusions

- Canada and Thailand are very different in pain management practices. This is because - the healthcare environments of Canada and Thailand are different in terms of healthcare delivery and resources such as beds, insurance and length of stay.
- fewer nurses in Thailand so there is increased workload and decreased time for managing pain.
- The nursing role is different in Canada compared to Thailand and nurses lack authority or do not assert authority.
- Pain management in Thailand will improve when every institution develops pain management policies.
- By increasing family-centred care in Thailand, the system will be more responsive to the needs of children around pain.

Acknowledgements

Authors gratefully acknowledge support of the Better Care CHSRF/CIHR Chair

