

Summary of: Oral health-related quality of life of children in relation to dental appearance and educational transition

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FULL PAPER DETAILS

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Background A variety of inherited and acquired conditions affect the dentition. The aim of this research was to investigate the oral health-related quality of life (OHRQoL) of children in relation to the status of their permanent incisors, at a significant transitional stage in their childhood. **Method** Two hundred and sixteen patients of the Charles Clifford Dental Hospital, Sheffield, aged between 10 and 11 years, were sent an OHRQoL questionnaire (CPQ₁₁₋₁₄) three months before secondary school entry. Participants were categorised, according to clinical status, as having a visible dental difference (abnormal incisor aesthetics and/or orthodontic malocclusion) or no visible difference. Follow-up questionnaires were issued three months after secondary school entry to obtain repeat psychosocial data. Analysis of variance tests investigated the impact of clinical variables, self-reported satisfaction with dental appearance and gender on OHRQoL during educational transition. **Results** Ninety-two children participated in the baseline study and 71 of these children completed the follow-up questionnaire (43% and 77% response rates, respectively). Visible dental differences and dissatisfaction with dental appearance were associated with worse OHRQoL at baseline and follow-up. **Conclusions** Dental conditions which result in visible incisor differences are associated with higher levels of dissatisfaction with appearance and have potential to negatively impact on children's OHRQoL.

EDITOR'S SUMMARY

What is impressive about this work is the demonstration that the oral health-related quality of life index can provide such a sensitive measure of variation within an individual patient over such a relatively short period of time. It is also intriguing that the authors have been sensitive enough to identify a transition time with their patients during which dental appearance may have a more important impact than throughout life in general.

We are all aware that changes in life do unsettle us and that this becomes manifest in many forms, albeit that we usually give them an overall blanket explanation of being stress-related. Somehow, stress-related doesn't seem an appropriate term for youngsters in the transfer from junior to senior school and yet presumably that is what it is. We are all also very aware from

personal experience of the hurtful comments that children make against those who are different, for whatever reasons. Oral appearance is one of these variants and whether this is associated with orthodontics or with the quality of hard tissue, notably enamel, is immaterial to the taunting classmate or the playground bully.

In dental care terms how does this help us? Importantly it should raise our awareness of the potential for an unsettled period of time in our patients during the transition between junior and senior schools. This may also have dietary and oral health impacts which could easily otherwise go unnoticed. It may also increase parental pressure to treat a particular aesthetic problem because of the effect it is having on their child's schooling and general well-being. Once again, we have a piece of research which indicates that our role as clinicians has

to be set in a world that is far wider than the confines of the buccal mucosa and the surrounding tissues.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 211 issue 2.

Stephen Hancocks
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IN BRIEF

- Children's evaluation of their own dental appearance is a very important factor in how they rate their oral health-related quality of life.
- This association is of relevance when developing patient-reported outcome measures following treatments to improve dental aesthetics.
- It highlights the dynamic nature of children's oral health-related quality of life and the impact of significant life events.

COMMENTARY

Dental conditions can impact on children's oral health-related quality of life (OHRQoL). A number of factors may influence this association. This paper by Rodd *et al.* investigates the impact of sex, visible dental differences and self-reported satisfaction with dental appearance on children's OHRQoL during their transition from primary to secondary school. This stage of life is particularly important, not only because adolescents are exposed to a new school environment which may in turn result in a change in their peer group and challenges associated with that, but also because the majority of children have already gone or are going through puberty. During this period, adolescents tend to establish their personal identity, seek greater independence, increasingly rely on peers, and place greater importance on their appearance. Thus it may be speculated that participating children may report increased impacts on their OHRQoL following transition to secondary school.

Interestingly, whilst children's satisfaction with dental appearance remained unchanged, their OHRQoL improved following transition to secondary school. Furthermore, there was no significant association between sex and OHRQoL during this transition. The authors carefully examine the findings and provide possible explanations. Other puberty-related changes may also partly explain these findings. Unlike boys, the majority of girls have already gone through puberty and

have better adapted to changes during this period. Therefore, girls are likely to be more aware of their appearance and also more affected by distancing from their primary school peers. This may partly explain why the OHRQoL of girls improved less over time compared to boys. However, as the authors discussed, different factors may be responsible for these findings.

Rodd *et al.* also review the study design and identify the limitations and how they could be improved. The use of OHRQoL instruments which allow measurement of severity as well as frequency of impacts on children's quality of life and condition-specific analysis of impacts could provide further information. It would also be interesting to follow up children for a longer period to investigate how their OHRQoL will change. Nonetheless, this study demonstrates the need for further research to explore factors influencing OHRQoL of children at different stages of their lives.

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AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

Our multi-disciplinary research group seeks to develop novel qualitative and quantitative methodologies to more fully engage children in oral health-related research and service evaluation. This study emerged from a clinical impression that some children became increasingly conscious of a visible dental or facial difference prior to the move to secondary school. We therefore undertook this study to corroborate our clinical observations and to gain a greater insight into the associations between dental appearance and oral health-related quality of life.

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

There are two main areas of enquiry we hope to pursue following on from this work. Firstly, we wish to develop more sensitive measures of oral health-related quality of life for use in future clinical trials as well as in service evaluations. It is increasingly important that we can demonstrate the use of valid patient-reported outcome measures in our clinical practices. We also wish to gain greater insight into the potential psychosocial impacts of dental differences in young people. We are currently exploring whether young people make negative social judgements about other young people on the basis of developmental enamel defects. This will complement our previous studies which found that children with poor incisor aesthetics following dental trauma are viewed negatively by their peers.