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 **John R. Radford**.

Gender-delivered healthcare outcomes

Comparison of hospital mortality and readmission rates for Medicare patients treated by male vs female physicians

Tsugawa Y, Jena AB *et al. JAMA Intern Med* 2016. doi:10.1001/jamainternmed.2016.7875.

But is it that '…teams lead by women physicians have better outcomes'?

The aim of this study was to find out if outcomes for elderly patients differ following treatment by either male physicians or female physicians. In this study, one and a half million Medicare patients were followed. Regardless of the medical condition and severity of the illness, patients treated by female physicians had a lower 30-day mortality and fewer admissions. A possible explanation for this finding is that female physicians are more likely to follow evidence-based practice. But a commentary on this paper (www.acsh.org/news/.../are-patient-outcomes-better-female-physicians-not-so-fast-106..) contends that as patients are cared for by teams of health care providers, it could be that women are better team leaders. It is also stated in the same commentary that 'career interruptions for child-rearing, (and) higher rates of part-time employment' may to the contrary, compromise the quality of care offer by female physicians. Provocatively it has been suggested that this could justify higher salaries for male physicians.

DOI: 10.1038/sj.bdj.2017.116

Glass ceiling

The gender pay gap in surgery

Dean E. *Bulletin* 2017 rcseng.ac.uk/doi/pdf/10.1308/rcsbull.2017.12

'…women don't want to go into these specialties, they want to be at home.'

To the contrary. The author of this article argues volubly that a jaundiced culture has led to such attitudes that in turn has led to unacceptable pay differences and this gap is increasing; the Office for National Statistics reported in 2004 that male doctors earned 21% more than their female colleagues, and this had grown to 41% in 2015. But it has been argued that women may not want to pursue the highest-paid specialties, such as general and neurosurgery, as they have high on-call commitments making it difficult with finding suitable childcare. The author states that supernumerary part-time training is no longer available, however there are *Less Than Full Time* (LTFT) training schemes in England, Wales and Northern Ireland and a comparable scheme in Scotland. Policies should be enacted to address inequalities (see http://surgicalcareers.rcseng.ac.uk/wins/join-women-in-surgery - a national initiative dedicated to encouraging, enabling and inspiring women to fulfil their surgical career ambitions).

DOI: 10.1038/sj.bdj.2017.117

'Micro-organisms stressed and entombed'

Long-term survival and vitality outcomes of permanent teeth following deep caries treatment with step-wise and partial-caries-removal: a systematic review

Hoefler V, Nagaoka H *et al. J Dent* 2016; **54:** 25–32

Partial-caries-removal would appear to be superior to step-wise.

Failure was defined as loss of pulp vitality or restoration failure. These markers are fraught with errors as identified by the investigators. For example, when considering pulp vitality, two of the five studies (2 RCTs, and 3 observational case-series) included in this systematic review used the absence of pulpal symptoms together with a satisfactory radiographic appearance. The other studies recruited cold testing. Not only could these surrogate markers for pulpal health have led to false outcomes, but some of the candidate teeth may have been allocated erroneously to receive such treatment regimens. Other confounders were 1) a lack of quantification of residual diseased biomass (infected dentine) before sealing, and 2) the potential effects dental materials could have had on pulpal health and the longevity of the restoration. A meta-analysis could not be performed.

DOI: 10.1038/sj.bdj.2017.118

Stress

Relation between resting amygdalar activity and cardiovascular events: a longitudinal and cohort study. Tawakol A, Ishai A *et al. The Lancet* 2017; DOI: 10.1016/S0140-6736(16)31714-7

Those with higher amygdala activity were at a greater risk of a future cardiovascular event.

The amygdala is that part of the brain within the temporal lobes, shaped like two almonds. It has a host of different functions for example emotional learning and possibly sexual orientation. The aim of this study was to explore links between amygdala activity and the risk of a cardiovascular event. In this study, 293 patients were followed-up for almost 4 years; brain activity was recorded using PET/CT scan, bone marrow and spleen activity and inflammation of arteries were measured using validated measures. Over twenty patients suffered a cardiovascular event including heart attacks, angina, heart failure, stroke and peripheral arterial disease. Resting metabolic activity within the amygdala was associated with increased bone-marrow activity ($r=0{\cdot}47$; $p<0{\cdot}0001$), arterial inflammation ($r=0{\cdot}49$; $p<0{\cdot}0001$), and risk of cardiovascular disease events (standardised hazard ratio 1·59, 95% CI 1·27–1·98; $p<0{\cdot}0001$), independent of established risk factors. In a parallel cross-sectional study, amygdala activity was linked with perceived stress.

DOI: 10.1038/sj.bdj.2017.119