Highlights from this issue

Nick Brown , *Editor in Chief*

WAKE UP CALLS

I've been quite unwell over the last few weeks: nothing, in the great scheme of things that would count (other than to my family and me) as 'major', but enough to have to postpone a trip to Pakistan and more than enough to give me a reminder that good health can't be taken for granted and that, without it, life becomes rather… scary. Extrapolating this theme, reality checks feature heavily…

Most readers of both Atoms and *Archives* would concur that, irrespective of grade or specialty, they are privileged to be paediatricians. This though, doesn't airbrush away the morale sapping recruitment issues felt so keenly over the last few years, the application to training position ratio falling faster than in any other acute medical branch. Coupled with this, are inequitably high rates of care seeking for work associated mental health problems: are paediatricians better at acknowledging them or is the environment causal? There have always been pressures unique to paediatrics, but the morale corroding cycle of rota gaps, scrutiny through social media platforms, high profile media ethical cases and parental expectations, have accelerated the process.

In the Spotlight on Paediatrics meetings held at the Royal Society of Medicine in 2018, Hilary Cass and colleagues examined factors in this. Written with warmth, positivity and feeling for our specialty, the piece is essential reading and my editor's choice for the month. ***See page 109***.

VACCINATION: A SHORT HISTORY

Though other areas will have their own proponents and though almost uniquely under scrutiny, most would agree that vaccination is the single most important intervention in the story of public health. Pollard's history of UK vaccination brims with detail about the controversies around each milestone (the embers hot even before stoked by the internet) from Jenner's smallpox vaccination in the early 1800s to the current programme. ***See page 115***.

BREAST FEEDING: WHAT INCENTIVE IS REQUIRED?

For whatever reason, societal or other, and despite the known benefits, most women in the UK choose not to breastfeed long-term. The notion of conditional financial incentives to encourage longer breast feeding has been tested previously in the USA, Puerto Rica, France and Canada where there is some evidence of effectiveness. One spoke of the Nourishing Start for Health project which was a cluster randomised controlled trial of food vouchers or standard advice for mothers in deprived wards in Northern England who continued to breastfeed. The intervention was effective (5.7% increase (95% CI 2.7% to 8.6%)) and the cost per baby €109 (USD $121) at 6 weeks of age but much greater for each additional child-mother dyad maintaining breast feeding at €1150 (£974). ***See page 155***.

GLOBAL CHILD HEALTH: BREAST FEEDING—WHAT INCENTIVE IS REQUIRED?

Though the adverse associations with non-breast milk feeds and short term outcomes are well recognised, the literature from low and middle income countries on persistence beyond the first 6 months is patchy. Nguyen *et al* describes the relatives rates of lower respiratory and diarrhoeal illnesses and all cause hospitalisation in 1700 babies born in six centres in Vietnam, assessed at 1, 3, 6 and 12 months of age by the use of prelacteal feeds (a composite of water, formula, honey and fruit juices given before breast milk feeding is initiated) and formula feeds (both common) against sole breast feeding. Both increased the risks of adverse health outcomes particularly hospitalisation and lower respiratory tract infection by approximately adjusted OR (95% CI) 1.43 (1.09 to 1.88) and 1.48 (1.07 to 2.05), respectively at 12 months. ***See page 122***.

MEDICAL PRODUCTS AND SEMANTICS

The management of non-bloody diarrhoea is essentially simple: rehydration, continuation of normal feeds (to prevent catabolism) and zinc are the cornerstones of WHO management. As it is so common, it is unsurprising that the market for over the counter alternatives has flourished one of the best examples being the relatively unobstructed proliferation of gelatin tannate and its siblings. Two paper in the Drugs and Therapeutics section go into this controversy in detail

Florez' systematic review and meta-analysis of trials of gelatin tannate against standard treatment shows no evidence of benefit: In a random effects model there was no difference in diarrhoea duration, stool frequency at day 2, diarrhoea at day three and vomiting. ***See page 141***.

Huijghebaert explores the legal reasons these products have been able to forge their own market. Like so much else, it comes down to terminology, the fine line between what is and what is not a 'medicine', and there are loopholes in the current system. New medicines by law, require full evaluation, including pharmacokinetic, pharmacodynamic, and clinical efficacy studies to enter the EU by the European Medicines Agency (EMA) They are subjected to strict claim control, and are prescription-only at launch.

Unlike new medicines which require full pharmacokinetic, pharmacodynamic, and clinical efficacy studies to enter the EU by the European Medicines Agency (EMA), medical devices (MedDevs) are defined as any material intended by the manufacturer to be used for prevention treatment or alleviation of disease modification of anatomy or of a physiological or pathological process. EU laws are less strict than those in the US and the authors' analysis is eye opening. Using the examples of gelatin tannate with tyndalised probiotics for diarrhoea and hyaluronidase and chondroitin sulfate as examples, standard guidance for medicines was applied to the promotional leaflets for these MedDevs. There were several areas in which detail that would have been required for a medicine was not expanded upon: despite the lack of evidence in children, use was not clearly restricted; side effects were unclear and potential interactions including interference of absorption of concurrently taken drugs not detailed. ***See page 147***.

As I said earlier, reality checks…

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