

# Summary of: Communicating new policy on antibiotic prophylaxis with patients: a randomised controlled trial

S. Soheilipour,<sup>\*1,2</sup> S. M. Dunne,<sup>3</sup> C. Dickinson,<sup>4</sup> S. E. Jabbarifar<sup>5</sup>  
and J. T. Newton<sup>6</sup>

## VERIFIABLE CPD PAPER

### FULL PAPER DETAILS

<sup>1</sup>Research collaborator, King's College London, Dental Public Health Research group, London, UK; <sup>2</sup>Assistant Professor, Department of Oral Public Health and TorabiNejad Dental Research Center, Dental School, Isfahan University of Medical Sciences, Isfahan, Iran; <sup>3</sup>Professor in Primary Dental Care, Department of Primary Dental Care, King's College London, London, UK; <sup>4</sup>Consultant in Sedation and Special Care Dentistry, Guy's and St Thomas NHS Foundation Trust, Guy's Hospital, London, UK; <sup>5</sup>Professor in Pediatric Dentistry, Department of Pedodontics and Torabi Nejad Dental Research Center, School of Dentistry, Isfahan University of Medical Sciences, Isfahan, Iran; <sup>6</sup>Professor of Psychology as Applied to Dentistry, Division of Health and Social Care Research, King's College London, London, UK  
\*Correspondence to: Shima Soheilipour  
Email: shima.soheilipour@kcl.ac.uk,  
Tel: +44 20 7346 3481

#### Refereed Paper

Accepted 13 May 2013

DOI: 10.1038/sj.bdj.2013.742

British Dental Journal 2013; 215: E5

**Objectives** This trial aimed to assess the effectiveness of two different communication tools on the levels of anxiety and concern when a change in patients' treatment was introduced. **Method** Patients previously advised to have antibiotic prophylaxis before their dental treatments were randomised to receive information about the new policy either through a video accompanied by a written leaflet or just the leaflet. All patients completed a questionnaire to assess anxiety and concern as well as intentions regarding accepting dental treatment without antibiotic prophylaxis at enrolment point, after intervention and after meeting the cardiologist. **Results** Ninety questionnaires were analysed (45 in each group). The mean level of anxiety and concern scores were significantly reduced after the intervention point ( $p < 0.05$ ). The ANOVA model revealed a significant reduction in the levels of anxiety and concern during the trial ( $p < 0.001$ ). However, the main effect of group (intervention *versus* control) and the interaction term were not significant. At the end of trial there was no difference in the number of patients accepting dental treatment without cover in the two groups. **Conclusion** Patients appear more likely to accept a change if it is communicated directly to them by their practitioners via face to face consultation compared with video or leaflet. When there is a lack of time for in-depth consultation, video could be a more effective method than leaflet alone.

### EDITOR'S SUMMARY

Communicating effectively with patients is an absolutely key element for ensuring successful care and good practice. This is nowhere more critical than in the situation in which a change in circumstances requires an explanation and especially so in relation to a potential serious medical condition.

Such a situation has arisen in recent years since NICE issued a guideline published in the UK in 2008 which abolished the requirement to give antibiotic prophylaxis (AP) to patients at risk of infective endocarditis. This reversed many years of emphasis on the absolute importance of this antimicrobial measure impressed not only on patients but also particularly on undergraduates as to the serious dento-legal consequences of an incident of infective endocarditis arising out of neglect of providing AP.

While it is one thing for professionals with an understanding of evidence-based review to come to terms with such a radical u-turn it is potentially much more difficult to explain, and convince patients that the former protection that they had been assured of is now no longer deemed necessary.

Various studies have assessed the effect of this change from the clinicians' viewpoint as well as patients' acceptance or otherwise of the new guideline and found, as might be expected, a variance in compliance and understanding of such a substantive shift.

This study aimed to investigate the most effective communication methods in order to permit patients to comprehend the change as fully as possible. As so often nowadays there is a range of options available and it is probably that each has benefits for any given patient

group or individual. Perhaps not surprisingly, but also reassuringly, patients appear more likely to accept a change if it is communicated directly to them by their practitioners via face to face consultation compared with video or leaflet. This would seem to be intuitive and yet equally as often, the information given by a dentist or doctor can be blanked out by the stress of the consultation. Once again, it is the trust in the clinician that clinches the effectiveness of the message and the consequent agreement to the therapeutic change.

The full paper can be accessed from the *BDJ* website ([www.bdj.co.uk](http://www.bdj.co.uk)), under 'Research' in the table of contents for Volume 215 issue 3.

Stephen Hancocks  
Editor-in-Chief

DOI: 10.1038/sj.bdj.2013.766

**TO ACCESS THE BDJ WEBSITE TO READ THE FULL PAPER:**

- BDA Members should go to [www.bda.org](http://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](http://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](http://www.bda.org/getstarted) for information on how to start using the BDA website.

**IN BRIEF**

- Suggests that due to a lack of interest in the written material and the probability of low literacy, communicating evidence-based and unbiased information to patients through a visual source tends to be more persuasive.
- Stresses the consistency of message among healthcare teams would strongly reassure patients to accept a change in their clinical care.

**COMMENTARY**

This interesting paper from the group in Kings College looks at ways in which we might improve our communication of important clinical changes in practice to our patients that should lead to an improvement in their understanding of the rationale for such changes. Patient anxiety, concern and willingness to accept the change in practice were assessed in cardiac patients following the publication of the 2008 NICE guideline that negated the requirement for antibiotic prophylaxis prior to dental treatment in patients at risk of developing infective endocarditis.

The authors used three tools for information delivery – namely: a printed leaflet, a five-minute video in which a dentist gave the information verbally and a face-to-face interview with a cardiologist. The patients were divided into two groups. All received the printed leaflet as the first educational intervention, half of these also saw the five-minute educational video and then all had a face to face meeting with a cardiologist. They were asked to complete the same questionnaires before any intervention and after reading the leaflet and/or viewing the video and finally after their meeting with the cardiologist.

The design of the study, a randomised controlled trial, initially appears to be of a high standard. The devil is, however, in the detail and the limitations of the study, many of which are acknowledged by the authors, are pervasive. The setting and timing of the study is of concern, the premise is flawed due to

the absence of imminent dental treatment and the *ad hoc* patient reported measures used calls into question the results of the study.

In spite of the limitations of the study, it does raise some important points regarding patient education, and communication with both patients and fellow healthcare professionals which are highlighted. In multi-disciplinary care we should strive to collaborate with colleagues to achieve a common, concise message for patients to facilitate their information needs and better engage them in their own care. In an era of vast multimedia and technological advancement we have the opportunity to embrace these technologies to facilitate patient information needs and engage a wider population.

**Dr Christine McCreary**  
Senior Lecturer and Consultant  
in Oral Medicine,  
Cork University Dental  
School and Hospital

**Dr Richeal Ni Riordain**  
Specialty Doctor,  
Eastman Dental Institute

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

The NICE guideline on antibiotic prophylaxis in 2008 no longer recommended antibiotic prophylaxis for high risk patients having dental procedures. This is in clear conflict with long established clinical practice and has posed difficulties when communicating this change to patients for practitioners who have previously prescribed antibiotic prophylaxis. The current research in this area has revealed the appropriate knowledge on the guideline amongst health professionals; however, levels of compliance are different. Patients' concern on not taking antibiotics before dental treatments is a key factor that could influence the successful adoption of the guideline. Evidence-based consumer information designed for patients can increase patient understanding of the evidence for a change and can also facilitate the implementation of change in clinical practice by reducing possible concerns and eliciting patients' preferences. In this trial we aimed to evaluate the impact of two different communication tools on the anxiety level and patients' decision making process.

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

We would like to expand this work by assessing the interventions over a longer period. We also would consider other interventions and/or educational programmes to target different health professional groups involved, in order to reduce barriers and facilitate applying the NICE guideline in practice.