

Background and Objectives

- Few studies have sought to explore children's dental pain from the point of view of the child or collected information from the children themselves.
- One of the few studies was based in a school setting and looked at children aged 8-12 years of age (Adeniyi and Odusanya 2017).
- There is little research about dental pain reported by younger children; most studies use parent's reports of their child's pain level despite the availability of validated pain scales designed for children at the appropriate level of child development.
- The aim of this service evaluation was to assess the pain history reported by children aged 4 years old and the parents' perception of their child's pain for children of all ages who attended a children's dental emergency clinic (CDEC) in a UK teaching dental hospital.

Methods

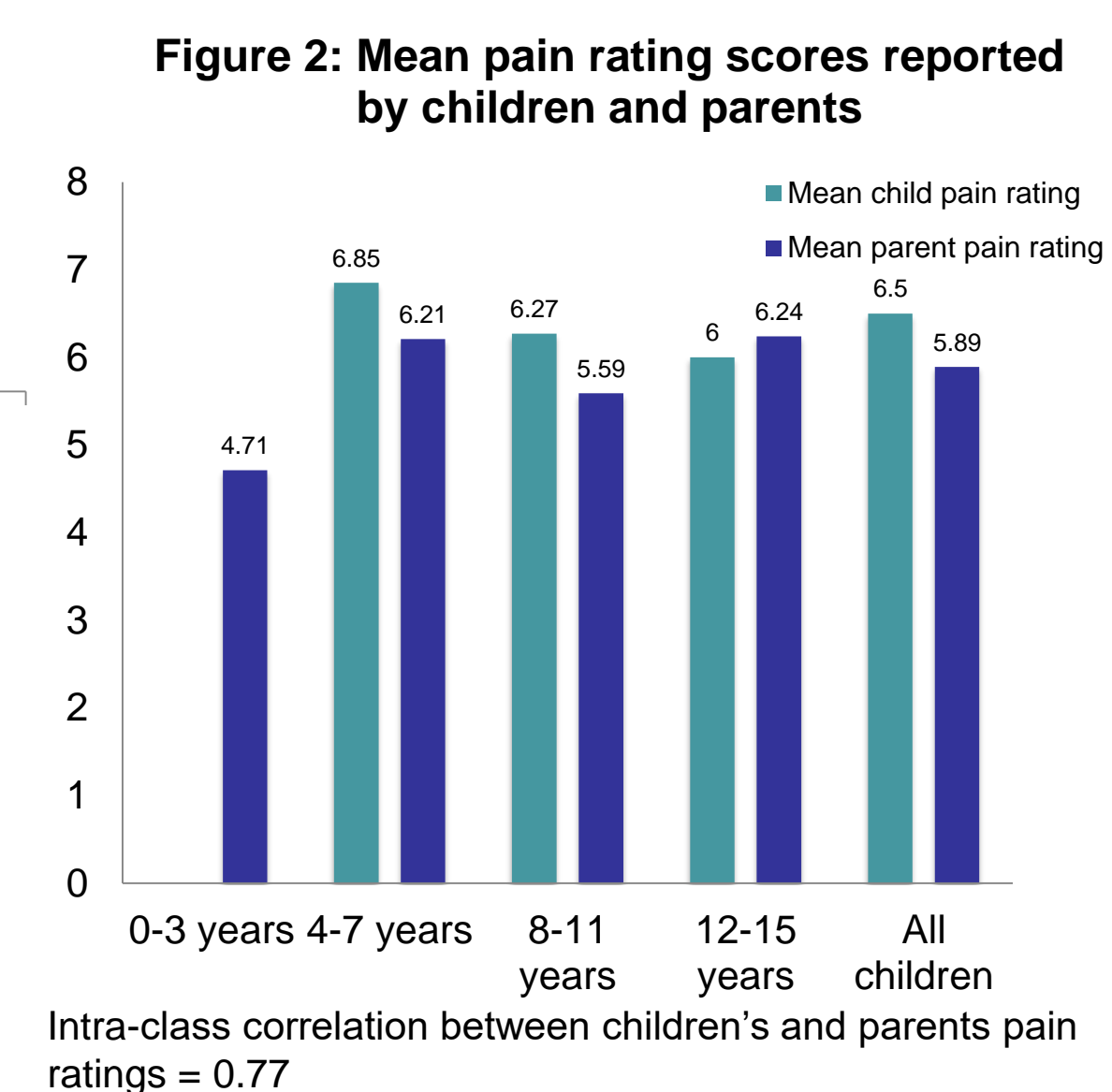
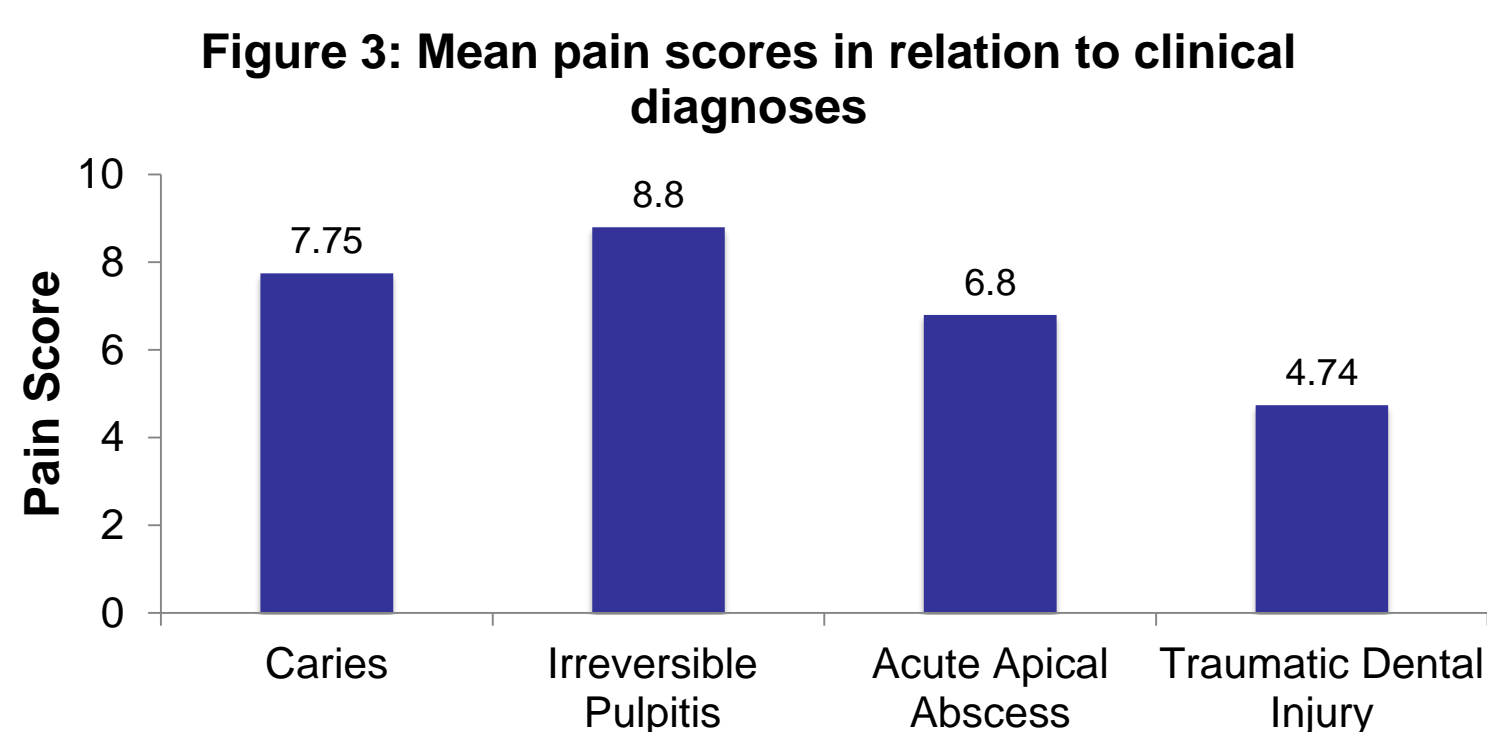
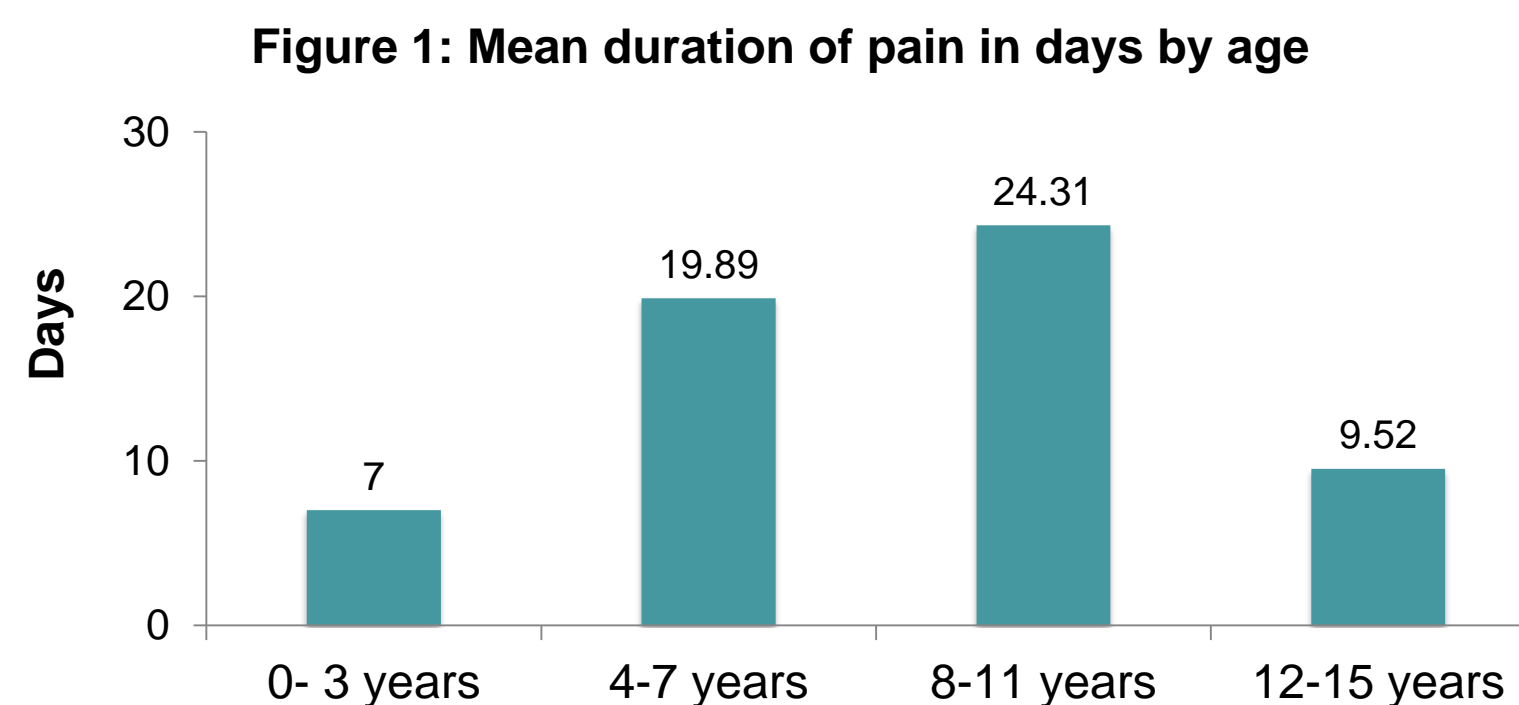
- Study population: 0-15 year olds attending the Children's Dental Emergency Clinic (CDEC) over a three month period (September – December 2018).
- This service evaluation used a structured questionnaire completed by the parents/carers of children before their emergency appointment.
- The questionnaire recorded the reason for attendance, the pain duration and a child-reported current pain rating for children aged 4 years and older, using the Wong-Baker FACES pain rating scale (Garra et al. 2010).
- The parents also rated their children's dental pain on a 0-10 scale.
- Clinicians provided a clinical diagnosis, following assessment and investigations.
- Data was collated using Microsoft excel and analysed using SPSS including ANOVA tests, T-tests and Intra-Class Correlation to test agreement.

Results

- One-hundred and thirty six questionnaires were completed by parents (39% response rate).
- Sixty-seven percent of children reported dental pain; 27% reported swelling; and 16% reported dental trauma.
- 51% of children had taken over-the counter pain medication and 16% had received prescribed pain medication.

Table 1: Descriptive statistics for children who were seen at the Children's Dental Emergency Clinic (N=136)

Characteristics	Number (%) of children
Gender	
Female	57 (41.9)
Male	77 (56.6)
Age (years)	
0-3	16 (11.8)
4-7	58 (42.6)
8-11	32 (23.5)
12-15	25 (18.4)
Child's Ethnicity	
White	49 (36.0)
Mixed	12 (8.8)
Asian	49 (36.0)
Black	9 (6.6)
Other ethnicity/Arab	12 (8.8)
Ethnicity not disclosed	2 (1.5)
Clinical Diagnosis	
Dental caries	36 (26.5)
Reversible Pulpitis	0 (0.0)
Irreversible Pulpitis	16 (11.8)
Acute Apical Abscess	12 (8.8)
Recurrent Aphthous Ulcer	0 (0.0)
Traumatic Dental Injury	41 (30.1)
Pericoronitis	1 (0.7)



Discussion and Conclusions

- The majority of children attending CDEC had experienced dental pain lasting on average 17.7 days (median = 4 days) with more than a quarter of children diagnosed with dental caries.
- There were no significant differences between children and parent's pain ratings by age, gender or ethnicity.
- Children who were diagnosed with irreversible pulpitis had the highest self-reported pain scores while children who had a TDI reported the lowest pain score.
- Children's and parents pain scores were highly correlated showing a high level of agreement in pain ratings between parents and children (Figure 2).

References

- Adeniyi, A. A. & O. O. Odusanya (2017) Self-reported dental pain and dental caries among 8-12-year-old school children: An exploratory survey in Lagos, Nigeria. *Niger Postgrad Med J*, 24, 37-43.
- Garra, G., A. J. Singer, B. R. Taira, J. Chohan, H. Cardoz, E. Chisena & H. C. Thode, Jr. (2010) Validation of the Wong-Baker FACES Pain Rating Scale in pediatric emergency department patients. *Acad Emerg Med*, 17, 50-4.

