

INTRODUCTION

International guidelines recommend a first dental visit by the infant's first birthday.¹⁻³ Anecdotally, most children in Ireland are not seen at an optimal age, and the most recent national survey revealed that 42% of Irish 5-year-olds have dental caries.⁴ The benefits of dental examination at 12 months of age were recently reviewed by Duane and FitzGerald.^{5,6} To ensure that Irish infants receive timely oral healthcare, it is important to identify current barriers and facilitators to access to dental care.

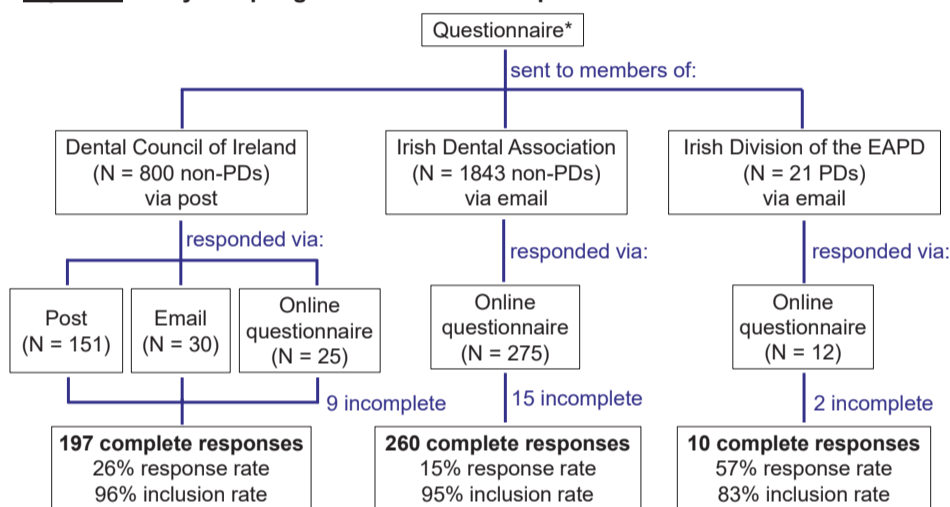
OBJECTIVES

This study is designed to assess the knowledge, attitudes, and behaviour of dentists practicing in the Republic of Ireland regarding the infant oral health visit. It aims to reveal whether dentists are aware of the recommendations regarding the timing and components of the first dental visit. This research aims to compare and contrast the responses obtained from paediatric dentists (PDs) to those obtained from general dentists and non-paediatric dental specialists (non-PDs) and identify any differences in approach between the two subgroups studied.

MATERIALS & METHODS

- A 10-item validated questionnaire was piloted at the TCD School of Dental Science prior to conducting the main study (Figure 1).

Figure 1. Study sampling and data collection procedure



- All data were analysed in Microsoft Excel. Non-PD responses from the DC and IDA samples were aggregated, while PD responses were analysed separately.

RESULTS

Respondent Demographics:

- Equal female (51%) and male (49%) non-PD respondents; All PDs female.
- Graduated from dental school 1960-2017; Highest proportion (39%) in the 1990s.
- Most worked at least 31 clinical hours per week (68-70%) in private practice (67-70%)
- 73% of non-PDs did see infant patients in practice; Majority (39%) saw 1 child/month.

Main Findings:

Figure 2. Dental treatments routinely carried out at the infant oral health visit

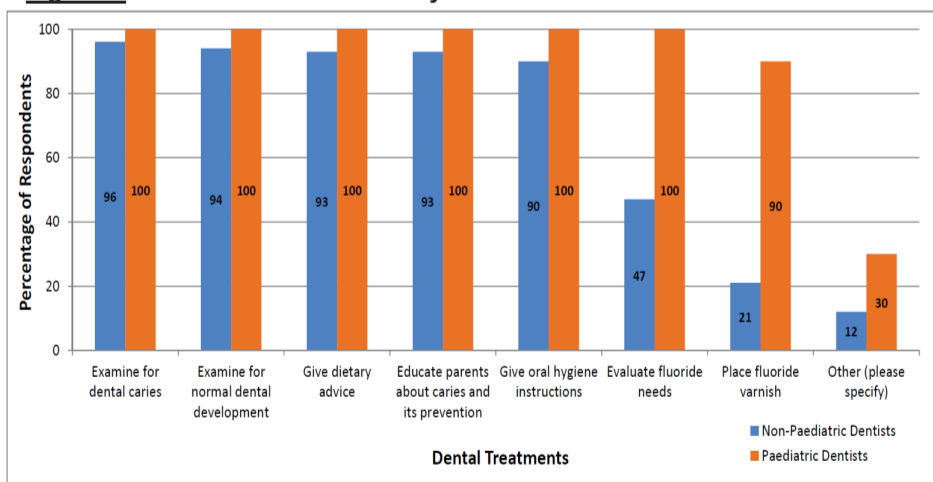


Figure 3. Reasons non-paediatric dentists do not treat infant patients

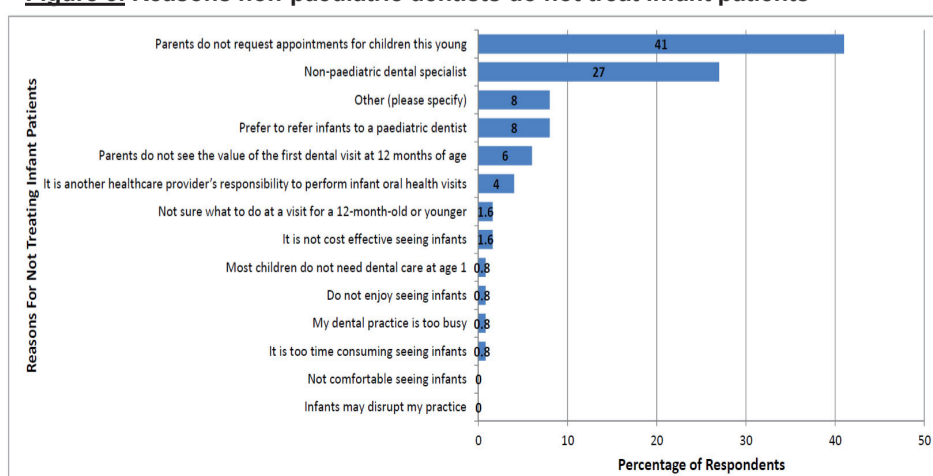
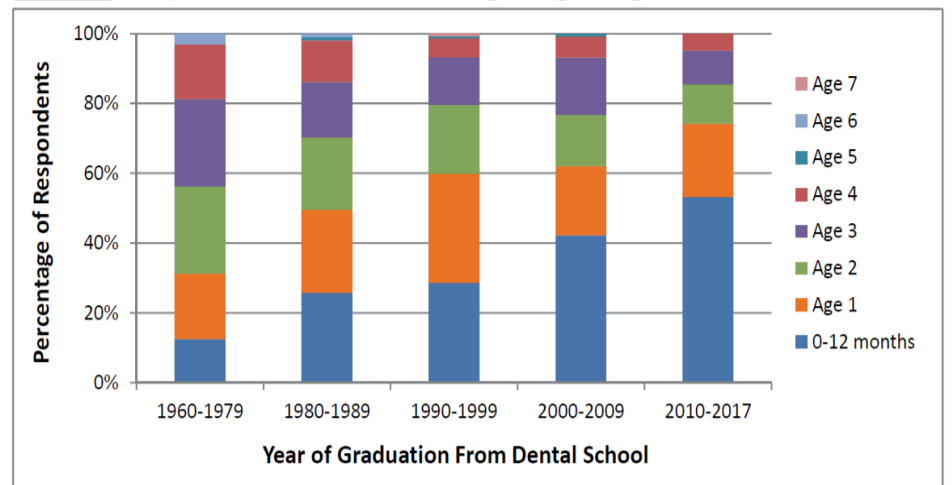


Figure 4. Non-paediatric dentists' beliefs regarding the age of the first dental visit



DISCUSSION

Implications of Main Findings:

- 73% of non-PDs treated infant patients; 90% of whom performed most components of a successful infant dental visit, with the exception of evaluating for fluoride needs and applying fluoride varnish (Figure 2).
 - Possible knowledge gap or concerns regarding fluorosis/fluoride toxicity in infants.
- 68% of non-PDs saw, at most, one infant patient per month.
 - Suggests little exposure & low infant attendance at general dentists.
- Of those who did not see infants, 41% of non-PDs reported that this was due to parents not requesting appointments for such young children (Figure 3).
 - Suggests a barrier at home; possibly lack of awareness or interest, time or funds.
- 58% of non-PDs believed that infants should have their first dental visit by age 1.
 - Suggests that most dentists in Ireland are aware of current paediatric guidelines.
 - Demonstrates a significant improvement compared to previous studies.
- >70% of respondents who agreed that the first dental visit should occur by age 1 graduated from dental school in 2010-2017, compared to <50% of graduates from the 1980s (Figure 4).
 - Suggests more recent graduates are better informed about current guidelines.

Recommendations:

- Irish undergraduate curricula and continuing dental education should place a greater emphasis on the importance of fluoride needs assessment and fluoride varnish placement in the infant patient.
- A national health promotion campaign is indicated to help inform new parents of the importance and benefits of a timely infant oral health visit, involving other healthcare professionals as well as social media.

Limitations:

- Inherent response bias, as respondents formed a self-selecting group.
- Innate limitation of questionnaires where results rely on accurate recall, honesty, and lack of double respondents.
- Small population of PDs in Ireland prevented statistical comparison with non-PDs.

CONCLUSIONS

Key Findings:

- Most non-PDs in Ireland reported seeing infant patients and were aware of the key features of an infant oral health exam, with the exception of assessing for fluoride needs and application of fluoride varnish.
- The main reason a minority of non-PDs in Ireland did not see infant patients is that parents do not request appointments for their infants.
- All PDs and over half of non-PDs believed the age of the first dental visit to fall within the range advocated by current Irish and International guidelines.

Future Research:

- Obstacles to non-PD assessment for infant fluoride needs & placement of varnish.
- Dentists' opinions regarding the practicality of current infant oral health guidelines.
- Self-reported facilitators and barriers to patient access to timely infant oral healthcare.
- Cost-effectiveness analysis of potential future provision of a free infant oral health visit subsidized by the Irish government.

References

- European Academy of Paediatric Dentistry. Guidelines on Prevention of Early Childhood Caries: An EAPD Policy Document. 2008.
- Irish Dental Association. Children's oral health. J Ir Dent Assoc. 2011;57(6):284.
- FDI World Dental Federation. FDI policy statement on perinatal and infant oral health: adopted by the FDI General Assembly: 13 September 2014, New Delhi, India. Int Dent J. 2014;64(6):287-8.
- Whelton H, Crowley E, Harding M, Guiney H, Cronin M, Flannery E, et al. North South survey of children's oral health in Ireland 2002. Cork: University College Cork; 2006.
- FitzGerald K, McGovern E, Ni Chaollaí A. First tooth, first visit, zero cavities: a practical approach to the infant oral health visit. J Ir Dent Assoc. 2017;63(2):99-104.
- Duane B, FitzGerald K, McGovern E, Ni Chaollaí A. First tooth, first visit, zero cavities: a review of the evidence as it applies to Ireland. J Ir Dent Assoc. 2017;63(2):105-11.

*The questionnaire can be found at <https://www.surveymonkey.com/r/DVD2CQB>