



## VIEWS & REVIEWS

### NO HOLDS BARRED

# Margaret McCartney: Who gains from the media's misrepresentation of science?

Margaret McCartney *general practitioner, Glasgow*

The *Daily Mail* said that “770 deaths a year could be avoided,” about weekend childbirth.<sup>1</sup> But the study hadn't said that.<sup>2</sup> For this to be true, maternity services would need to be like *Groundhog Day*, with every day being Tuesday (the weekday with the lowest risk).

In the *Mirror* it was “good news for the posh” because drinking three glasses of champagne a week could “stave off” dementia,<sup>3</sup> although the experiment looked at “aged rodents” trying to find their way in a maze.<sup>4</sup>

In the *Express*, meanwhile, rhubarb “can save your life” because it “speedily kills cancer.”<sup>5</sup> But this was in mice, not humans, and the pigment pterin was under evaluation, not the whole plant. These facts were in the press release but were not reported by the newspaper.<sup>6</sup>

These misleading, overblown, and simplified stories do little to improve citizens' scientific literacy or medical knowledge. Instead, they risk creating confusion and disenchantment about research.

Thousands of medical journals compete for attention, and each of these newspaper stories gestated from a press release.<sup>7,9</sup> Press releases make easy articles for journalists. Add some quotes from a researcher. Add “breakthrough” or “cancer” to the headline. For newspapers with declining budgets, there's your story.

And medical journals gain from this sorrowful melee because they get mentioned. Presumably journals, along with researchers, count any media coverage as a good thing. But it's capable of harm, like anything else.

I once sat in a meeting with Anne Szarewski, the late cervical cancer researcher, to discuss whether to press release a research article. She thought not: it offered too much scope for misinterpretation and scaremongering. The journal duly published the article with no press release and little fuss. Szarewski had not, perhaps, increased the journal's standing, but she may have prevented a lot of rot being talked and harm being done. She had my total respect.

So why have we come to accept the press release cycle with journals publishing medical research and the institutes funding them? Appealing to the need to “improve public awareness”

won't do. Small studies with erratic results can attract much attention, while sober meta-analyses find little popular appeal. This may not advance useful public knowledge. Several researchers and university press officers have told me that they had felt under pressure to simplify or overextend research to sell it to the media.

Should funders or institutions view press coverage as successful, when it's not always desirable or useful in disseminating research findings? We should aim for quality, not quantity. Should we formalise press release writing to highlight uncertainties and caveats?

Lastly, don't we need to think hard about what the role of media releases is—and when journalists would be better to refer to the paper, not the press release?

Competing interests: I have read and understood BMJ policy on declaration of interests and declare the following interests: I'm an NHS GP partner, with income partly dependent on Quality and Outcomes Framework points. I've written two books and earn from broadcast and written freelance journalism. I'm an unpaid patron of Healthwatch. I make a monthly donation to Keep Our NHS Public. I'm a member of Medact. I'm occasionally paid for time, travel, and accommodation to give talks or have locum fees paid to allow me to give talks but never for any drug or public relations company. I was elected to the national council of the Royal College of General Practitioners in 2013 and am chair of its standing group on overdiagnosis. I have invested a small amount of money in a social enterprise, Who Made Your Pants?

Provenance and peer review: Commissioned; not externally peer reviewed.

Follow Margaret on Twitter, @mgmtmccartney

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