Summary of: Oral health-related quality of life and the IOTN index as predictors of children's perceived needs and acceptance for orthodontic treatment

FULL PAPER DETAILS

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VERIFIABLE CPD PAPER

Objective To evaluate whether the index of orthodontic treatment need (IOTN) could be improved by adding an oral health-related quality of life measure to predict both the outcome of orthodontic consultation and the child's perceived need for orthodontic treatment. **Methods** The sample consisted of 187 children aged 11–16 years referred to orthodontic clinics in the Bedfordshire Personal Dental Service (PDS) in the United Kingdom. The children completed a questionnaire containing the Child Perception Questionnaire (CPQ11–14), were clinically examined and completed the Child-OIDP index in face-to-face interviews. Demographic information and perceived need for orthodontic treatment were also collected. Clinical data on orthodontic treatment need was collected using the IOTN. **Results** 49.3% of children reported one or more oral impacts. Combining the IOTN index with either of the two oral health-related quality of life measures used in this study did not predict outcome of consultation, however it explained children's perceived need for braces. There were some discrepancies between need according to the orthodontist and children's perceptions. **Conclusions** Adding an oral health-related quality of life measure to IOTN did not influence prediction of outcome of consultation but it explained the prediction of perceived need for braces. Importantly, children with an impact were denied orthodontic treatment.

EDITOR'S SUMMARY

There was at one time an outcry against the idea that children, or students, should be asked what they thought they should be learning about. On a similar tack it is only in recent times that dentists, in particular, have grudgingly come to accept that patients may actually like to have an input into the type of treatment they wish to undergo. Previously we always thought we knew what was best for our patients.

So, perhaps the notion that children might have their own thoughts about whether or not they would benefit from orthodontic treatment is not before its time. This study sought to discover whether the system used for the assessment of orthodontic provision under the NHS was responsive to the opinions of the potential patients themselves.

Clearly it is not since this did not influence whether they were offered orthodontic treatment as this was governed by IOTN scores. Furthermore, the study demonstrated that adding an oral health-related quality of life measure to the IOTN index did not predict outcome of consultation.

On a much less sophisticated level I recall being taught as a student many years ago that the first question to ask both the child referred for orthodontic assessment and their parent or guardian was why they were attending; the rationale being that if they didn't really know, they probably had no perceived need for treatment, and consequently may be less motivated to maintain and continue therapy through to its conclusion.

Given that under almost any system there is rationing due to some type of

restricted supply, be it economic or scarcity of skill, surely one sensible criterion to include is whether or not the patient feels they would benefit from the treatment? Do we still think that children don't know, or is it just too much common sense?

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 204 issue 7.

Stephen Hancocks,
Editor-in-Chief

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IN BRIEF

- There were inconsistencies in estimates of perceived orthodontic treatment need when using the IOTN and oral health-related quality of life (OHRQoL) measures.
- The IOTN index in combination with an OHRQoL measure explained significantly more of children's perceived needs than the IOTN on its own.
- Additional subjective information using an OHRQoL measure would enhance orthodontic treatment need assessments.

COMMENT

The incorporation of oral health-related quality of life into the assessment of oral health needs has been advocated for many years.¹ The main advantage of this approach is that it gains the individuals' perspectives on the impact oral health has on their lives. This is particularly important for services aimed at children and young people, with the National Service Framework for Children and Maternity Services recommending that services should be child-centred to meet the needs of children and their families.²

This paper describes a study that uses two child oral health-related quality of life measures to supplement clinical assessment of the need for orthodontic treatment of children referred to an orthodontic service. The study found a discrepancy between assessment based on the Index of Orthodontic Treatment Need (IOTN) and the child's own perceived need for treatment. Given that NHS orthodontic treatment is prioritised based on IOTN, it serves to expose the potential conflict between NHS policies: on the one hand services should meet the needs of children, while on the other hand decisions about the need for treatment are based on the application of indices by clinicians. The authors conclude that the current approach for determining need for orthodontic care is not appropriate.

This paper highlights significant challenges for primary care trust/local health board commissioners in the

assessment of need for orthodontic services, particularly given the pressures of achieving an 18-week wait for orthodontic treatment in secondary care by December 2008.

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2. Department of Health. National service framework for children, young people and maternity services. London: Department of Health, 2003.

AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research?

There is a high unmet demand for orthodontic treatment in the UK, despite current NHS spending of £160 million per annum. In order to target care optimally, the Department of Health now requires orthodontists to determine eligibility for treatment by the application of IOTN, an Index of Orthodontic Treatment Need developed in the 1980s. This however does not take into account the young person's perceptions of their condition (socio-dental impact).

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

The next step would be the development of a new orthodontic treatment need assessment instrument by adding an oral health-related quality of life measure to the IOTN index. Improved orthodontic need assessments will lead to a more accurate differentiation between those who do and those who do not require orthodontic treatment through the inclusion of patients' perceptions. In turn, this should lead to more efficient allocation of scarce orthodontic resources in the NHS and better planning and provision of orthodontic services.