Summary of: Antibiotic prophylaxis in dentistry: part I. A qualitative study of professionals' views on the NICE guideline

S. Soheilipour,[1] S. Scambler,[2] C. Dickinson,[3] S. M. Dunne,[4] M. Burke,[5] S. E. Jabbarifar,[6] and J. T. Newton[7]

FULL PAPER DETAILS

[1*]Department of Oral Health Services Research & Dental Public Health, GKT Dental Institute, King's College London, Caldecot Road, Denmark Hill, London, SE5 9RW/Member of Faculty, Department of Community Dentistry, Dental School, Isfahan University of Medical Sciences, Isfahan, Iran; [2]Lecturer in Sociology, [7]Professor of Psychology as Applied to Dentistry/Deputy Director of Research & Development/ Head of Oral Health, Workforce & Education Research Group, Department of Oral Health Services Research & Dental Public Health, King's College London, Caldecot Road, Denmark Hill, London, SE5 9RW; [3,5]Consultants in Special Care Dentistry, Guy's and St Thomas' NHS Foundation Trust, Floor 26, Guy's Tower, Guy's Hospital, London, SE1 9RT; [4]Professor in Primary Dental Care, Head of Dental Practice and Policy, Department of Primary Dental Care, King's College London, Caldecot Road, Denmark Hill, London, SE5 9RW; [6]Associate Professor in Pediatric Dentistry, Department of Pedodontics, Dental School, Isfahan University of Medical Sciences, Isfahan, Iran
*Correspondence to: Shimae Soheilipour
Email: shimae.soheilipour@kcl.ac.uk; Tel: +44 (0)203 299 3481; Fax: +44 (0)203 299 3409

Online article number E1
Refereed Paper – Accepted 10 December 2010
DOI: 10.1038/sj.bdj.2011.524
©British Dental Journal 2011; 210: E1

Background The NICE guideline for antibiotic prophylaxis before dental treatment has made a substantive change and fundamental departure from previous practice that affects long-standing beliefs and practice patterns. There is potential difficulty for healthcare professionals explaining the new guidance to patients who have long believed that they must receive antibiotics before their dental treatment. **Aim** To explore clinicians' attitudes towards the NICE guidance on antibiotic prophylaxis, their use of the guideline in clinical practice, barriers to the implementation of the guideline, and how best to overcome any perceived barriers. **Methods** In-depth interviews were conducted with seven dental care professionals, two cardiologists and a cardiac care nurse. The data were analysed using the framework method to extract central themes and opinions. **Results** Clinicians generally perceived that initially patients would be reluctant to follow the NICE guidance. This was felt to be particularly true of the patient cohort that had previously been prescribed prophylactic antibiotics. They found it difficult to explain the new guidance to patients who have had infective endocarditis and have long believed that they must receive antibiotics before their dental treatment. Concerns were also raised about the legal position of a clinician who did not follow the guidance. Clinicians generally suggested that the provision of accurate information in the form of leaflets and valid websites would be the best way to advise patients about the new guidance. **Conclusions** Clinicians anticipated difficulties in explaining to patients the change in clinical practice necessitated by adherence to the NICE guidance, most notably for patients with a history of infective endocarditis or where the patient's cardiologist did not agree with the NICE guidance. They placed particular emphasis on the provision of accurate information in order to reassure patients.

EDITOR'S SUMMARY

The National Institute for Health and Clinical Excellence (NICE) guideline for antibiotic prophylaxis (AP) in relation to dental treatment, which effectively reversed previous advice and traditional knowledge, has had the potential to cause confusion and misunderstanding among professionals and patients.

In this issue we publish two companion papers which examine the immediate impact on clinical practice that this guidance has created, firstly by questioning health professionals and secondly by seeking the reactions of patients. The papers provide a valuable insight into the complex weave of the professional-patient relationship, uncover some truths about our sense of self and society and open debate on the extent to which we all rely on whatever the 'truth' is to guide our responses and actions.

Clinicians express a range of thoughts on the guidance, connected with their own doubts about the veracity of the evidence supporting the change of treatment approach, the way in which it potentially dictates their 'clinical freedom' and how they might be able to communicate this apparent *volte face* to their patients. What emerges clearly from both sides of the therapeutic divide, the prescribers and the prescribed, is the central need for trust. This is a quality not confined to the relatively narrow confines of AP but is brought into sharper relief by the potential seriousness of what may happen if a 'mistake' is made in the event that the trust is misplaced, undermined or proven by experience to have been misjudged.

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 1.

Stephen Hancocks
Editor-in-Chief

DOI: 10.1038/sj.bdj.2011.541

IN BRIEF
- The appropriateness of the NICE guideline in all cases, particularly for those with the highest risk, was an important concern in the absence of strong evidence.
- Conflicting advice from cardiologists clearly influenced dentists' ability to implement the guideline.
- Professionals felt responsibility to take into account individual patient's needs and requests and adapt the guideline to suit circumstances.

RESEARCH

COMMENTARY

Evidence-based dentistry has many different tendencies, all of which are subject to debate. For example, evidence-based dentistry has been criticised for its tendency to increase technical control of clinical practice but on the other hand it makes evidence more widely available and understandable to practitioners and the public. This latter function is important because it highlights the possibility that the evidence-based movement may well have an important democratising function. Identifying potential barriers that may affect clinicians' ability to apply new guidelines is important because if evidence-based practice is to work, these barriers need to be considered in some depth. Likewise seeking to explore the implementation of interventions to help address these barriers is also very important if practice is to change.

The qualitative study reported here followed a well established approach to data collection and analysis. The framework analysis in the paper has been well executed and the findings are presented in an accessible format.

The findings report a range of views about the implementation of the guidelines from positive to negative. Of greatest significance, however, is that on the one hand having the guidelines can simplify and standardise practice, while on the other hand some practitioners perceived the guidelines as a form of technical infringement on their autonomy. For some the guidelines were more a form of technical legal control rather than based on good science, with some practitioners preferring to have more freedom to adopt, for example, the AHA, BCS or BSAC guidelines.

The paper goes on to discuss the problems of conflicting advice given by other health professionals and the difficulties this raises for dentists attempting to follow the guidelines. It also discusses the problem of implementing standardised approaches when individualised care is often what patients demand. The paper appeals to effective communication as a way to overcome this barrier but specific details of how this might be achieved are lacking in the discussion. In the end this paper highlights the conflict in evidence-based dentistry between standardisation and control on the one hand and democracy and clinical freedom on the other. More direct work is needed in dentistry that explores these issues directly.

B. Gibson
Senior Lecturer in Medical Sociology,
School of Clinical Dentistry, The
University of Sheffield

AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research?

The National Institute for Health and Clinical Excellence guideline on antibiotic prophylaxis (NICE 2008) no longer advocates antibiotic prophylaxis for high risk patients having dental procedures. This is in clear conflict with long-established clinical practise and it may be difficult to communicate this change to patients for practitioners who have previously prescribed antibiotic prophylaxis, but now need to convince their patients that there is no longer a need. We wanted to find out whether patients and clinicians felt there was a possibility for confusion and concern about the new recommendations and any techniques to address potential barriers that may affect clinicians' ability to apply the NICE guideline. We hoped this information would be of value to practising clinicians and researchers in helping to reassure patients about the new guidance.

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

The results of these two studies raise valuable insights into possible barriers and facilitator factors that impact upon the implementation of the NICE guideline. We would like to expand this work by using social cognition models to identify variables to target in order to enhance uptake of and compliance with guidelines amongst healthcare practitioners. Ultimately, we would like to devise and test a targeted intervention and/or educational programme to reduce barriers and facilitate applying the NICE guideline in practice.