



Cite this as: *BMJ* 2024;384:q738  
<http://dx.doi.org/10.1136/bmj.q738>  
 Published: 28 March 2024

## New uses for aspirin ... and other research

**Ann Robinson** reviews the latest research

Ann Robinson *NHS GP and health writer and broadcaster*

### Old drug, new use?

The ancient Sumerians and Egyptians used willow bark containing salicylates to treat pain and fevers more than 3500 years ago. In 1897, Bayer chemist Felix Hoffmann synthesised the first aspirin tablet, and 70 years later John Vane explained that it works by inhibiting prostaglandins. Today, aspirin remains one of the most widely used drugs worldwide and new indications for its use can still get researchers excited.

This preliminary phase 2 trial of 80 adults with metabolic dysfunction-associated steatotic liver disease (MASLD) found that six months of taking daily, low dose aspirin (81 mg) significantly reduced their total hepatic fat quantity compared with placebo ( $-6.6\%$  v  $3.6\%$ , mean difference  $-10.2\%$ ) and increased the number of participants achieving 30% hepatic fat reduction ( $42.5\%$  v  $12.5\%$ ). The rationale is that reducing hepatic fat prevents inflammation, fibrosis, and eventual progression to liver failure. But further study in a larger sample size is necessary to confirm these potentially important findings and determine the ideal dose, duration, and starting point for aspirin.

*JAMA* doi:10.1001/jama.2024.1215

### Ignoring the messenger 1

Text messages from my GP often pop up on my phone, reminding me to order a prescription, attend an appointment, or have a flu jab. Another option is to send messages through patient portals in your electronic health record (EHR), which you get when you log in. In the UK, these are a work in progress, with NHS England requiring all non-specialist acute trusts to have established patient portals by the end of 2024.

Many people would agree that direct messaging has been a game changer for doctors and patients alike. But this large Californian study of over 260 000 people (90% adults, 10% children) found that neither portal nor text message reminders for patients were successful in raising the overall flu vaccination rates of 47%. Whether reminders were sent via a portal or a text message, whether they were responsive or fixed monthly reminders, and whether there was a pre-appointment reminder or none, none of the interventions led to a statistical or clinically significant improvement.

*JAMA Intern Med* doi:10.1001/jamaintern-med.2024.0001

### Ignoring the messenger 2

In this study of nearly a million Danish citizens over 65 years old, a series of nine electronic letters resulted

in a modest increase in flu vaccine uptake rates (1%) but didn't translate into observable subsequent improvement in clinical outcomes.

There was no difference between usual care and the nudged group in terms of hospitalisation for pneumonia or flu (1%), hospitalisation for any cause (13%), or deaths (1.8%). There may be some misclassification of events, and these results may not be generalisable to other populations who are less likely to come forward for flu jabs without a lot of nudging. But the results challenge the notion that repeat messaging translates into more uptake of flu jabs or better outcomes overall. The benefit of flu jabs for vulnerable groups remains unchallenged, but we clearly need better ways of getting the message across.

*Ann Intern Med* doi:10.7326/M23-2638

### Pregnancy and epilepsy

The children of women who are taking antiseizure medication during pregnancy are more likely to be diagnosed with neurodevelopmental disorders, but the reasons are unclear. Is it because of a shared genetic predisposition, the effect of having an unwell mother, increased surveillance of the child, or fetal neurotoxicity of the drugs? And are some antiseizure drugs safer than others?

In this large US cohort study of children born to women with epilepsy, the incidence of autism spectrum disorder (ASD) was higher among children exposed to antiseizure drugs during pregnancy than in the general population. However, once the authors had adjusted for indication and other confounders, they found that there was no substantially increased risk of ASD after in utero exposure to topiramate or lamotrigine, but that there was a dose-dependent increased risk among women taking valproate. These findings will help to inform safe prescribing for women with epilepsy who want to get pregnant.

*N Engl J Med* doi:10.1056/NEJMo2309359

### Getting weight just right

Goldilocks was right: finding the balance between too much or too little of a good thing is hard. Both underweight and obesity are associated with poor health throughout life. This gargantuan study using data from 3663 population studies with 222 million participants found that, from 1990 to 2022, the combined prevalence of underweight and obesity in adult men and women increased in most of the 200 countries and territories of the world (70% for men, 81% for women) and decreased in only a few (9% for men, 6% for women). Most of the increase was accounted for by rises in obesity, although underweight remains a problem in south Asia and

parts of Africa. Access to nutritious foods is a global priority, and the challenge is to adequately feed the underweight while reversing the growth in obesity in most of the world.

*Lancet* doi:10.1016/S0140-6736(23)02750-2

Competing interests: None declared

Provenance and peer review: Not commissioned; not peer reviewed