

PERSPECTIVES

Helping Journalists Get It Right

A Physician's Guide to Improving Health Care Reporting

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News reports are the way that most people, including many physicians and scientists, first learn about new developments in medicine. Because these reports can raise awareness, influence behavior, and confer credibility, physicians should share responsibility with the media for accurate reporting. Physicians can work with reporters to avoid sensationalizing tentative findings, overstating benefits, and making inappropriate generalizations. This article includes pragmatic suggestions for crafting effective news releases and explaining numerical data. It details "rules of the road" for interviews. Working collaboratively with news reporters to improve the quality of medical stories in the lay press benefits patients and physicians alike.

KEY WORDS: journalism, medical; mass media; physicians; communication; health education.

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In surveying the literature on the quality of medical journalism, we discover no shortage of challenges that need remedy. News stories about medical research fail to mention potential harm to patients, fail to report benefits quantitatively, and fail to mention costs.¹ They frequently fail to put new research into a meaningful context and fail to mention limitations of the research.² Articles commit sins of omission and sensationalism.^{3,4} Two people bear the ultimate responsibility for the quality of a medical news story: the clinician or scientist explaining the research, and the journalist who interprets it for the public. A nationwide survey of 857 respondents explored the relationship between these 2 groups.⁵ It revealed that while reporters felt certain that they get the technical details of medical reporting correct, physicians were certain that they do not.

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Physicians felt that coverage is too sensational; journalists said it is not. Journalists believed that they could be objective; physicians disagreed.

Instead of viewing journalists as antagonists, physicians are better served by viewing health care reporting as a collaborative process in which both parties bear responsibility for producing fair and accurate news stories. Physicians benefit when consumers of their research are well informed, whether they are people who receive health care, such as patients and taxpayers, people who provide health care, such as physicians and other medical professionals, or people who fund health care research, such as those in government, industry and philanthropy. The goal of this article is to outline strategies that we think will improve the quality of medical stories in the lay press and result in a better-informed public. The recommendations are pragmatically focused and emphasize interactions with the print media. They are based on a review of pertinent articles obtained in a search of the electronic databases MEDLINE, HealthStar, and PsycINFO that were identified using the following search terms: communication, communication media, health education, mass media, and numeracy. The authors also based recommendations upon their personal experience in roles as a former television and radio journalist and a public relations officer; an internist and clinician-researcher who has interacted with local and national media outlets; a clinical psychologist with expertise in health psychology and mass media dissemination; and as a medical reporter for *USA Today* and former senior editor of *U.S. News and World Report*.

CONSTRUCTING YOUR STORY: THE NEWS RELEASE

One strategy for getting your message to the public is to send a well-written news release to health care reporters to spark their interest. You might assume that if your research is being published, the medical journal will issue a news release. Ask the journal that publishes your article if this is the case. Only a handful of journals prepare their own press releases on newly published research. These include *Annals of Internal Medicine*, *British Medical Journal*, *Circulation*, *Journal of the American Medical Association*, *Journal of the National Cancer Institute*, *Lancet*, and *Pediatrics*.⁶ The vast majority of journals do not have the staff or the inclination to prepare news releases. The *New England Journal of Medicine* only in

2002 hired an outside public relations firm to work with the press, although it still does not issue press releases. Journal articles that are promoted with a news release appear to have a much greater chance of appearing in the popular media. One retrospective content analysis of newspaper stories and journal press releases found that when newspaper stories referred to journal articles, 84% of these referred to articles that had been promoted in press releases while only 16% referred to articles not mentioned in press releases.⁷ The greater visibility that a physician may enjoy by being featured in a news release requires greater responsibility to ensure that research findings are reported accurately, completely, and in proper context. A recent examination of the news release process at several high-profile medical journals found that the news releases frequently presented data in exaggerated formats, and failed to highlight study limitations or conflicts of interest.⁶ Tell your journal editor that you'd like to review the draft news release.

If the journal does not plan to issue a news release, contact the public relations office at your university, hospital, or any institution that has a stake in your research. Even if reporters had easy access to all of the thousands of English-language medical journals (at most, news organizations subscribe to only a dozen or so medical and scientific journals), they certainly do not have the time to scour them for newsworthy studies. Journalists welcome press releases about brand-new, or, even better, about-to-be-reported research, especially if the release comes from an academic center.

That does not mean that every publication or presentation at a scientific meeting merits a press release. Medical reporters are bombarded with e-mails, faxes, and snail mail from people trying to pitch them a story. Pharmaceutical companies have internal and, often, external public relations machines aggressively trying to promote new products. A number of physicians, hoping to establish themselves as media-friendly experts in a particular subject, have even hired their own public relations agents. *The New York Times* syndicated health columnist Jane Brody says, "I spend an entire workday each week going through my mail and journals. Typically on that day, I fill three large wastebaskets with mailed and faxed material not worth keeping. Finding something worth keeping has become a task akin to looking for a needle in a haystack. And finding something worth writing about—worth communication to a public that tends to swallow every bit of health news hook, line, and sinker—has become an even greater challenge."⁸

So what is most likely to attract journalists' attention? In general, reporters prefer to write about research involving people, rather than petri dishes or animals. Usually, the larger the study, the better. Research that challenges the conventional wisdom is more appealing than the ninth or nineteenth study that confirms earlier findings.

A professionally written news release has a better chance of being read by a reporter or editor. The news

release is the first step in translating your study from the language of science to a more accessible description of your work. Some journalists will base their report entirely on your news release. Anecdotal evidence suggests that spending time working with your institution's public affairs office to craft an accurate, pithy news release is worth the effort. Dr. Meir Stampfer of the Harvard School of Public Health found that "the story was usually reported better if the journalist had a press release that we had a hand in preparing."⁵

Because medical reporters receive so many news releases, public relations professionals recommend limiting a news release to 2 pages. If the release is spare and meaty, and still fills 3 or 4 pages, break it into a 2-page release with a 1-page sidebar that addresses one important issue. Or add a page of frequently asked questions to deliver the information.

Before you call the public relations folks, however, consider the questions they will ask you. It will make your initial appointment more productive. You probably will be asked some or all of the following questions: How will these findings help patients (the media's readers/viewers/listeners) live longer or better? Will it reduce treatment time or save money? Is this truly new information or does it confirm what other researchers have found? Do your findings suggest a need to change standard treatment now, or could they revolutionize treatment in the future?

Physicians have a responsibility to help the public apply research findings to their everyday lives, and to tell people when research does or does not suggest a change in their lives now. They also have a responsibility to provide fundamental information about the conduct of their research so that the public, journalists, health care professionals, and other potential stakeholders can evaluate its quality. In crafting a news release with a public relations consultant, consider the basic questions that a complete medical research news story should answer (Table 1), adapted from *The New York Times* syndicated columnist Jane Brody.⁸ As you prepare to answer these questions, think carefully about the language you'll use and how you can best translate complex scientific and medical concepts into lay language. It's likely that your research is newsworthy if your answers satisfy the public relations practitioner, who generally has a good sense of what will interest reporters and editors.

While most news releases are in print form, some universities and journals produce video news releases (VNRs) that are transmitted to television stations nationwide via satellite. You could be videotaped and asked to provide a patient who could also be interviewed on camera. (Print reporters might also want to interview and photograph a patient.)

Distribution of the news release is a strategic issue, best discussed with a public relations professional. Most university public affairs offices have developed media mailing lists, and can advise you about whether national, regional, or local distribution is most appropriate to your

Table 1. Questions to Address in a News Release

1. What question was the study designed to answer?
2. Who funded the research? Have all potential conflicts of interest been disclosed?
3. Were the findings published in a peer-reviewed authoritative journal?
4. How many subjects participated in the study? How were they selected and (if applicable) how were they assigned to the various study groups?
5. Were the subjects humans or animals? If they were animals, are there limits on the applicability of the findings to people? If the subjects were humans, what was their composition in terms of gender, age, ethnicity, and other important sociodemographic characteristics? Were the human subjects patients or from the general population? Or were they physicians or other health care professionals?
6. If outcomes data are presented, how was the information obtained (e.g., administrative data, chart abstractions, observational data, patient surveys)?
7. Are there any potential threats to the validity of the findings (e.g., large percentage of drop-outs in a clinical trial or nonresponders in survey research, misclassification in outcomes research)?
8. Which variables were controlled for? Are there any other variables that could have influenced the findings that were not controlled for?
9. If the study describes a clinical finding, are there basic science studies that support it? (The intent is to have a plausible mechanism for the observed effect. For example, antibiotics help heal peptic ulcers. Basic science has shown that the bacteria *Helicobacter pylori* are found in more than 90% of ulcers. So it's logical that treating the *H. pylori* may heal ulcers—and it does!)
10. What has previous research shown and how do the new findings advance our knowledge?
11. What are the practical applications of the findings? Are there any important caveats?

Adapted from health columnist Jane Brody.⁸

message. The most ambitious dissemination strategy is comprehensive and national, which requires current addresses of the medical reporters at major newspapers, relevant magazines, major radio and TV stations, syndicated wire services (such as Associated Press), and Web-based publications.

Increasingly, journalists prefer to receive press releases via e-mail. Fax machines break down, and the U.S. Postal Service is not always timely. With e-mailed press releases, it is easy to attach charts or photos that could heighten reporters' interest in your story.

Timing of the news release depends on whether you're disseminating data that is also being published in a medical journal or presented at a medical meeting. A number of journals and scientific organizations forbid press coverage of new research prior to publication or presentation (see section on embargoes). A new study about press coverage of preliminary data at scientific meetings underscores the need for peer review before releasing research results to the public.⁹ Authors found that information from abstracts presented at scientific meetings are widely reported in major media outlets, even

though the information may be preliminary and may have undergone limited scientific review. They also found that 3 years after the meeting, one fourth of meeting abstracts remain unpublished in medical journals.⁹

EXPLAIN YOUR DATA CLEARLY AND ACCURATELY

Your numerical results will be presented through the media to an audience that often is ill prepared to understand numbers. Problems with numeracy are common, and low numeracy is associated with poor understanding of risk information and quantitative data.^{10,11} For example, low levels of numeracy are strongly related to difficulty in making use of quantitative data about the risk reduction from screening mammography.¹⁰ To illustrate the magnitude of the problem, 47% of adult Americans could not calculate the difference between the regular and sales price from an advertisement.¹² Poor numeracy may not be limited to the general population. In a study of first-year medical students, only 77% answered all 3 relatively simple numeracy questions correctly, and only 61% accurately interpreted standard presentations about risk reduction.¹¹ Students were less likely to interpret risk reduction data accurately when the data were presented solely as number needed to treat as opposed to relative risk, absolute risk, or the combination of all three.

Given the problems with numeracy, it is important for researchers to communicate their results clearly, perhaps by using multiple methods. One possible solution is to substitute verbal qualifiers (e.g., "likely" or "rarely") for numbers, but risk communication research has shown that the numerical equivalents for these terms vary greatly by context (e.g., "likely" to rain versus "likely" to have a painful adverse effect) and by individual.^{13,14} On the basis of a case-study of reporting errors,¹⁵ research on cancer risk communication,¹⁶ and our own experience, we offer in Table 2 guidelines to presenting numerical results. For readers wanting a more comprehensive guide to reporting statistics, we recommend the text *How to Report Statistics in Medicine*.¹⁷

WHAT TO DO WHEN A REPORTER CALLS

It's important to be accessible to journalists, who, facing deadline pressures, will simply call another researcher for comment if you are not available. There are commonly 2 instances in which you can plan on the need to be accessible: after a news release has been sent or a news conference has been held. In these cases, reserve some time over several days to respond to reporters' requests. It can damage your credibility and your good relationships with reporters to make an announcement and then fail to respond to the resulting media interest.

If you answer the phone and unexpectedly find a reporter on the other end of the line, feel free to tell the reporter you would prefer to call back in a few minutes, after you've had a chance to collect your thoughts.

Table 2. Helping Reporters Understand Numerical Data

Report the absolute event rates. 0.6 percent vs 1.0 percent and 60 percent vs 100 percent represent very different absolute event rates, yet yield the same 60 percent relative risk.

Report benefit and harm results symmetrically. When reporting the results of an intervention, present absolute event rates for both benefits and harms.

Put the results in context. Help the reader calibrate the magnitude of the risk or intervention effect by placing the results in context. Give the risk of events generally acknowledged to be common (e.g., common cold) or rare (e.g., hit by lightning). Compare your intervention effects to other accepted treatments using outcomes common to both (e.g., mortality).

Convert odds ratios to risk ratios if the event rate exceeds 10%. When the outcome of interest is uncommon (e.g., <10%), the odds ratio is appropriate because it approximates the risk ratio; odds ratios increasingly overstate the risk ratio as outcomes become more common. Odds ratios are hard to comprehend directly and are usually interpreted as being equivalent to the relative risk. Many people have no intuitive feel for odds or odds ratios and it is unrealistic to expect reporters or the public to understand the distinction. There are simple methods of conversion for both crude and adjusted data.^{18,19} If odds ratios cannot be avoided one should remind the reader that the higher the base rate the more the odds ratio will overstate the relative risk.

Report the precision of the result. The confidence interval is a range of values consistent with the data, that is believed to encompass the "true" population value.¹⁷ Help the reporter understand that the "true" effect in the broader population to which your study applies lies within this confidence interval.

Ensure that comparisons are appropriate. In reporting the results of comparisons, one should be clear about the reference group. If an important interaction is identified, aggregate data should not be used in reporting the results.

Occasionally, journalists will call for your opinion of a study you might not have yet seen. Ask the reporter to fax you the study so you can comment intelligently. Another way to conserve your time and avoid being caught off guard is to train someone on your staff to assist. If you are the author of a study expected to attract a considerable amount of press attention, consider delegating the responsibility for screening reporters' calls and scheduling interviews to a member of your institution's public affairs office. An effective media liaison is a person who is usually available to handle phone calls and who can take precise telephone messages. If other support personnel handle your incoming calls, let them know where to direct your media calls. See Table 3 for guidelines you can give staff members.

Increasingly, reporters e-mail interview requests to physicians and are even willing to conduct interviews via e-mail. This approach benefits busy physicians who can answer at their convenience and feel less at risk of being misquoted. However, many journalists still prefer the immediate back-and-forth exchange possible with a

telephone interview, which tends to produce more conversational quotes than written correspondence via e-mail.

WHEN REPORTERS ASK YOU TO PROVIDE NAMES OF PATIENTS TO ENHANCE YOUR STORY

A well-described patient example can often convey a message where numbers fail. Journalists understand this, so no matter how well you explain your numbers, they'll often ask if they can interview one of your patients. If you accept that a patient's story would enhance public understanding of your message, and you can identify a patient, consider the ethics of asking a patient to consent to an interview. The American Psychological Association has studied the issue of whether patient confidentiality

Table 3. What to Do When a Reporter Calls

When a reporter calls, have your media liaison ask for the following information. Answers to these questions will help you decide whether you want to do the interview.

- What is your deadline?
- How much time do you need with the doctor?
- Tell me what this interview is for—which publication, broadcast show, online news site, etc. Tell me how many potential readers, viewers it has. Who is the audience—physicians or lay public?
- Can you give me a general idea of what topics the interview will cover?
- Who else is being interviewed for this story? Reporters may volunteer this information, or may choose not to divulge their other sources.

Tell your media liaison to provide you with the information above quickly, so you can provide times that you're available for an interview. Returning reporters' calls late is the best guarantee that you won't be interviewed.

Determine who will call the reporter back to confirm a time for the interview. Be clear on who's calling whom if it's a telephone interview, and confirm the phone number. Give the reporter a name and number to call in case they have to reschedule the interview.

Ask your media liaison to make a practice of contacting your institution's public affairs office once an interview is scheduled. Time is of the essence, as reporters usually need an interview in the next day or two, and institutional clearance can take that long. It's in your best interest to notify Public Affairs as soon as possible because they can tip you to potentially sensitive topics for the institution that could come up during an interview. Give the public affairs specialist all the information you have gathered, including the reporter's name and phone number. If the interview will take place on campus, the Public Affairs office may arrange for the reporter's security clearance, convenient parking, and an escort to your office. Contact your institution's public relations office to learn its protocol. **NOTE:** This procedure changes slightly if the request is from a local or national TV reporter. Their requests are generally more complicated; they usually want us to identify a patient to be interviewed or arrange a procedure to be videotaped. When you get a TV request, you may want to discuss the story with the reporter yourself, and ask the institution's public relations office to get involved.

requires that health care professionals rule out giving reporters the names of patients, either current or past. Although the types of stories psychologists tell the media may differ from those of physicians, their suggestions offer some valid points for consideration²⁰: The patient's welfare always comes first. Is the patient deciding to participate to please the clinician? Is the value of the interview for public education purposes? Normal informed consent procedures apply here. Tell the patient the purpose of the interview, where it will take place, how long it will last, and where the information will be presented. Reassure the patient that agreeing or declining to participate will not have any impact on their subsequent health care. The clinician or a staff member should contact the patient first and describe the process to see if the patient is willing to participate.

NOW THAT YOU KNOW WHAT TO SAY, HOW DO YOU SAY IT?

Dr. Sam Nixon of Houston, former president of the American Academy of Family Physicians and the Texas Medical Association, says he gives 2 different types of answers when he's being interviewed on tape.⁵ If he wants to make sure he is quoted, he gives pithy answers. If he wants to ensure he isn't quoted, he'll give rambling answers.

Approach the reporter as you would a student, advises R. K. Farberman in the book, *Psychology and the Media*. "Think of the interview as a teaching opportunity, and as such, communicate to the student (the reporter) in language he or she can understand. . . . By taking the time to educate the reporter and provide him or her with all appropriate background material, you are making an investment in more thorough, more accurate news coverage."⁵

Preparing for the Interview

Expect your interviewer to have had little or no science education in college. A Freedom Forum survey showed that most medical reporters majored in journalism and liberal arts; only 17% had advanced degrees in science.⁵

Decide on 1–3 messages that you believe are most important to explain your research. If you're discussing a multicenter study or there will be multiple spokespersons, agree in advance on the messages and make sure you are all reading from the same script. "Off message" or conflicting messages may end up being "the story" rather than your health care finding. Ensure that your key messages make it into the news story by putting them in quotable (i.e., short, everyday) language. Write them down so you can see them in black and white. Make sure you're giving the message you intend.

Answer the audience's unspoken question, "What's in it for me?" Specify the group(s) to whom your message applies and provide concrete suggestions for the indi-

vidual reader (e.g., "If you are a woman 45 years or older with x, you may be at risk for y. Ask your doctor about.").

Avoid medical jargon, acronyms, and statistics. Talk to the reporter the way you would talk to a neighbor who knows little about your field or to an intelligent 8th grader.

Create "word pictures" to explain technical concepts.

For example, "The stent works a bit like a Chinese finger puzzle. Just as the puzzle tightens its grip on your fingers as you twist it, the stent pushes more tightly against the arterial wall as blood pushes through it."

Anticipate questions and prepare short answers rather than long ones. Use full sentences. Short answers are less likely to be edited or misunderstood.

Prepare for the possibility that the interviewer's questions won't give you a chance to convey your message.

Think about ways to "bridge" to your message with a phrase like, "I'd also like to point out. . . ." or "Another point I might mention here. . . ."

Prepare a list of other experts who could comment knowledgeably on your study findings. Reporters may interview other experts to put your findings into context. This is your opportunity to direct them to research leaders who are likely to offer balanced views, or to clinical experts who are particularly knowledgeable about the implications for clinical practice.

Expect that tight deadlines will not permit a chance to review the news article. News organizations rarely will allow interviewees to review the entire text before publication or broadcast, although journalists are usually willing to read back or e-mail quotes so interview subjects can check them for accuracy. Unless you have an established working relationship with a reporter, it's best not to speak off the record. Anything you say could end up in print or on the air.

Table 4 contains a list of general and specific tips to help you when giving interviews. Remember that interviewing is a learned skill. Physicians who expect to have regular or ongoing contact with the press should seek training in order to better understand reporters' needs and constraints.

EMBARGOES: WHEN TO REMAIN SILENT

An embargo is an agreement that you make with a publisher when your manuscript is accepted for publication in a peer-reviewed journal. It states that you agree not to disclose data in your article until its publication date. Embargoes don't apply to researchers presenting papers at scientific meetings, Congressional hearings, or other government proceedings. If reporters cover these presentations and approach you afterward with questions, it's okay to discuss your findings, but take care to limit comments to the information addressed in your presentation. Refrain from making illustrations available to the interviewer that you may wish to publish in a journal at a later time.

Table 4. The Interview: Rules of the Road

General tips

Never say "no comment." It's like waving a red flag in front of a bull. Reporters will look elsewhere for information you can't or don't provide. Even a general statement is better than none at all. If you can't give an answer, explain why.

Don't answer hypothetical questions. Questions that begin with "what if" or "let's suppose" might land you in hot water. Instead, respond positively about the way you've handled actual situations, or use a phrase such as, "I can't speculate about that, but we do know for a fact that . . ."

The interview isn't over until it's over. Even after the reporter has snapped shut the notebook, he's still listening to everything you're saying. Anything you say might be used in the story.

Telephone interviews

Your voice transmits how you're feeling. Demonstrate the same animation and excitement in a telephone interview that you would in person. Take the call standing up to avoid relaxing too much and letting your guard down.

Ask if the interview is being recorded. Print media reporters will tape interviews to get the facts straight and avoid misquoting you. If the interview is for radio, it means that any answer or partial answer can be edited for use on the air.

Incorporate the question into your answer if the interview is being taped for later editing and broadcast. The interviewer's questions that put your answers in context may not be aired or printed.

Make your point first when responding to a question. Then back it up with facts. Most importantly, don't start answering the question before you think through what you want to say.

Ask before the interview if it will air in its entirety or will be edited. If the interview won't be edited, proceed as if it were "live." Everything you say will be on tape.

Television interviews

Look open, relaxed and responsive. Communications studies show that in television, the impression you create outweighs the message you state.

Look at the reporter, not the camera. Maintain good eye contact. Looking away can make you look uncertain and nervous. It also distracts the viewer from what you're saying.

Speak at your normal voice level in a conversational tone. Modern recording equipment will get your message across.

Avoid sitting in a chair that swivels. If you can't, plant your feet on the floor in a way that will prevent you from inadvertently turning the chair.

Sitting fairly erect, but leaning slightly forward will help you look attentive and eager to talk. Pressing the small of your back firmly against the chair centers your energy. Sitting on your suit coat or lab coat will prevent wrinkling at the shoulders. Men should make sure socks cover their calves when legs are crossed. Take a minute beforehand to straighten your hair and clothing.

Use audience language. Reporters probably will not air any response that contains jargon or technical words that need further explanation.

After the interview, feel free to speak out if you don't feel you did your best. The reporter may be willing to let you try again on the important questions.

Table 4. (continued)

Television cameramen will shoot additional footage following an interview. Be sure your smiles and gestures are compatible with your posture during the interview; you don't know how the story will be edited.

Plan the background carefully. Remember, a picture is worth a thousand words.

An embargo also refers to an agreement that journals have with journalists. Journals release advance copy about a manuscript to the news media with the understanding the media will defer coverage until final publication. In those cases, the authors are encouraged to talk with reporters, although it's advisable to first secure a reporter's promise to honor the embargo.

Similar to the embargo is an agreement between authors and journals known as the Ingelfinger Rule.²¹ Under this rule, the journal considers a paper for publication only on the condition that its substance is not submitted or reported elsewhere. The Ingelfinger Rule (named for the *New England Journal of Medicine* editor who founded it) prohibits publicity about an unpublished report from the time of submission, while the embargo applies only to the time between the printing of the journal and its date of publication.

In tandem, the 2 policies are designed to ensure that journal readers have the full article when the media report on it. It's also believed that organized dissemination of important, technical information through the public press leads to better quality news coverage. The embargo period allows reporters time to analyze and report on the complex stories behind the data. Reporters who violate a journal's embargo (proved by conclusive evidence) can be excluded from future embargoed information.

These policies have been criticized by some who argue that the public has a right to know before scientific publication about trial data that appear to have significant implications for patient care or safety, especially when funded by the government.²¹⁻²³ Under such circumstances, the prepublication embargo has been waived in a few instances. A case study of 1 such instance suggests that the premature release of research data may have unintended and adverse effects on clinical practice.²⁴ Results of 2 clinical trials on the use of carotid endarterectomy (CEA) to prevent stroke that were released prepublication were associated with rapid increases in the use of CEA. Unfortunately, the increased use of CEA was not always applied appropriately, resulting in more harm than benefit to some patients.²⁴ It is the responsibility of authors, sponsoring institutions, and reporters to correct misinformation.⁴

CONCLUSION

If successful, this article demonstrates that physicians can help journalists write accurate medical stories with an

investment of time, creative energy, and skill. To decide whether the payoff is worth the investment, consider the following. News reports are the first way that most people, including physicians and scientists, learn about new developments in medicine.²⁵ A *Washington Post* survey found that television is the primary source of health information for 39% of those surveyed; newspapers, 28%; magazines, 23%; and radio, 10%.²² News reports not only inform a physician's patients and colleagues, they also confer credibility. Furthermore, researchers are more likely to cite papers that have been publicized in the popular press. One study found that articles that appeared in the *New England Journal of Medicine* and that were covered by the *New York Times* received 73% more scientific citations in the *Science Citation Index* than control articles.²⁵

Although it's not clear that newspaper coverage of a single research study can influence health policy, news reporting influences public opinion, which in turn, helps set public policy agendas.²⁶⁻²⁸ Consider media coverage of the health hazards of smoking. Studies suggest that the mass media may have slowed public acceptance of smoking's health risks and subsequently delayed regulatory action, in spite of accumulated evidence indicating that cigarette smoking and passive smoking are associated with increased mortality.^{29,30} Media influences that may have served to obscure smoking's health risks included tobacco industry-funded public relations campaigns, tobacco advertising dollars, and journalists' tradition of balanced reporting.^{29,30} Providing balance meant that reporters routinely quoted tobacco industry spokespersons, suggesting that these opposing voices carried equal scientific weight with published peer reviewed research.²⁹ It is the role of news organizations to provide information to the public, give voice to different viewpoints, and facilitate discussion, but to avoid advocating solutions to maintain journalistic objectivity.³¹ When appropriate, medical researchers should explicitly clarify areas where significant scientific agreement exists and comment on implications their findings may have for individual behavior or health policy.³²

Doctors' patients ultimately suffer the most when news reports sensationalize information. A case in point: news wire services reported in 1995 that 6 million people in the United States who were taking calcium channel blockers for hypertension might be increasing their risk for a heart attack by 60%.⁴ Some people stopped taking their medication and doctors' offices were flooded with calls. The report stemmed from a presentation at the American Heart Association that was covered by journalists who had been given a news release but who had little access to scientists other than the presenter. Situations such as this are perhaps the most compelling reason for internists to help journalists get it right.

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