Summary of: 'I felt weird and wobbly.' Child-reported impacts associated with a dental general anaesthetic

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FULL PAPER DETAILS

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Aim This qualitative study sought to obtain children's accounts of having dental extractions under general anaesthesia (GA). The aim was to gain greater understanding of the physical and psychological impacts from a child's perspective. **Method** Ten children, aged 6-11 years, maintained a video diary to document their feelings and experiences before, and following their hospital admission. Two semi-structured home interviews supplemented the video diary data and analysis was guided by narrative approaches. **Results** This research revealed new insights into children's experiences of having teeth removed under GA. Several of the post-operative impacts correlated with those previously reported by parents/carers. These were notably nausea, bleeding and tiredness, although children used different terminology. However, additional physical and psychological outcomes, both positive and negative, emerged from the children's narratives. Negative aspects included hunger, disturbed eating, being scared/worried and experiencing discomfort from the IV cannula. Interestingly, pain was not a strong theme. Positive outcomes were also reported, such as satisfaction with the resolution of their dental problem and receipt of rewards and attention from family members. **Conclusion** These accounts have implications for improving patient experiences and outcomes throughout the dental GA care pathway. A review of preoperative fasting protocols should be a priority.

EDITOR'S SUMMARY

Measuring is crucial in our society: counting money; counting people; counting jobs; counting sales; counting website hits; measuring the effectiveness of plans; measuring outcomes. It's great really. It's important to base important decisions on effectiveness and what works best rather than carrying on blindly with boondoggles (look it up, you will thank me for it!).

However, though it is possible to count people and their attitudes, they are fundamentally difficult to study on a purely quantitative basis. Though it may grate on our empirical instincts as scientists, people need to have a voice in healthcare research, not just be a number, percentage or ratio.

This is why a combination of qualitative and quantitative research is a good idea. Because, qualitative research, such as that carried out in this study by Professor Rodd and her team in Sheffield, aims to look at the *why* and *how* rather than just the *how many*. In a way most dentists carry out qualitative research everyday just by communicating with their patients – asking them how they feel, how their dental experience was and basing future treatments on what they hear 'anecdotally'.

Something which we don't do particularly well in today's research world is to ask children what they think. Quite often it is the parents, clinicians or carers who are questioned instead of the children themselves. Professor Chris Deery, a co-author on this paper, told a story in a recent BDJ interview¹ which sums up the immediate value of both qualitative and child-centered studies on improving practice. From a small study looking at the experiences of children having their teeth fissure sealed, Chris said that they hated the taste of the sealant more than anything else. Thus, Chris began wiping the excess sealant away to eliminate the taste. Such a simple thing, but what a difference it makes to each child's experience of dentistry.

Considering that around 57,000 children in the UK undergo a general anaesthetic (GA) for dental treatment each year, it is highly important not just to know how many children were treated and what the outcomes were but also to know what the children's experience of the GA process was, by asking *them*. This study found that, by asking the children to document their feelings and experiences before and following their hospital admission, new insights into the experince of dental extraction under GA were revealed.

For example, it transpires that children were more affected by the impact of the GA on eating and the resulting hunger, than by pain or fear of pain. I, personally, would never have thought that hunger would be one of the primary concerns of someone undergoing anaesthetic. The study revealed much more about the children's experiences and it's certainly worth reading in depth to find out why and when they felt so 'weird and wobbly'!

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 216 issue 8.

1. Chris Deery: 'The Hall Technique will revolutionise children's dentistry'. *Br Dent J* 2014; **216:** 156-157.

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IN BRIEF

- Provides a new insight into the emotional and psychological impacts of having teeth out under general anaesthetic (GA), entirely from a child's perspective.
- Describes the use of a video diaries as a participatory technique for health-related research with young patients.
- Suggests that pre- and post-operative instructions for a dental GA should be more tailored to the child's needs.

COMMENTARY

Much of the existing literature investigating the effects of dental general anaesthetics has used parents as proxy informants. It has shown marked improvements - from the informants' perspective at least - in the day-to-day lives of the affected children and their families. What has been missing so far has been an in-depth look at the child's perspective of what occurs. Moreover, almost all of the work in this area has been quantitative in nature, relying upon questionnaires with fixedresponse questions. To a certain extent this imposes the investigator's own frame of reference and limits the richness of the collected data (although they are easier to analyse).

Professor Rodd and colleagues have taken a different approach in this very interesting study, using tools from the qualitative research repertoire, where the emphasis is upon understanding a given situation rather than imposing an arbitrary measurement framework upon it. As a result, they have obtained a great deal of rich information that will be useful for all who provide dental care for children. In particular, the findings should help improve children's pre-operative experiences (most notably the nature and length of the pre-operative fasting) and the advice given to them and their parents on post-operative feeding. It is likely that further useful findings will eventuate from the team's research.

Interestingly, there is scope for a similar approach to be taken in investigating the effects of the child's oral condition (and the associated treatment) on the wider household. Recent work conducted elsewhere has shown that treatment under general anaesthesia is associated with improvements in scores on quantitative indicators of family impact, but quite how this works is unclear as yet.

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AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research? The provision of dental treatment under general anaesthesia (GA) is one of the most common reasons for a child to be admitted to hospital in the UK. Most research about paediatric dental GA has considered the perspectives of clinicians and parents/carers, but not the impact that the treatment may have on children themselves. We wanted to use a novel research method, a video diary, to seek children's own descriptions of the impacts. We hoped that this insight would then help us to improve the GA care pathway for our young patients.

2. What would you like to do next in this area to follow on from this work?

The research identified several areas where child-centred information should be developed to better inform children of what to expect before, during and after a GA for dental treatment. To follow on from this study, we would like to develop patient decision aids for parents and children to provide tailored information on options, benefits and risks in the management of dental caries. This study also highlighted the lack of any patientreported outcome measures (PROMs) for completion by children to evaluate the effectiveness of treatments at reducing the impacts of dental diseases. We intend to develop a PROM to be used in future trials to compare the effectiveness of different treatment approaches, including GA, for caries management in children.