

# Acute pain management in the cognitively impaired older person - can we do better?

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## Introduction

The timely provision of analgesia is an important aspect of emergency care and one of the key quality indicators of emergency care. International research has identified that between 50% and 80% of patients in an Emergency Department (ED) present with a complaint of pain.

## Background

Older persons who present to the ED often experience a delay to analgesia. While older people are disproportionately high users of ED services and often present with pain, the timely delivery of analgesics is often compromised in the ED environment. This study explores the Time to Analgesia for cognitively impaired and cognitively intact older people diagnosed with a long bone fracture.

## Aim

To determine the impact of cognitive impairment on time to analgesia and whether the use of an observational pain assessment tool can improve the delivery of analgesics.

## Method

The findings being presented are part of a program of research exploring pain management practices for older persons with long bone fractures. The first study was conducted across four metropolitan emergency departments of older patients (>64years) with long bone fractures, and comprised a 12-month randomised medical record audit (n=255). The second study consisted of a randomised control trial, across eight emergency departments, exploring the impact of an observational pain assessment tool with preliminary findings to be presented.

## Results

For study one across the four EDs, of the patients aged 65 and over, 7501 (16.7%) had a musculoskeletal condition or injury diagnosed including 1343 (17.9%) with a long bone fracture. Across four sites, 255 medical records were analysed. Women (n=200; 78.4%) were more frequently represented. Of the 255 patients, 204 (80%) received analgesia in the ED. The overall median time to analgesia was 83 minutes (IQR 38-180 minutes). The median time to analgesia for the cognitively intact group was 72 minutes compared with 149 minutes for the cognitively impaired group, with the difference statistically significant (Mann Whitney U test, p<0.001) Of the patients with long bone fractures, 51 (20%) received no analgesia while in the ED. After adjusting for age, triage code, gender, ambulance analgesia and whether a pain score was documented for the patient in a binary logistic model, patients with cognitive impairment were more likely to suffer a delay to analgesia beyond 60 minutes (p 0.045, OR 2.14, 95% CI 1.01-4.50). RCT preliminary findings (n=161) suggest that the majority are Triage Code category 3 (n=99) or 4 (n=54) and cognitive impairment was identified in 57 cases (35.4%); 65 (40.4%) had a SIS score less than 4 and the average time to analgesia for cognitive impairment was 176.11 minutes compared to cognitively intact 162.8 minutes with over 73% of patients waiting longer than 60 minutes for analgesia.

## Conclusion

Research suggests that older adults with long bone fractures are at greater risk of analgesic delay and inadequate assessment of pain by ED clinicians, especially if cognitive impairment is present. Utilisation of pain assessment tools may improve the time to analgesia for this vulnerable group.