In a recent issue of this journal, Ding et al provided an interesting analysis of the news coverage that accompanied their recent publication of an original publication in JAMA Internal Medicine.\(^1,2\) The authors observed a mismatch between the key messages of their academic paper and those subsequently reported in the media. Specifically, they observed that media reporting was dominated by a focus on the benefits of vigorous physical activity rather than the stressing of underlying benefits of moderate physical activity.

Media outlets are often blamed for making exaggerated or unsubstantiated claims.\(^3\) However, in their recent analysis of the association between exaggeration in health-related science news and in academic press releases, Sumner et al observe a strong correlation between exaggerations and misrepresentations contained in press releases and those appearing in news articles.\(^4\) We therefore reviewed the original publication\(^2\) and the accompanying press release issued by the lead author’s university\(^5\) to explore this issue.

Under the title, “Working up a sweat could save your life,” the release states in its opening paragraphs:

“Physical activity that makes you puff and sweat is key to avoiding an early death, a large Australian study of middle-aged and older adults has found. [...] They found that the risk of mortality for those who included some vigorous activity was 9 to 13 per cent lower, compared with those who only undertook moderate activity.”

The release goes on to directly quote the authors highlighting the benefits of vigorous physical activity, and throughout the release very little attention is given to the benefits of moderate physical activity. This focus mirrors the stated conclusions in both the full text and abstract of the original paper,\(^2\) in which the message that “total amount of physical activity was associated with a substantially reduced risk of all-cause mortality” was not conveyed. In light of this, it is perhaps unsurprising that media outlets have chosen vigorous activity as their focus. Moreover, two of the messages identified as misleading in the commentary can be linked to information provided in the press release: exaggeration (see for example the quote above), and encouraging short bouts of exercise (“Previous studies indicate that interval training, with short bursts of vigorous effort, is often manageable . . . ”).

This story, which was lost in translation, might therefore act as a cautionary tale. Far from being simply a ‘hook’ to get journalists interested in an article, a press release provides the frame for editorial decisions on coverage and often forms a large element of the final story.\(^6\) In the best case scenario, journalists would have the time and knowledge to read and understand the original paper if available to them, speak to the researchers, or find opposing scientific views. However, they are often under pressure to produce several news stories a day, so will inevitably revert to the summaries contained in the press release. (Indeed, scientists provide direct quotes in press releases so that agencies and journalists are able to write up the story without contacting researchers for interviews.)

The cited press release was not mentioned in Ding et al’s commentary and it is unclear whether the authors were aware of it being released and how much input they had into its content. While we would not dispute that the media can at times distort, simplify, and misrepresent scientific findings, it is the joint responsibility of the scientists, press offices, and the institutions that host them to ensure that the messages we put into the public domain are representative of our research and convey the messages we wish the public to receive.\(^7\) It could be argued that more nuanced press releases might lead to less media coverage; however, Sumner et al observed that there was little evidence that exaggeration in press releases increased the uptake of news or the number of associated news stories.\(^4\) This suggests that high profile, accurate coverage is possible, and we believe that it would be unfortunate if Ding et al’s experience and commentary discouraged scientists from disseminating their findings through the media.

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References


