Summary of: What happens after referral for sedation?

C. A. Boyle,¹ T. Newton,² L. J. Heaton,³ S. Afzali⁴ and P. Milgrom⁵

VERIFIABLE CPD PAPER

FULL PAPER DETAILS

1*Consultant in Special Care Dentistry, Department of Sedation and Special Care Dentistry, King's College London Dental Institute at Guy's, King's College and St Thomas' Hospitals, Floor 26, Tower Wing, London, SE1 9RT, UK; ²Professor of Psychology as Applied to Dentistry, King's College London, Oral Health Services Research & Dental Public Health, King's College Hospital, Caldecot Road, London, SE5 9RW, UK; ³Acting Assistant Professor, Dental Fears Research Clinic, Department of Dental Public Health Sciences, Box 357475, University of Washington, Seattle, WA 98195-7475, USA; ⁴Student of Dental Hygiene and Therapy, Faculty of Health Care, Utrecht University of Applied Sciences, Bolognalaan 101, 3584 CJ Utrecht, The Netherlands; 5SAAD Visiting Professor of Anxiety and Pain Management, Department of Sedation and Special Care Dentistry, King's College London Dental Institute at Guy's, King's College and St Thomas' Hospitals, Floor 26, Tower Wing, London, SE1 9RT, UK *Correspondence to: Dr Carole A. Boyle Email: carole.boyle@kcl.ac.uk; Tel: +44 (0)20 7188 6074

Online article number E22 Refereed Paper – Accepted 19 February 2010 DOI: 10.1038/sj.bdj.2010.502 [®]British Dental Journal 2010; 208: E22

Objective To follow up 100 referrals to the sedation clinic, examining dental anxiety and background of patients, and to assess how many patients attended for treatment planning, initial treatment and how many completed treatment, and describe the characteristics of each. For those who attended for initial treatment, to investigate which type of sedation they received and the level of clinician they saw. **Design** Descriptive, cross-sectional survey and review of case notes. **Subjects and methods** Subjects were 100 consecutive new patients to the Department of Sedation and Special Care Dentistry at Guy's and St Thomas NHS Foundation Trust. The notes were analysed by an experienced member of staff (CAB) and data entered into an Excel spreadsheet and an SPSS data file created. These data were merged with a dataset containing their responses to the initial questionnaire and medical history for analysis. **Results** Of the 100 patients initially referred, 72 attended the treatment planning session, 66 of the 72 (92%) attended for initial dental treatment, and 33 of 66 (50%) completed treatment. Dental Fear Survey (DFS) scores were related to attendance at the initial treatment visit but not to completion of treatment. Only 33 of 100 referred patients completed treatment. **Conclusions** Attendance for treatment planning and initial treatment was high. Attendance is related to fear and mental health. Overall completion of treatment from referral was 33%.

EDITOR'S SUMMARY

The change from the provision of general anaesthesia (GA) in general dental practice consequent on the ban by the General Dental Council in the 1990s to the far greater use of sedation is spawning much activity and research.

Although prompted by concerns over safety following very unfortunate loss of life, the switch to GA in appropriately equipped and staffed facilities and the rise in the use of sedation also have specific financial and resource implications. So this paper, which investigates what happens after referral for sedation asks valuable questions and presents us with several matters on which to ponder regarding the provision, checks and balances for such services. What is striking is the gradual 'drop off' of attendance and consequent failure to complete treatment as the process progresses. It seems that while as a profession we have taken the necessary steps to safeguard patients, the lingering attitude that remains with them is one of wanting the easiest solution which they see as being 'knocked out' and having it all done at once. After the immediate concerns of the patient have been dealt with the motivation to return dwindles, probably with the falling away of the perception of the importance of good oral health and absence of a sense of longer term value.

In the same way that research into sedation has increased, it may well be that we also need to step up our efforts in investigating alternative strategies such as behavioural therapy, as indeed the authors indicate in their wishes for future work. But perhaps we also need to think more closely about how to change the public's perception of oral health, oral care and whether or not the 'knock me out and get it done' philosophy can be fundamentally changed. Not only would this potentially improve oral care it would also have financial and resource consequences that would enable more to be spent on prevention and less on treatment provision.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 208 issue 10.

Stephen Hancocks Editor-in-Chief DOI: 10.1038/sj.bdj.2010.520

BRITISH DENTAL JOURNAL VOLUME 208 NO. 11 JUN 12 2010

TO ACCESS THE BDJ WEBSITE TO READ THE FULL PAPER:

- BDA Members should go to www.bda.org.
- Click the 'login' button on the right-hand side and enter your BDA login details.
- Once you have logged in click the 'BDJ' tab to transfer to the BDJ website with full access.

IF YOUR LOGIN DETAILS DO NOT WORK:

- Get a password reminder: go to www.bda.org, click the login button on the right-hand side and then click the forgotten password link.
- Use a recommended browser: we recommend Microsoft Internet Explorer or Mozilla Firefox.
- Ensure that the security settings on your browser are set to recommended levels.

IF YOU HAVE NOT YET SIGNED UP TO USE THE BDA WEBSITE:

• Go to www.bda.org/getstarted for information on how to start using the BDA website.

IN BRIEF

- A second stage treatment-planning visit increases the likelihood of that individual attending a sedation treatment appointment and has cost savings.
- Older dentally anxious patients are more likely to complete treatment.
- People with mental health disorders are less likely to attend and may require additional support.
- A significant number of appointments are wasted due to patient non-attendance.

COMMENT

Dental sedation provision within the NHS has a significant cost, so its use is therefore of interest to service planners and providers. This London based study adds to the evidence of disparities between referred demand and successfully completed treatment.^{1,2}

Boyle et al. reviewed the treatment pathways of patients referred for dental treatment under conscious sedation who attended for new patient appointments at a specialist clinic in 2007. They hypothesised that fear intensity would correlate with attendance (due to sedation being 'the solution' to avoidance) and mental health problems would be associated with diminished completion (due to coping skills). While this study does not address the question implied in the introduction regarding engagement with dentistry subsequent to sedation treatment completion, it does provide interesting data on the likelihood to engage with sedation following referral.

The notes of 100 consecutive new patients referred for sedation were retrospectively analysed two years later for the characteristics of those patients who attended for treatment planning, provision and completion. The authors demonstrate that there was no characteristic difference between treatment planning attendees/non-attendees, however patients who attended for the initial treatment session showed greater fear scores, and attendance for initial treatment was lower in those patients with mental health conditions. Compared with a study carried out in

Dundee,¹ the provision of intravenous sedation was higher and there were less inhalation sedation and general anaesthetic treatments carried out. The study shows engagement drops off at each stage of the treatment pathway, and completion of treatment was only achieved in 33% of patients.

The provision of sedation services needs to be cost-effective as well as socially inclusive. Initial engagement with sedation services was high for patients, but not maintained by those with mental health problems, nor completed by significant numbers of anxious patients. This has implications for patient well-being and service planning/delivery. As the authors conclude, this demonstrates possible barriers to treatment and the need for further research to understand how the profession can facilitate treatment engagement and completion by patients.

S. M. Woolley Clinical Research Fellow, Cardiff University Dental School

- McGoldrick P, Levitt J, de Jongh A, Mason A, Evans D. Referrals to a secondary care dental clinic for anxious adult patients: implications for treatment. *Br Dent J* 2001; **191:** 686–688.
- Woolley S M. An audit of referrals to a secondary care sedation unit. *Br Dent J* 2009; 206: E10.

AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research? We were interested to find out what happens after patients are assessed as requiring sedation for their dental care. A previous study¹ had looked at the characteristics of these patients: demographics, self-reported oral health and dental attendance, and dental fear. We wanted to know if there were any indicators in the patients profile that we could use to predict whether they would attend for treatment and go on to complete the planned care.

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

It was disappointing that only a third of patients completed treatment and it would be interesting to follow up this group and find out why. Our hypotheses include the number of appointments required to complete care, the number of different clinicians treating patients and perhaps a reflection of the less stable population in London.

We now have a psychologist-led service available offering cognitive behaviour therapy (CBT) to overcome dental fears and it would be interesting to compare attendance patterns for those receiving CBT to those have pharmacological anxiety control methods.

Boyle C A, Newton T, Milgrom P. Who is referred for sedation for dentistry and why? *Br Dent J* 2009; 206: E12.