

## Journals, the Press, and Press Releases: A Cozy Relationship

**Katherine Arnold**

BETHESDA, Maryland.—In a breakthrough discovery that may change the face of scientific communication forever, a researcher has found that, although journalists rely on press releases to bring important discoveries to their attention, they do not write news stories about every press release they receive. Even more striking is the discovery that press releases from scientific journals sometimes present incomplete information about scientific findings.

"I'm shocked, just shocked", said the author of the article, which appears in the current issue of *Science Editor*. "I never would have guessed that journalists would have such blatant disregard for what they are told is news, and I never would have suspected that journals aren't neurotically meticulous in their press releases."

Such a press release, in spite of its attention-grabbing clichés, would probably be quickly relegated to a reporter's circular file. Nevertheless, the lack of a truly newsworthy finding has never stopped scientific journals and institutions from sending out press releases. A handful of recent studies and articles have addressed how the popular press reports on published scientific research and the role of press releases in news coverage. Presented below are some highlights of this literature and some related observations by journalists and others.

### Press Releases and Press Coverage

Last summer, Christopher Bartlett and colleagues at the University of Bristol published a study in the *British Medical*

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*Journal (BMJ)* that took a close look at the characteristics of articles that journals highlight in press releases and the characteristics of the subsequent media coverage.<sup>1</sup> Of 1193 original research articles published in *The Lancet* and *BMJ* in 1999 and 2000, 517 had been highlighted in press releases. Two London newspapers (the *Times* and the *Sun*) had 89 news stories about 81 of *The Lancet* and *BMJ* research articles in that same period. All the articles covered in the newspapers had been highlighted in press releases by the journals.

Journal articles about randomized controlled trials and observational studies were more likely to have press releases written about them than systematic reviews and articles in the "other" category, which included analyses of routine data and qualitative or methodologic research. However, randomized trials were less likely to be covered in the newspapers than articles in the remaining categories. The journals wrote press releases on equal numbers of articles classified as "good news" and "bad news"; however, bad news was more likely to be written up in the newspapers. The authors found that the journals were more likely to write press releases about particular topics—such as women's health, reproduction, and cancer—and that these topics were also highly likely to be reported on in the newspapers. Press releases about research findings related to babies and children and mental health were less likely to be reported in the newspapers.

Bartlett and colleagues acknowledged several limitations of their results. For one, the two newspapers they studied were in the same publishing group, so the results may be narrow with respect to what a news organization deems newsworthy. They also note that the institutions with which the authors are affiliated may have issued their own press releases, but the impact of those releases could not be factored into the analysis. In addition, the study was specifi-

cally looking for immediate-reaction news stories and so did not include any later feature stories or longer news stories written about journal articles more than 2 days after journal publication.

The authors expressed concern that "many aspects of medical research are not well represented in newspapers." They argue that "newspapers have a role to play in health care—for example, by explaining the importance of evidence from randomized controlled trials, dispelling the misconceptions and confusion that surround the concepts of randomization and equipoise, and reporting both good and bad news and research that is relevant to international health."

The publication of the article by Bartlett and colleagues started a discussion on an e-mail list sponsored by the National Association of Science Writers (NASW). In response to the authors' assessment that the most important medical evidence does not get news coverage, *Science* correspondent Dan Ferber wrote, "Is any of this a problem? People want to know if a treatment is safe, if it works, how much it costs, and what the alternatives are. If the results of a randomized, controlled trial confirmed widely reported earlier results from an observational trial, is that big news? I'd say it's news but not big news. If the results of the big trial contradict earlier reports or standard practice, as in the case of [hormone-replacement therapy], then that's a story."

Indeed, Dorothy Nelkin addressed the classic disagreement between scientists and journalists in *Selling Science: How the Press Covers Science and Technology*.<sup>2</sup> "To scientists, research results become reliable and therefore newsworthy through replication and endorsement by professional colleagues. . . . For journalists, on the other hand, certified and established ideas are 'old news'—of far less interest than fresh and dramatic, though possibly tentative, research."

## A Cozy Relationship *continued*

Sheldon Rampton, editor of PR Watch ([www.prwatch.org](http://www.prwatch.org)), elaborated on this point in the NASW e-mail discussion: "With regard to reportability, scientists tend to look for things like statistical tests of significance. Journalists, by contrast, tend to look for novelty, which is essentially a statistical test of insignificance. It's not news when a dog bites a man, but when a man bites a dog, that's news. This means that if there are 100 scientific studies showing that obesity shortens longevity, the 101st study that reaches this conclusion will be ignored, but reporters will jump all over themselves to cover a study which 'upsets the conventional wisdom' by finding that obesity is good for you."

### Are Press Releases the Problem?

Bartlett and colleagues looked specifically at characteristics and topics of press releases from journals. In a June 2002 article in the *Journal of the American Medical Association*, Steven Woloshin and Lisa Schwartz speculated that some of the shortcomings in media reports might result from the quality and comprehensiveness of press releases issued by the journals themselves.<sup>3</sup> Because press releases are the primary means through which journals communicate with journalists, they studied the press-release process at nine medical journals. They interviewed the press officer at each journal and then performed a content analysis of the press releases for the six issues of that journal that preceded the interviews.

The seven journals that routinely issue press releases had produced 127 press releases during the study period. The journal editor or the press officer selected articles to highlight. Woloshin and Schwartz found that 23% of the press releases mentioned study limitations, and 65% quantified study results. Only 22% of the press releases about papers that were industry-funded noted that fact. Woloshin and Schwartz state that they did not assess the relationship between press releases and later media coverage.

The authors suggest that the qual-

ity of press releases could be improved by enhancing editorial oversight of the press-release process. They suggest a structured presentation format similar to an abstract and a standardized way to report quantitative results to improve the quality of press releases.

### Press Releases from Science and Nature

In some respects it is fairly easy to predict what medical stories will be picked up by the mass media. But how do nonmedical journals make decisions about what to highlight? The journal *Science* highlights 10 to 13 articles per week, and they are selected by the American Association for the Advancement of Science Office of Public Programs with input from *Science's* editorial team, on the basis of potential newsworthiness and the significance and quality of the research, said Ginger Pinholster, director of the Office of Public Programs. The articles that yield the most press coverage are "critter stories", Pinholster said: "Whether it's an article on dolphins, dinosaurs, dogs, or sharks, those stories get big pickup." Other hot topics include space stories, population-migration articles, and cloning papers.

The weekly journal *Nature* also highlights about 10 articles per issue. The manuscript editors provide input as to articles' newsworthiness, and the staff science writers make the final decisions and write the summaries for the weekly press release from the journal. The media coverage of *Nature* appears to fall into four categories, said Jo Webber, press officer for *Nature*: "the obvious 'biggies', such as the human genome, cloning of Dolly the sheep", and so on; articles related to the cure of a disease or a hot topic, such as genetically modified foods or global warming; "quirky" science; and topics that readers are always interested in, such as dinosaurs and space.

### But Do Journalists Read Press Releases?

Woloshin and Schwartz noted that "releases do seem to draw journalists' attention

and increase the chance that an article receives press coverage. However, most journalists say they do not rely solely on the release for information, but go to the article."

Robert Steinbrook, a national correspondent for the *New England Journal of Medicine*, took that observation a step further and implied in a 2000 editorial<sup>4</sup> that press releases are purely self-serving: "Press releases, whether the work of universities, manufacturers, organizers of medical meetings, or medical journals, inherently involve self-interest. Although some reporters find press releases helpful, I have always found that there is no substitute for basing a story about a report in a medical journal directly on the report. News conferences allow reporters to ask researchers questions and to seek clarification, but they, too, often involve self-interest." (It is worth noting that the *New England Journal of Medicine* does not issue press releases about its papers. As Steinbrook said, "We believe reporters and editors should make their own decisions about what is important to their readers.")

And, in fact, even when journalists rely on press releases to flag important news, they are often critical of the content of press releases and assess the original article themselves. Josh Fischman, deputy editor at *U.S. News & World Report*, relies on press releases from specialty journals but prefers to look at the entire contents of major medical journals, particularly such items as commentaries and letters that are not highlighted in press releases. Paul Recer, who covers science for the Associated Press, reads any press materials available and the entire scientific paper before conducting any interviews. And John Travis, who covers biology for *Science News*, said that occasionally a press release will grab his attention, but most often his stories result from direct scanning of journals.

And what science stories are deemed newsworthy, whether accompanied by a press release or not? Answers were similar at a variety of publications. Maggie Fox, of Reuters, said that journal-article findings

must be new, be easily explained, refer to a significant advance, or address a controversial subject. Janet Raloff, environment and nutrition reporter at *Science News*, bases her coverage decisions on novelty or counterintuitive findings, strong statistical significance, and broad subject appeal. Fischman said he looks for immediate implications for human beings.

Conversely, there are studies that reporters know do not warrant a second glance. Judy Peres, of the *Chicago Tribune*, steers clear of anything that seems intended to support the bias of its authors. Recer avoids studies that repeat earlier work, are technically dense and beyond the reader's grasp, or have little or no foreseeable application; "thus, I rarely do stories about new discoveries in cell cultures, and will only occasionally do stories about laboratory

animal studies." Travis avoids studies in which the speculation or interpretation is greater than the actual results.

As long as peer-reviewed journals keep publishing (a topic for another article), reporters will continue to report on their findings. But journal editors and reporters alike should follow studies like those summarized above as a sort of "report card" on coverage. Studies like those justifiably try to raise the bar for reporting and publicizing research results. "The impacts of science, including technology, and its effects on individuals and on society, are becoming more powerful and less predictable", wrote Boyce Rensberger in the fall 2002 *Nieman Reports*.<sup>5</sup> "It is more important than ever that the public be informed of what's happening in science. What the news media need to do is get smarter in how they cover

it. Their focus should be more on increasing the public's understanding and less on hyping apparent 'gee-whiz' moments."

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