

lic health implication should be promptly submitted to peer-reviewed journals, without delays because of political or economic considerations. Such delay in submission apparently occurred in the v-CJD article.¹¹

Second, scientific journals should expedite the peer review and publication process as much as possible in these cases, for example, by providing a fast track for articles with relevant public health implications.¹² Improved coordination between news release by public health authorities and scientific publication by peer-reviewed journals should also be pursued.

Third, peer-reviewed journal editors should consider placing articles with po-

tential public health implications in Web sites. In an era in which information on health matters is disseminated rapidly by the media, circulation of information within the scientific community should be at least as fast, while preserving the quality and reliability of scientific journals.

This work was performed as a part of Ricerca Corrente degli Istituti di Ricovero e Cura a Carattere Scientifico, 1997.

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Press Releases of Science Journal Articles and Subsequent Newspaper Stories on the Same Topic

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Context.—Scientific journals issue press releases to disseminate scientific news about articles they publish.

Objective.—To assess whether press releases about journal articles were associated with publication of subsequent newspaper stories.

Design.—Retrospective content analysis of newspaper stories, journal press releases, and journal tables of contents. From December 1, 1996, to February 28, 1997, press releases and tables of contents were collected from *BMJ*, *Nature*, *Science*, and *The Lancet*, along with newspaper stories on scientific research published in *The New York Times* (United States), *Le Figaro* and *Le Monde* (France), *El País* and *La Vanguardia* (Spain), *La Repubblica* (Italy), and the *International Herald Tribune*.

Main Outcome Measurements.—Number of newspaper stories that contained reference to articles appearing in the 4 scientific journals, number of newspaper stories that referred to journal articles described in press releases, and the order in which journal articles were mentioned in press releases.

Results.—Of the 1060 newspaper stories analyzed, 142 referred to journal articles; of these, 119 (84%) referred to articles mentioned in press releases and 23 (16%) referred to journal articles not mentioned in press releases (comparison of proportions, $P = .03$). Articles described first or second were referenced in more newspapers than articles described later in the press release ($P = .01$ by χ^2 analysis).

Conclusions.—Journal articles described in press releases, in particular those described first or second in the press release, are associated with the subsequent publication of newspaper stories on the same topic.

MANY SCIENTIFIC journals now produce press releases to encourage journalists working for the news media to bring the material they contain to wider audiences. A study by Entwistle¹ revealed that 81% of journal articles mentioned in the British press were included in journal press releases. In a previous study of the Dutch press, Van Trigter et al^{2,3} concluded that press releases were used by journalists as a source of ideas rather than as a source of information. Do press releases set the agenda for science journalists publishing in the general press? This study was conducted to examine, on the international level, the possible association between the appearance of science journal articles in press

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Presented as a poster at the Third International Congress on Peer Review in Biomedical Publication, Prague, Czech Republic, September 17-21, 1997.

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JAMA. 1998;280:294-295

| Order of Articles in Press Releases | Newspaper Story References, No. of Articles | | | | | | |
|--|---|---|---|---|---|----|-----|
| | ≥6 | 5 | 4 | 3 | 2 | 1 | 0 |
| First or second (n = 98) | 1 | 3 | 2 | 3 | 7 | 24 | 58 |
| Third or fourth (n = 93) | 0 | 0 | 0 | 0 | 2 | 11 | 80 |
| Fifth or sixth (n = 65) | 0 | 0 | 0 | 1 | 0 | 5 | 59 |
| Seventh or lower (n = 137) | 0 | 0 | 0 | 0 | 0 | 6 | 131 |

* $P < .05$ by χ^2 analysis.

releases and publication of subsequent newspaper stories on the same topic.

METHODS

All newspaper stories on scientific research appearing between December 1, 1996, and February 28, 1997, were collected from 7 major general newspapers from European countries and the United States: *The New York Times* (United States), *Le Figaro* and *Le Monde* (France), *La Repubblica* (Italy), *El País* and *La Vanguardia* (Spain), and the *International Herald Tribune* (a European edition published by *The New York Times* and *The Washington Post*). Simultaneously, tables of contents and press releases were gathered from 4 scientific journals: *BMJ*, *Nature*, *Science*, and *The Lancet*. These journals were selected because they have been described by journalists as being commonly consulted for scientific information.^{2,4}

For data analysis, the following variables related to newspaper stories were collected: publication (did the story refer to a scientific publication?), sample (was the source scientific journal 1 of the 4 sample journals?), press release (did the newspaper story refer to a journal article included in a press release?), and source article (name of the journal that published the source article and date of journal publication). We considered only

those newspaper stories that contained an explicit reference to the source (ie, the journal in which the article was published). The following press release variables were collected: number of press releases, article order (in what order did the source article appear in the press release?), and newspaper story references (how many newspaper stories mentioned a scientific journal article that appeared in a press release?).

RESULTS

Between December 1996 and February 1997, the 7 newspapers in this sample contained 1060 stories on scientific research. During this time, 393 journal source articles were included in press releases.

A statistical test was used to compare the proportion of newspaper stories that referred to journal articles that did vs did not appear in press releases. Of the 1060 newspaper stories collected, 142 referred to journal articles that appeared in 1 of the 4 journals during the sample period. Of these, 119 (84%) referred to articles that appeared in press releases and 23 (16%) referred to articles that did not appear in press releases ($P = .03$). Thus, journal articles that appeared in press releases were better represented in the general press.

A similar analysis performed for each

newspaper also found significant differences, except for *The New York Times* (no significant difference) and *La Repubblica* (the number of newspaper stories that referred to journal articles was too small to yield any conclusion).

Was there an association between the order in which an item appeared in a press release and coverage of the topic in the general press? Of the 393 articles that appeared in press releases, 65 were mentioned at least once in the sample newspaper stories. The remaining 328 articles received no mention. We found an association between article order and newspaper story references. The higher priority a journal article was given in a press release, the more it was referred to in the general press (Table).

COMMENT

This study demonstrates an association between appearance of a journal article in the journal's press release and subsequent publication of a story on the same topic in a national newspaper. The order in which a journal article appeared in the press release was also associated with the number of newspaper stories published on the same topic.

We thank Karina Gibert, DS, for the statistical analysis and Marta Pulido, MB, for editorial assistance.

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