Bad science in a plastic world

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The climate is our biggest challenge. Health professionals can influence the public and politicians to help create a society able to address the urgent existential threat posed by climate change. We can also set an example of how to improve our world, and that begins with helping make the health industry carbon neutral. The NHS leads other health systems in its determination and thinking on climate action and environmental sustainability. But the task is huge. The danger to our health and our planet is severe and escalating. And difficulties lie everywhere.

Take plastics, for instance. Once a magic bullet for any problem, our reliance on plastics contributes importantly to climate change. Use of plastics in healthcare is ubiquitous and seemingly inextricable. The global medical plastics market is worth an estimated US$22 billion and grows every year. The link between production of plastics and environmental damage is clear. The solutions less so.

Climate change has many complex dimensions but breaking it down into more defined areas is helpful. Chantelle Rizan and colleagues detail the scale and harms of healthcare plastics, and propose applying the principles of a circular economy. Reducing, reusing and recycling plastics must be integral to the provision of healthcare if we are to tackle the demonstrable harms of plastics to human and environmental health.

While we are rethinking our use of plastics in healthcare, might we also reconsider case finding? The UK National Screening Committee has approved case finding or ‘targeted screening’ for dementia, lung cancer and atrial fibrillation. Harriet Hunt et al. explain why case finding is bad science. The science on vaccinations to prevent cervical cancer might be bad science too. A detailed review by Allyson Pollock and colleagues finds that trials might have overestimated efficacy of HPV vaccine.

Others may disagree. One person’s elixir is another person’s snake oil. In the same issue that Anant Jani and others put their faith in the disruptive power of technology-based social prescriptions, Eric Will warns us not to get carried away with technology unless its value is proven.

There is generally no substitute for reporting and replicating experiments. When it comes to the planet, we might only get one chance and that chance might be to reorientate our whole societal approach towards health and wellbeing.

References