

Summary of: Who is referred for sedation for dentistry and why?

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FULL PAPER DETAILS

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Online article number E12

Refereed Paper – accepted 5 December 2008

DOI: 10.1038/sj.bdj.2009.251

[©]British Dental Journal 2009; 206: E12

Objective To assess referrals to sedation, examining dental anxiety and background of patients, and compare these characteristics to those referred to a restorative dentistry clinic. **Design** Descriptive, cross sectional survey. **Subjects and methods** Subjects were 100 consecutive new patients in sedation and special care and 50 new patients in restorative dentistry at Guy's and St Thomas NHS Foundation Trust. A questionnaire included demographics, self-reported oral health and dental attendance, and dental fear. Information from the patients' records was taken: ASA classification, previous sedation or general anaesthesia, alcohol and tobacco use, and medications. **Results** The best predictors of referral were dental anxiety level and an irregular attendance. The most important fears were seeing, hearing and feeling the vibrations of the dental drill, and the perception of an accelerated heart rate. Other factors such as general, mental and dental health and alcohol use were related to referral but less important. **Conclusions** Referral is consistent with the goal of the sedation clinic to see anxious patients. Referring general practitioners are able to identify these patients.

EDITOR'S SUMMARY

In my summary in the previous issue of the *BDJ*,¹ about another audit of sedation referrals,² I mentioned the opening of the new Health Psychology Service at King's College London Dental Institute. The findings of this paper by Boyle *et al.* helped to inform the decision to open the new Service, comparing the anxiety characteristics of patients referred to a sedation clinic with patients attending a restorative clinic and confirming that highly anxious patients were more likely to be referred for sedation.

The results showed that there were significantly more highly anxious patients in the sedation clinic than in the restorative clinic: 62% of sedation patients had high dental fear, compared with 18% of those in the restorative clinic. As stated by the authors, this confirmed that referrals to the sedation clinic were in accordance with its goals to see anxious dental patients. This in turn makes the sedation clinic

a suitable location for conducting further research into dental anxiety and clinical trials on treating patients with dental fear – an important benchmark to establish before any such research is undertaken.

The paper and the opening of the new King's College Health Psychology Service are also a testament to what can be achieved by successful collaboration with research centres overseas – in this case with the Dental Fears Research Clinic in Seattle, USA. The authors mention the lack of available services in the UK for psychological treatment of individuals with dental fear, a point that is also made by Woolley in his paper² and in his commentary on this article (right). The opening of the Health Psychology Service is therefore an important step forward, both in terms of patient treatment and as a setting for future research into the subject.

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 6.

Rowena Milan,
Journal Editor

1. Milan R. Editor's summary. *Br Dent J* 2009; 206: 270.
2. Woolley S M. An audit of referrals to a secondary care sedation unit. *Br Dent J* 2009; 206: E10.

DOI: 10.1038/sj.bdj.2009.233

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IN BRIEF

- Identifies that individuals who are referred for sedation are highly anxious and fear a range of different dental stimuli.
- Even patients who are referred for restorative dentistry can be anxious.
- Anxious patients are likely to attend for dental care only on an emergency basis.
- Highlights the aspects of dentistry which cause anxiety.
- The drill is more anxiety provoking than dental injections.

COMMENT

Dental fear is prevalent in a substantial proportion of the adult population, and has a significant effect on their well being. The dental management of such patients with conscious sedation within the primary and secondary sectors has considerable financial implications, and the provision of services is therefore of interest as part of dental public health strategies. This study examined the characteristics of patients who attended for new patient appointments at a clinic providing conscious sedation, comparing them with patients who attended new patient appointments in a restorative clinic. While this does not take into account the patients who were referred yet failed to attend, it still provides useful information about patients seen within a secondary care sedation clinic.

A 34-item questionnaire comprising of demographic, oral health and dental attendance information as well as dental fear scales was administered to 100 consecutive sedation clinic patients and 50 consecutive restorative clinic patients. Three sedation clinic patients declined to participate. As might be expected, more high anxiety patients attended the sedation clinic than the restorative clinic, and anxious patients were more likely to have been referred to the sedation clinic than the restorative clinic. There were significant differences between the patient populations. Sedation clinic patients were more likely to have previously attended for emergency treatment rather than routine care, and to report poor oral

health. They were more likely to report higher overall dental fear, and generally showed more anxiety towards various items of dental treatment as well as reporting physiological responses.

The limited availability and additional cost of sedation services means that they must be used appropriately. This study demonstrates that the sedation clinic is providing treatment opportunities to a suitable population. In addition, the authors note the requirement for, but lack of availability of, effective psychological services to address dental fear. A more integrated approach to the management of anxious patients, using psychological services to treat underlying fear, could consequently liberate sedation resources. This would allow sedation to be available to a wider population and to be used appropriately for urgent treatment.

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

The idea arose from the collaboration between the department of sedation and special care dentistry at King's College London Dental Institute and Professor Peter Milgrom and his team at the dental fears research clinic in Seattle, Washington. Peter and his team had extensive experience of the use of questionnaires to determine both the level of and sources of dental anxiety amongst patients. In contrast the UK-based team relied on clinical assessment of patients' fear. By comparing the people referred for sedation to those referred for restorative care we wanted to explore whether the two groups would differ only in their level of anxiety or whether anxious patients worried about different things to a non-anxious group.

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

The findings of this research together with the collaboration between the two centres have led to the setting up of the King's College London Dental Institute Health Psychology Service for individuals who are dentally anxious. This service provides cognitive behavioural therapy for patients who are identified as suitable on the basis of the questionnaires used in this study. Sedation services and the psychology team work together to help patients overcome their dental treatment needs and develop coping strategies which hopefully will allow them to attend regular dental treatment. Our future research will look at the effectiveness of the new service, as well as developing automated computer-based approaches to the management of dental fear.