

Comments to the Editors' Code of Practice Committee in relation to the upcoming revision of the Editors' Code of Practice – submitted by the Science Media Centre

The Science Media Centre is an independent press office for science established in 2002 as a direct result of a House of Lords inquiry into science and society published in 2000¹. Every mainstream national newspaper uses the SMC's services and our goal is to continue to improve the quality and accuracy of science in the media. As such our submission to this consultation is in relation to the accuracy clause of the Editor's Code of Practice².

The scientific community relies on journalists to report complex new research to a mass audience on a daily basis. These stories are largely balanced and accurate and the UK is fortunate to have retained specialist science, health and environment reporters on every national newspaper.

Sometimes, however, things do go wrong and while this can be the fault of over-eager scientists and press officers, newspapers also play a role. In 1995, the media widely reported advice from the Committee on the Safety of Medicines (CSM) that third generation contraceptive pills containing oestrogen and either gestodene or desogestrel were associated with a higher risk of blood clots. The result was thousands of women came off the pill, with significant public health costs resulting from the increase in pregnancies and abortions.³ The loss of trust in the MMR vaccine is probably the best known example of how poor media reporting can cause harm.⁴

Overclaiming for small preliminary studies, giving undue prominence to mavericks making extraordinary claims without strong evidence, and confusing correlation with causation, are routine in newsrooms and can have the effect of misleading the public and harming public health. A recent study⁵ carried out by LSHTM revealed just how influential science reporting is, when it revealed that patients at risk of heart disease went off statin treatments in response to exaggerated reports of side effects carried by the press.

In December of 2016, Ipsos MORI and Mumsnet conducted a report⁶ into who the public trusted to tell the truth during the EU referendum campaign. Journalists polled near the bottom with 24% and scientists at the upper end of the scale at 80%. With these figures in mind, it is clear to see that the public is somewhat sceptical about the veracity of the news they read. Improving the standard of science reporting will be good for public trust in newspapers.

For the SMC, alongside good scientists and experienced press officers, specialist science reporters are a key part of ensuring high quality coverage of science in the media and creating a degree of trust from the public. An example of this was when the issue of mitochondrial donation hit the headlines. The press

¹ House of Lords Science and Technology Committee (2000) [Science and Technology – Third Report](#)

² Independent Press Standards Organisation [Editors' Code of Practice](#)

³ Summarised by Annabel Ferriman (1999) [Health: A bitter pill to swallow](#)

⁴ BBC News Online (2003) [Parents 'misled' by media over MMR](#)

⁵ BMJ 2016;353:i3283 [Impact of statin related media coverage on use of statins: interrupted time series analysis with UK primary care data](#)

⁶ Ipsos MORI and Mumsnet (2016) [Enough of experts? Trust and the EU referendum](#)

coverage⁷ of this complex and controversial new technique was accurate and measured and this was due, in no small part, to the science journalists.

We wish to submit the Science Media Centre's '10 best practice guidelines for reporting science & health stories' as a recommendation for newsrooms across the UK. The guidelines were created in response to a request by the Leveson inquiry and in his report, Lord Justice Leveson remarked on the guidelines as being *"in my view commendable for their utility as well as their succinctness. Any new regulator should bear them closely in mind."*

We have previously communicated with the Independent Press Standards Organisation (IPSO) about the aforementioned guidelines and they are already keen to promote them externally.

10 best practice guidelines for reporting science & health stories

The following guidelines, drawn up in consultation with scientists, science reporters, editors and sub editors, are intended for use by newsrooms to ensure that the reporting of science and health stories is balanced and accurate. They are not intended as a prescriptive checklist and of course shorter articles or NIBs will not be able to cover every point. Above and beyond specific guidelines, familiarity with the technicalities and common pitfalls in science and health reporting is invaluable and every newsroom should aim to employ specialist science and health correspondents. Wherever possible the advice and skills of these specialists should be sought and respected on major, relevant stories; the guidelines below will be especially useful for editors and general reporters who are less familiar with how science works.

- State the source of the story – e.g. interview, conference, journal article, a survey from a charity or trade body, etc. – ideally with enough information for readers to look it up or a web link.
- Specify the size and nature of the study – e.g. who/what were the subjects, how long did it last, what was tested or was it an observation? If space, mention the major limitations.
- When reporting a link between two things, indicate whether or not there is evidence that one causes the other.
- Give a sense of the stage of the research – e.g. cells in a laboratory or trials in humans – and a realistic time-frame for any new treatment or technology.
- On health risks, include the absolute risk whenever it is available in the press release or the research paper – i.e. if 'cupcakes double cancer risk' state the outright risk of that cancer, with and without cupcakes.
- Especially on a story with public health implications, try to frame a new finding in the context of other evidence – e.g. does it reinforce or conflict with previous studies? If it attracts serious scientific concerns, they should not be ignored.
- If space, quote both the researchers themselves and external sources with appropriate expertise. Be wary of scientists and press releases over-claiming for studies.

⁷ BBC News Online (2016) - [Three-person babies IVF technique 'safe'](#)

- Distinguish between findings and interpretation or extrapolation; don't suggest health advice if none has been offered.
- Remember patients: don't call something a 'cure' that is not a cure.
- Headlines should not mislead the reader about a story's contents and quotation marks should not be used to dress up overstatement.