Presenting patients with information on their oral health risk: the PREFER three-arm RCT and ethnography

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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Plain English summary

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A new system in NHS dentistry in England is being tested, which involves putting patients into traffic light (TL) categories: ‘red’ for high, ‘amber’ for medium and ‘green’ for low risk of dental disease. Currently, it is not known whether or not dentists talk to patients about risk, whether or not patients find TL risk information useful and if this leads to improved behaviours such as better toothbrushing. New camera technology, Quantitative Light-Induced Fluorescence (QLF™) (Inspektor Research Systems AB, Amsterdam, the Netherlands), is also available and produces attention-grabbing photographs with unbrushed areas highlighted in red. Whether or not patients appreciate this information and use it to improve their brushing is not known.

First, a literature review was carried out to see whether or not the form in which risk information is presented to patients is valued and useful. This review found only 12 studies, mainly showing that even if information is presented visually or with computers, patients still want to discuss information to make it meaningful.

Second, an experiment was conducted in four dental practices involving 412 patients who were given (1) TL information, (2) QLF photographs or (3) just verbal information. Information on oral health was collected from patients, QLF images of their teeth were taken and telephone interviews were conducted 6 and 12 months later. It was found that 51% of patients liked verbal information best, 35% of patients liked QLF photographs best and 14% of patients liked TL information best; this varied between practices. When patients were asked to value information, TL was valued least. Although there was a slight improvement in patients’ reports of toothbrushing and amount of sugar in drinks, there was no difference between the three types of information tested.

Third, 368 dental appointments were observed and 30 patients and 16 dental staff were interviewed. Mixed views were found about TL and QLF information but, mostly, what patients really want is detailed, personal, verbal information from their dentist.
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