

, London

Cite this as: *BMJ* 2023;381:p858 http://dx.doi.org/10.1136/bmj.p858 Published: 20 April 2023

Tom Nolan's research reviews—20 April 2023

Tom Nolan *clinical editor; sessional GP, Surrey*

Blood pressure management (tailor's version)

Using genetic, biomarker, and other individual characteristics to come up with a tailor-made treatment plan sounds a bit like, well, going to a tailor. When it comes to key decisions about our health, we might well prefer a bespoke outfit (and some will be able to afford one), but, looking at healthcare systems right now, most people are lucky if they can find something that's good enough off the peg.

A randomised, double blind, crossover trial set in Sweden explored the potential for personalised therapy in people with grade 1 hypertension at low risk for cardiovascular events. Participants took one of four antihypertensives (lisinopril, candesartan, hydrochlorothiazide, or amlodipine) for a month or longer, then, after a washout period, switched to the next one, and repeated this until they'd taken all four. Blood pressure response varied considerably between participants-overall the researchers found that a personalised approach could reduce average systolic blood pressure by a further 4.4 mm Hg. Although this study suggests a tailor-made approach to blood pressure management could be worthwhile, we don't currently have the tools (other than age and ethnicity) to measure people up.

JAMA doi:10.1001/jama.2023.3322

Earning recovery after myocardial infarction

In contrast to the buzz around personalised medicine, the inverse care law doesn't seem to get much attention these days, so it's good to see a study looking at whether being a high earner means you're more likely to survive a myocardial infarction than someone on a low income. A cross sectional cohort study looked at people in six countries admitted to hospital for at least one day with a myocardial infarction. They calculated mortality rates at 30 days and one year after adjusting for age, sex, and comorbidities. Overall, those in the top quintile of income had around a 1-3% lower 30 day mortality rate compared with those in the lowest quintile of income. This difference was even greater at one year (although no difference was found at 30 days or a vear in Taiwan). However, income was determined by the patient's postcode rather than individual earnings, meaning the findings may also reflect access and quality of local health services and other confounding factors.

JAMA doi:10.1001/jama.2023.1699

None the wiser

Any cardiologist feeling sensitive about why their specialty was chosen for a study of an intervention to improve communication skills can rest assured that it's not a reputation thing but "because they frequently navigate challenging conversations with patients with serious illness, yet are understudied." The intervention in this randomised trial involving 40 cardiologists was to be taught five communication skills by an experienced coach that go by the mnemonic WISER (Walk in, sit down and make eye contact; Invite, by asking open questions; Say back, paraphrasing what patients have said to show active listening; Emotion, using empathic communication, including naming emotions; and finally Revisit concerns by inviting questions at the end of the consultation).

Analysis of post-intervention audio recordings found that cardiologists given the WISER training improved in the measures of E and R compared with controls who hadn't received the training—perhaps ER is an easier mnemonic to remember when you spend a lot of time there.

JAMA Intern Med doi:10.1001/jamainternmed.2023.0629

Targeting vascular inflammation as well as cholesterol

Lipid lowering to prevent cardiovascular events gets a lot of the limelight—but, once you've adopted all the lifestyle advice and are taking your statin, what next? Have we been overlooking the role of vascular inflammation, thought to be of similar importance to hyperlipidaemia when it comes to cardiovascular risk?

An analysis of three large multinational studies looked at inflammatory risk using a high sensitivity C reactive protein (CRP) test and cholesterol risk using low density lipoprotein (LDL) levels in people with or at high risk of cardiovascular disease already receiving statins. The authors found that high sensitivity CRP was a better predictor of cerebrovascular events than LDL, suggesting vascular inflammation may be a more important focus than lipids in this group of patients. The authors argue that their findings add more support to the option of adding colchicine for further reduction in cardiovascular risk in people taking statins who remain at high risk of cardiovascular events.

Lancet doi:10.1016/S0140-6736(23)00215-5

Spike in RSV publications

The *New England Journal of Medicine* published five articles on respiratory syncytial virus (RSV) within a day of each other this month, perhaps trying to replicate in paediatrician readers the sensation of arriving for a shift to find an emergency department full of wheezy babies and toddlers. An editorial describes the two new trials—one of an RSV vaccine given in pregnancy, and one in older adults—as the beginning of the end of the fight against RSV. When the bivalent RSV prefusion F protein-based (RSVpreF) vaccine was given in pregnancy, rates of medically attended severe RSV infection in babies up to 180 days old were lower than in the placebo group (0.5% v 1.8%). In the other study, adults over 60 years old given the same RSV preF vaccine also had a reduced rate of symptomatic RSV infections compared with placebo, but at seemingly low absolute rates: 1.19 versus 3.58 cases per 1000 years of observation.

N Engl J Med doi:10.1056/NEJM0a2216480, doi:10.1056/NEJ-M0a2213836

Competing interests: None declared.

Provenance and peer review: Not commissioned, not peer reviewed.