Summary of: The use of the Index of Orthodontic Treatment Need in dental primary care

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FULL PAPER DETAILS

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Objectives The primary objective of this survey was to assess the use of the Index of Orthodontic Treatment Need (IOTN) in dental primary care (Scottish general dental services – SGDS), and to compare orthodontic specialists (OS) and general dental practitioners (GDPs). The secondary objective was to explore the attitudes to mandatory introduction of the IOTN into the SGDS. **Design** Postal, self completed questionnaire. **Setting** Dental primary care, Scotland. **Subjects** Randomly selected sample of general dental practitioners (GDPs), n = 315, and all orthodontic specialist practitioners (OS), n = 49, identified as working in the SGDS. **Main outcome measures** Prevalence and experience of using the IOTN in the SGDS. **Results** Response rate was 46% (n = 169). Eighty-four percent of respondents did not use the IOTN. Thirty-five percent of respondent GDPs had never heard of the IOTN. Respondents reported using the IOTN as an inter-colleague communication tool and to grade case complexity. GDPs perceived the IOTN as beneficial in setting national standards of practice; OS saw it as a tool to justify the allocation of NHS resources to patients. Responses indicate concerns that IOTN introduction will restrict access to orthodontic care. **Conclusions** The IOTN is not widely used in the SGDS but is perceived as standardising treatment need assessment by GDPs and justifying the allocation of NHS orthodontic resources to patients amongst OS. Introduction of mandatory IOTN grading is likely to be contentious – the following needs to be considered: the index profile should be raised; its advantages highlighted; concerns about restricted access to orthodontic care addressed; and perceived need for locally accessed training met.

EDITOR'S SUMMARY

Rationing is a word that has many emotive overtones: queues, want, deprivation. We have alternative terms which are more pleasantly euphemistic, such as resource allocation or appropriate distribution of services but whatever description we use the hard reality is that not everyone can have what they want or what they deem to be their right; in this case, due to financial considerations not every child can have orthodontic care under the NHS.

The use of some type of sieve or test of need is therefore required in order to be as fair and transparent as possible in allocating treatment services and in orthodontics one such instrument is the Index of Orthodontic Treatment Need (IOTN). However, as with so many aspects of dentistry, dealing with the tangled complexity of human biology overlaid with subjective opinions, the likelihood of being able to come to a balanced decision merely by ticking boxes is slight, to say the least. Once again judgement is required and that has to be made by an individual about another individual, which is where disagreement and conflicting opinion can arise.

The underlying difficulties of this process are made more visible by the findings of this paper which highlights not only the potential patient and societal issues surrounding the application of the IOTN but also those from a professional viewpoint. These concerns include autonomy in clinical decision making, the setting of measurable standards and guidelines and the need to ensure minimal ambiguity and maximum lucidity in terms of determining care provision. While a problem with the Index might be its omission of elements of health-related quality of life outcomes and health economic analyses, one of the barriers identified by this research to anything approaching successful implementation is a lack of awareness of the IOTN by a large proportion of the GDPs who might be called upon to apply it. Without a universal understanding, acceptance and implementation of the Index the process of rationing, however it is managed will be far more open to accusations of bias, unfair application and obscure procedure.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 206 issue 8.

Stephen Hancocks,
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IN BRIEF

- Examines the extent to which the IOTN is used in general and specialist orthodontic dental practice in Scotland.
- Identifies variations in the clinical practice of these two groups of dental practitioners.
- Considers the barriers which might impede the implementation process. Makes recommendations for the implementation of the IOTN into clinical practice.

COMMENT

It is essential to use an appropriate system for determining and prioritising orthodontic treatment needs. Currently the IOTN is used for this purpose in the UK,[1] but its use in Scotland is not mandatory. This study used a postal questionnaire to assess the reported use of the IOTN among dental practitioners and orthodontic specialists in Scotland and also explore their attitudes towards its potential mandatory introduction for the assessment of orthodontic needs. The study found that only 16% of the sample (10% of practitioners and 50% of specialists) currently uses the IOTN. Even more striking, over one third of GDPs had never heard of it. The GDPs, but not the specialists, stated their preference for setting national standards for orthodontic treatment needs. Both professional groups were reluctant to use IOTN as a needs assessment tool and were also concerned that its introduction could reduce clinical autonomy and may restrict children's access to NHS orthodontic care. This is a defensive view. Current scientific thinking questions unlimited professional autonomy and advocates setting measurable standards and guidelines in order to reduce ambiguity and ensure uniform criteria throughout the country in assessing treatment needs and determining care provision.

The findings of this study highlight the important challenges of using a predominantly clinical orthodontic treatment need index in Scotland. However, there are major shortcomings in the sole use of clinically-defined measures of need. The real challenge, not only for Scotland, is to go a step further than just using clinical measures of orthodontic need, such as the IOTN, that fail to reflect the child's perceived needs. Instead, a rational system should be used which, in addition to a clinical measure such as the IOTN, also incorporates subjective perceptions of malocclusion as well as measures of behavioural propensity that help clinicians to judge the likely success and effectiveness of orthodontic care for that child.[2] After all, malocclusions are not diseases *per se*, but rather deviations from an aesthetic norm in a society. Therefore, the shift towards child-centred services that meet the needs of children and their families[3] should be a priority.

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AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research?

This research was conducted to assess the use of the Index of Orthodontic Treatment Need (IOTN) in the Scottish general dental services (SGDS). The Scottish Executive highlights the need for 'value for money in the use of public resources', ie resource allocation based on treatment need. In Norway and Sweden orthodontic indices are employed for this purpose. Currently dentists are not obliged to use IOTN in the SGDS and anecdotal evidence suggested that few if any practitioners use the IOTN. The primary aim of this survey was to assess and compare the reported use of IOTN by GDPs and orthodontic specialists in the SGDS. We also wished to explore reasons behind use and non-use and attitudes to the potential introduction of the index as a mandatory part of SGDS orthodontic provision.

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

If the IOTN is to be introduced into clinical practice then the profile of the index needs to be raised and perceived educational demand needs met on a local basis. The perceived reduction in patient access to orthodontic care and the lack of clinical autonomy must also be addressed. Increasing the use of the IOTN in clinical practice will require an evaluation of effective interventions using robust experimental methods, preferably randomised controlled trials. These trials should also incorporate measures of health-related quality of life outcomes and health economic analyses. Preliminary work to pilot potential interventions would inform the design of future studies.

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