

# Prehospital Analgesia in Children Suffering Traumatic Injury

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## Introduction

Pain causes distress and can negatively impact a child's experience of the hospital environment. It is best practice for pain relief to be administered as soon as possible to reduce stress, anxiety and discomfort. Research has shown that children are at the highest risk of receiving inadequate analgesia.<sup>1</sup> Reasons include difficulty in recognising pain, fear of the side effects of analgesia and reservations about masking symptoms.

**Aim:** To examine analgesia given prehospital and to look at any barriers that prevent appropriate and timely administration.

## Methods

The study included children (<16 years) who presented to the Children's University Hospital Emergency Department (ED) with acute trauma, in May and June 2012.

Pain was evaluated at triage using the Wong-Baker<sup>2</sup> or FLACC pain rating scale (face, legs, activity, crying and consolability).<sup>3</sup> Prehospital analgesia administration was noted and the reason for omission if appropriate.

## Results

200 children aged between 6 months and 15 years presented with acute trauma.

Of the 200 children, only 50 children (25%) had received analgesia prehospital including 10 children who needed additional analgesia in ED.

50 received analgesia of which 28 were ibuprofen, 19 were paracetamol and 3 were other. 150 patients did not receive any analgesia prior to presentation.

50 children had severe pain with pain score of 5 or more, however only 16 of these had received analgesia prehospital.

### Reasons for omission of analgesia:

- Haste to get to hospital (27%)
- Inadequate recognition of pain (27%)
- No medication available (23%)
- Not wanting to mask pain (8%)
- Fearing analgesia would be wrong (2%)
- Wanted to keep the child fasting (2%)
- Hospitals duty (2%)
- Other (9% - child refused in over half of these)

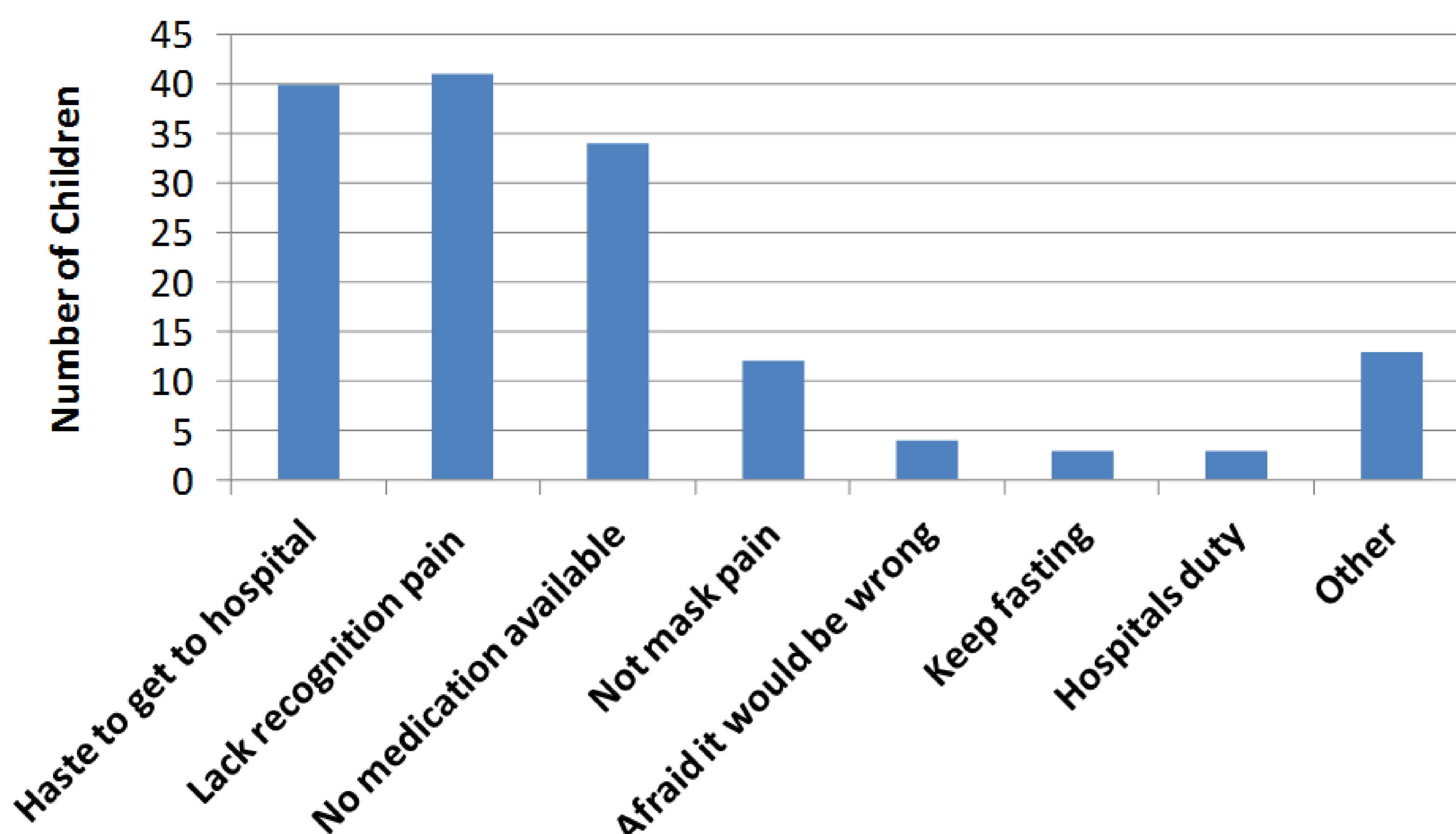
### Injuries involved:

- 80 fractures / dislocations
- 63 soft tissue injuries
- 23 head injuries
- 31 wounds
- 2 burns

### Wong-Baker FACES™ Pain Rating Scale



### Reason for No Prehospital Analgesia



## Conclusion

This study has demonstrated a discrepancy between the prehospital analgesia given and the assessed need. Research has shown that analgesia does not hamper assessment and can make children more comfortable to allow more detailed examinations.

More education is required to help caregivers recognise the signs of pain and the benefits of analgesia.

### References:

1. Relief of Pain and Anxiety in Pediatric Patients in Emergency Medical Systems, Zempsky WT, Cravero JP et al. Pediatrics 2004 Nov ; 114(5):1348.
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3. Merkel S, Voepel-Lewis T & Malviya S. Pain Control: Pain Assessment in Infants and Young Children: The FLACC Scale. American Journal of Nursing 2002 Oct; 102(10):55-58