

# Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.  
The abstracts on this page have been chosen and edited by Paul Hellyer.

## Barbie dolls – pink plastic toys?

Klamer K. Analysis of Barbie medical and science career dolls: descriptive quantitative study. *BMJ* 2023; DOI: 10.1136/bmj-2023-077276.

### ...or role models?

'We girls can do anything' states the former motto of the Barbie brand. Production of her different guises indicate that she has so many university degrees – PhD, MD, DDS, MSc, MBA – that the strapline could be true. As a role model, Barbie is more than a pink doll. She has come to symbolise the careers to which girls may aspire.

Studying Barbie (n = 92) and her other brand clones (n = 65) having medical or scientific roles, the author visually analysed whether the dolls' hair, clothing and accessories met appropriate safety standards and noted their specialisms. Most of the doctor and dentist dolls were female and worked with children. Dentists came with toothbrush, toothpaste and a lab coat. Doctors came with a stethoscope but wore open-toed, high-heeled shoes, did not have their hair tied back and had uncovered legs, in contravention of real life clinical dress codes.

The manufacturers have a responsibility to portray roles correctly and future dolls should come with proper PPE. Career aspirations should be expanded beyond paediatrics to more male-dominated specialities.

<https://doi.org/10.1038/s41415-024-7076-6>

## History is hidden in calculus

Gancz A S, Farrer A G, Nixon M P *et al.* Ancient dental calculus reveals oral microbiome shifts with lifestyle and disease in Great Britain. *Nature Microbiol* 2023; **8**: 2315–2325.

### Ancient samples may inform understanding of today's chronic diseases.

Present-day human microbiomes are linked to a range of non-communicable, chronic diseases such as obesity, cardiovascular disease and poor mental health. Historically, the evolution of the human microbiome and changes due to industrialisation are not well understood. Immigrants to the USA have shown changes in gut microbiomes as a western lifestyle is adopted. Using calculus samples from diverse pre-industrialised human remains dating from 2200 BC to 1853 AD, oral microbiota were reconstructed using shotgun metagenomics.

Sampling identified microbial communities which have existed for millennia. *Methanobrevibacter colonies*, however, were found to be present in these ancient samples, but are not commonly found in the oral microbiome of modern industrialised societies. The authors speculate that this disappearance may be related to the rise of industrialisation, advancements in dentistry (such as the routine removal of calculus deposits and use of oral hygiene products) and changes in diet and medical care. The greater diversity of pre-industrial microbiomes may enhance our understanding of chronic non-communicable disease.

<https://doi.org/10.1038/s41415-024-7078-4>

## Retirement

Baumeister S-E, Wesselman H, Nascimento G G, Listl S. Effect of retirement on self-rated oral health and dental services use: longitudinal fixed-effects instrumental variable study in 31 countries. *Scand J Work Environ Health* 2023; DOI: 10.5271/sjweh.4134.

### A challenge or benefit to oral health?

Retirement is a major life event which can impact on wellbeing and health with both beneficial and detrimental outcomes. Previous studies of retirees have focused on general health and have not considered oral health or access to dental care. From the measures used (self-assessed oral health on a 5-point Likert scale; dental visits >1 over the previous one or two years), the results showed a decrease in self-related oral health due to retirement and an increase in dental service use.

These effects were stronger in men than women. Suggested reasons for these subjective changes include reduced income leading to budget constraints, loss of work-related benefits, a more affordable but less healthy diet or simply that retirement gives more time to reflect on the benefits of good oral health. Increased attendance may be triggered by the increase in available time or by the perceived decline in oral health. Those retiring from manual labour exhibited worse self-related oral health and are less likely to use dental services.

<https://doi.org/10.1038/s41415-024-7077-5>

## Longevity of post and core restorations

Vogler J A, Stummer A-L, Walther K-A, Wöstmann B, Rehmann P. Survival of teeth treated with post and core – A retrospective study of more than 1000 cases with observation periods up to 18 years. *J Dent* 2023; **138**: 104723.

### What is the difference between success and survival?

Survival time – the length of time between placement of a restoration and extraction of the restored tooth – is more relevant to treatment planning than the survival time of the restoration itself, because the tooth may still be restorable. In cases of teeth restored with a post and core (PC) and a coronal restoration, time to decementation was termed 'success' and time to tooth loss was termed 'survival'.

In this study of patients treated at university clinics with a PC, 735 patients were identified who received 1,053 PCs between 2004 and 2022. Seventy percent received 1 PC. Treatment was carried out by students under supervision or by experienced dentists, using a standardised procedure.

The cumulative mean survival time was 11.74 years with a ten-year survival rate of 59%. Commonest reason for extraction was root fracture within five years of fitting as an abutment to a crown-retained removable partial denture, possibly due to the axial forces exerted on the crown on removal of the denture. Other risk factors for extraction included type of coronal restoration, bone attachment and the age of the patient.

<https://doi.org/10.1038/s41415-024-7079-3>