MEDICINE AND THE MEDIA

Is there an (unbiased) doctor in the house?

Journalists often forget that conflicts of interest might bias the opinions of their expert sources. Jeanne Lenzer and Shannon Brownlee explain how, in a bid to disentangle commercial messages from science, they have compiled a list of around 100 independent medical experts that reporters can turn to

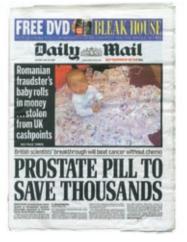
Ho hum, another medical scandal in the news. Earlier this month US Senator Chuck Grassley announced his intention to investigate Alan Schatzberg, chairman of the psychiatry department at Stanford University and the incoming president of the American Psychiatric Association, about his multimillion dollar interest in Corcept Therapeutics, a company that is seeking to market a drug that Dr Schatzberg is researching with federal funding, and the extent to which he disclosed and was required to disclose that interest to Stanford.¹ In June the New York Times broke a front page story about the alleged failure of three top research psychiatrists at Harvard, each of them a proponent of drug treatment for psychiatric conditions in children, to report that since 2000 they had collectively received more than \$4.2m (£2.1m; €2.6m) from various drug companies.2

After ignoring the growing controversy over conflict of interest for years, journalists now seem only too happy to expose wrongdoing in medicine. Yet when it comes to reporting medical news, those self same reporters often seem to forget that conflicts of interest

might also bias the opinions of their expert sources. The media are filled with happy to seek out sources who talk about "medical breakthroughs" that is based on information gathered from sources with ties to the industry. Yet simply knowing that conflicts of interest can create bias doesn't answer the

question of which studies we ought to believe. Because journalists fail to seek out sources who can offer an independent perspective, many medical stories in the popular media are either unbalanced or simply wrong.

In an attempt to disentangle commercial messages from science and to contribute to better reporting we took a drastic step that we believe can go to the heart of the problem: we decided to name names. We created a list of nearly 100 international medical experts in a wide variety of disciplines. But contrary to



Where do the media get their medical stories from?

the "gotcha" tradition of journalism, the list's members are not physicians on the take but rather the reverse: they are leading independent experts, many of them sources we have cultivated over years of reporting. It includes, from journal publishing, two former editors of the New England Journal of Medicine, the former editor of the Western Journal of Medicine, and

"Because journalists fail can offer an independent perspective, many medical stories in the popular media are either unbalanced or simply wrong"

a senior editor of PLoS *Medicine*; former advisers to the US Food and Drug Administration; physician educators; researchers; bioethicists; epidemiologists, methodologists, geneticists, and clinicians from various specialties; medical whistleblowers; and several

medical journalists.

Those applying to be on the list fill out a form affirming that they have not received "any financial support in any form from pharmaceutical or medical device manufacturers during the past five years" and that they don't have other affiliations or financial involvements that would present a conflict of interest. A three member board decides whether to accept applicants. We also maintain a "page 2" list of experts who willingly disclose their conflicts of interest or have ended their indus-

try ties but only within the past five years. Despite their recent commercial ties, these experts are included in the list because they have provided key insights into the inner workings of partnerships between physicians and the industry-and thus have bitten the hand that feeds them, in effect.

The reaction to the list, which has been embraced enthusiastically by our fellow reporters and roundly condemned by several allies of the drug industry, suggests that the effect of simply gathering these names together could well go beyond making life a little easier for our fellow journalists.

Seeking unbiased sources

The need for such a resource is evident from studies showing that bias and poor reporting on medical topics are widespread in the popular media. Gary Schwitzer, a professor of journalism at the University of Minnesota, publishes HealthNewsReview.org, a website that reviews healthcare news for balance, accuracy, and completeness. Schwitzer and a team of academic researchers analysed 500 stories published in top outlets between April 2006 and April 2008 for two key criteria: did the journalist quote an independent expert, someone not involved in the relevant research; and did they make some attempt to report potential conflicts of interest. The result? Half the stories failed to meet these two very basic requirements.3

In another study Alan Cassels, a pharmaceutical policy researcher at the University of British Columbia, and his colleagues analysed media coverage of five prescription drugs published in 193 Canadian newspapers in 2000.4 Cassels, who is on our list, found that the stories were overwhelmingly positive towards the drugs: all 193 articles included at least one drug benefit, while 68% (132/193) failed to mention any potential harm. Two thirds of the stories quoted a source by name, but only a scant 3% (5/164) included information about conflicts of interest for sources who were not government or industry officials.

In the view of one list member, Arnold

The list

Marcia Angell, former editor in chief, New England Journal of Medicine

David Antonuccio, professor, Department of Psychiatry and Behavioral Sciences, University of Nevada

Michael J Barry, chief of general medicine unit, Massachusetts General Hospital, Harvard Medical School

Ken Bassett, professor of family practice, pharmacology, and therapeutics, University of British Columbia

Lisa Bero, professor, University of California, San Francisco

Stephen Bezruchka, Department of Health Services and Department of Global Health, School of Public Health and Community Medicine, University of Washington, Seattle

Laura Boylan, assistant professor, Department of Neurology, New York University

Phil Brewer, university medical director, Quinnipiac University, Connecticut; and past medical safety fellow, US National Highway Traffic Safety Administration

Howard Brody, director, US Institute for the Medical Humanities

Steven R Brown, Banner Good Samaritan family medicine residency, University of Arizona College of Medicine

Daniel Carlat, assistant clinical professor of psychiatry, Tufts University School of Medicine, and editor in chief, The Carlat Psychiatry Report

Alan Cassels, pharmaceutical policy researcher, University of Victoria, British Columbia

Robert Cook-Deegan, director, Center for Genome Ethics, Law and Policy, Duke Institute for Genome Sciences and Policy

Sam S Dahr, Retina Center of Oklahoma

John M Davis, Gilman professor of psychiatry, University of Ilinois at Chicago

Raymond De Vries, professor, bioethics programme, University of Michigan Medical School

Richard Devo, Kaiser Permanente professor of evidence based family medicine, Department of Family Medicine, Oregon Health and Science University

Kay Dickersin, director, US Cochrane Center

Mark Ebell, deputy editor, American Family Physician, and professor, University of Georgia

Carl Elliott, University of Minnesota Center for Bioethics David I Elpern

Margaret Ewen, Health Action International, Netherlands

Anne Rochon Ford, coordinator, Women and Health Protection, Canada

Adriane Fugh-Berman, professor, Department of Physiology and Biophysics, Georgetown University Medical Center, and director, PharmedOut.org

Joseph Glenmullen, clinical instructor in psychiatry, Harvard Medical School

Robert Goodman, founder and director of No Free Lunch and general internist at Montefiore Medical Center, New York

Merrill Goozner, director, Integrity in Science, US Center for Science in the Public Interest

Peter Gøtzsche, director, Nordic Cochrane Centre, Denmark

Mark E Helm, medical director, EBRx, Arkansas Evidence-Based Prescription Drug Program, and assistant professor, College of Pharmacy, University of Arkansas for Medical Sciences

David Himmelstein, associate professor of medicine, Harvard University

John Abramson, clinical instructor, Harvard Medical School Jerome Hoffman, professor of medicine and emergency medicine, University of California, Los Angeles

> John PA loaniddis, professor and chairman, Department of Hygiene and Epidemiology, University of Ioannina School of Medicine, Ioannina, Greece, and Institute for Clinical Research and Health Policy Studies, Department of Medicine, Tufts-New England Medical Center, Tufts University School of Medicine

Peter Juni, head of division, Institute of Social and Preventive Medicine, University of Bern, and director, Clinical Trials Unit, Bern University Hospital

Jon Jureidini, head, Department of Psychological Medicine, Children's Youth and Women's Health Service, Adelaide, and associate professor, disciplines of psychiatry and paediatrics, University of Adelaide

Scott Kim, assistant professor of psychiatry

Peter D Kramer, clinical professor of psychiatry and human behaviour, Brown University, Providence, Rhode Island

Barnett Kramer, associate director for disease prevention, US National Institutes of Health

Sheldon Krimsky, Tufts University, and Council for **Responsible Genetics**

Stefan Kruszewski, Stefan P Kruszewski and Associates

Richard A Lange, professor of medicine, Johns Hopkins Hospital, Baltimore

leffrey Lacasse, assistant professor, Department of Social Work, College of Human Services, Arizona State University at West Campus

Dara KLee, staff cardiologist, Presbyterian Heart Group, Albuquerque, and vice president, Medical Staff Affairs, Presbyterian Hospital, Albuquerque

Gretchen LeFever, director of patient safety and performance excellence, Sentara, US

Trudo Lemmens, associate professor, Canada

Jonathan Leo, associate professor of neuroanatomy, US

Joe Lex, emergency physician, US

Joel Lexchin, professor, School of Health Policy and Management, York University, Toronto

Abby Lippman, professor, McGill University, Montreal Peter Lurie, Health Research Group at Public Citizen, United States

William K Mallon, associate professor of clinical emergency medicine. Keck School of Medicine at the University of Southern California, and director, Division of International, LAC+USC Medical Center, Los Angeles

Peter R Mansfield, director, Healthy Skepticism, Australia Linda Marsa, freelance journalist, US

Charlea Massion, Center for Education in Family and Community Medicine, Stanford University School of Medicine, and member of board of directors, American College of Women's Health Physicians

Charles Medawar, Social Audit, UK

Steven Miles, professor of medicine, Center for Bioethics, University of Minnesota

Barbara Mintzes, assistant professor, Department of Anesthesiology, Pharmacology and Therapeutics, University of British Columbia

Steven Morgan, associate professor and associate director, Centre for Health Services and Policy Research, School of Population and Public Health, University of British Columbia

Ray Moynihan, journalist, Australia

Vijaya Musini, assistant professor, Department of Anesthesiology, Pharmacology and Therapeutics,

University of British Columbia, and Therapeutics Initiative, Canada

Thomas L Perry, clinical assistant professor, Department of Anesthesiology, Pharmacology and Therapeutics and Department of Medicine, University of British Columbia

Bruce Psaty, professor of medicine and epidemiology, University of Washington Cardiovascular Health Research Unit

Arnold Relman, former editor in chief, New England Journal of Medicine

David Rind, senior deputy editor, UpToDate, and assistant clinical professor of medicine, Harvard Medical School

Charles Rosen, clinical professor of surgery, University of California, Irvine, and founding director, US Association for Ethics in Spine Surgery

Haya Rubin, director, research and evaluation, Palo Alto Medical Research Institute, California, and adjunct professor of medicine, Johns Hopkins University, Baltimore Larry Sasich

John Schumann, assistant professor of medicine, University of Chicago, and MacLean Center for Clinical Medical Ethics, Chicago

Lisa Schwartz, Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, New Hampshire

Gary Schwitzer, director, health journalism, MA programme, University of Minnesota School of Journalism and Mass Communication

Vera Hassner Sharav, Alliance for Human Research Protection, US

Allen Shaughnessy, professor, Tufts University School of Medicine, Boston, Massachusetts

Anthony So, programme on global health and technology access, Terry Sanford Institute of Public Policy, Duke University, Durham, North Carolina

Robert C Solomon, American College of Emergency Physicians, and medical editor in chief, ACEP News, US

Des Spence, general practitioner, Glasgow, and UK spokesman of No Free Lunch

Sydney Z Spiesel, clinical professor of paediatrics, Yale University School of Medicine, and regular commentator for Slate and US National Public Radio

Alex Sugerman, attorney, Prescription Access Litigation, US

Leonore Tiefer, New View Campaign, and New York University School of Medicine

Alexander Tsai, residency training programme, Department of Psychiatry, University of California at San Francisco

Jennifer Washburn, journalist, US

H Gilbert Welch, Dartmouth Institute for Health Policy and Clinical Practice, Lebanon, New Hampshire

Michael Wilkes, professor of medicine and director of global health, University of California, and former vice dean of education and former editor in chief, Western Journal of Medicine, University of California, Davis

Sidney Wolfe, director, Health Research Group of Public Citizen, US

Steven Woloshin, Veterans Affairs Outcomes Group Alastair Wood, US

Steffie Woolhandler, associate professor of medicine, Harvard University

James Wright, managing director, Therapeutics Initiative, Canada

Gavin Yamey, senior editor, PLoS Medicine, US

The list can also be viewed at www.healthnewsreview.org/ independentexperts.php

Relman, former editor in chief of the *New England Journal of Medicine* and professor emeritus of medicine and of social medicine at Harvard Medical School, such bias fails to serve the public good. "People who have a financial stake in the results of clinical research can well be biased in the way research is conducted, in the way they report it, and what they say about it when interviewed by the media."

Changing the status quo

The question is why reporters seem unable to grasp the connection between the large body of evidence showing that financial conflicts of interest create bias in medical research and the need for the media to seek out independent sources. To be fair, journalists face a daunting task when trying to sift through medical research, and many are as yet unaware of the profound influence the drug industry has over research results and the ways in which the industry shapes medical "truths." Many reporters also fail to realise that the individuals and organisations they turn to for expert commentary, such as professional groups and charities, professional guideline authors, federal advisory panellists, and patients' groups, often depend financially on the industry. Thus there is a self reinforcing process in which commercially sponsored researchers, whose prominence is enhanced by the industry's public relations machine, are dubbed "experts," while independent sources are cited less often.

From informal conversations with colleagues we also know that other factors are at work when reporters fail to take conflicts of interest into account. Some confess that they hesitate to ask sources about any potential conflicts for fear that the source will take umbrage and refuse to be interviewed. Others assume that if a study appears in a peer reviewed journal it must be valid.

One of the solutions to the problem of biased news reporting, in the view of Michael Wilkes, professor of medicine and director of global health at the University of California, Davis, is greater transparency.⁵ We think the list is a step in that direction. The chief requirement for membership, besides a recognised area of expertise, is that the expert must not have taken any industry funding for at least the past five years. Beliefs about certain drugs or treatments were not criteria for inclusion or exclusion. Indeed, the list includes experts who sit at opposite poles of the spectrum of beliefs on certain issues.

Backlash and honour

Within days of our announcing that we would make our list available to reporters the requests began pouring in. Thus far we have sent a copy of the list to 105 reporters, authors, and editors from such media outlets as the New York Times, Newsweek, Forbes, Fortune, Bloomberg News, the Washington Post, US News & World Report, the Canadian Broadcasting Corporation, Medscape, and many other publications across the US and several other nations. Senators and a state attorney general have also requested it.

Surprisingly, we are also receiving requests from recognised experts who wanted to be on the list. Being a member, it seems, is a badge of honour, say several of the list members we interviewed for the *BMJ*. Others, like list member Barnett Kramer, want to improve the quality of medical reporting. Kramer, a medical oncologist and associate director for disease prevention at the US National Institutes of Health, said, "Working journalists can be overwhelmed by PR."

The other surprise came after the publication of a story we wrote in the online magazine Slate that mentioned the list.⁶ Within days bloggers were furiously accusing us of everything from biased, sloppy reporting to being members of the Church of Scientology (which is opposed to psychiatric drugs). Many of our critics-virtually all of them backed by the industry-opined that our list was undoubtedly filled with experts who were on the payrolls of plaintiffs' attorneys. (A few have testified in court cases, and those who have been paid for their testimony have disclosed it for the list.) This venom was unexpected, as we imagined that the list would be viewed as a positive step towards helping reporters identify doctors and other experts who can address thorny and complex medical issues without having competing financial interests. Now we think we understand the backlash a little better.

One of the problems recognised by Schwitzer is that many journalists rely for story ideas

"Industry knows that buying doctors is an effective marketing tool . . . far more effective than the dollars they spend on drug representatives"

List member Peter Gøtzsche

on news releases from the industry's public relations departments, and some even use releases as the sole source of information on experts to interview. By offering an alternative list of highly credible, independent experts, the industry may fear that its paid key opinion leaders⁷ and the professional societies whose favour they cultivate will no longer be the first source of medical news.

Peter Gøtzsche, director of the Nordic Cochrane Centre and a member of the Danish group Doctors Without Sponsors, described why he joined the list: "Industry knows that buying doctors is an effective marketing tool . . . far more effective than the dollars they spend on drug representatives. This leads to less than optimal health care for patients."

Beyond the list's usefulness to journalists, we hope that it will also be used by government agencies, medical journal editors, and professional societies as they seek out experts to serve as editorialists and members of clinical guideline and advisory panels. The FDA, for example, has a copy of the list. We would be pleased to send it to other agencies and professional societies.

Readers can decide for themselves whether our list of independent experts includes any experts with "something worth saying." Jeanne Lenzer is a medical investigative journalist, New York jeanne.lenzer@gmail.com Shannon Brownlee is a senior fellow at the New

America Foundation, Washington, DC

- Garber K. Committee questions a top psychiatrist. US News & World Report. www.usnews.com/ articles/news/national/2008/06/26/committeequestions-a-top-psychiatrist.html.
- Lenzer J. Review launched after Harvard psychiatrist failed to disclose industry funding. BMJ 2008;336:1327.
- 3 Schwitzer G. How do US journalists cover treatments, tests, products, and procedures? An evaluation of 500 stories. *PLoS Med* 2008;5:e95.
- 4 Cassels A, Hughes MA, Cole C, Mintzes B, Lexchin J, McCormack JP. Drugs in the news: an analysis of Canadian newspaper coverage of new prescription drugs. CMAJ 2003;168:1133-7.
- 5 Shuchman M, Wilkes MS. Medical scientists and health news reporting: a case of miscommunication. Ann Intern Med 1997:126:976-82.
- 6 Brownlee S, Lenzer J. Stealth marketers: are doctors shilling for drug companies on public radio? *Slate* www.slate.com/id/2190775/.
- 7 Moynihan R. Key opinion leaders: independent experts or drug representatives in disguise? BMJ 2008;336:1402-3.

Cite this as BMJ 2008;337:a930

A longer version of this article is available on bmj.com. For a related blog, visit http://blogs.bmj.com/bmj

YANKEE DOODLING Douglas Kamerow

Should we screen for childhood dyslipidaemia?

The obesity epidemic raises the stakes in the issue of statins for children

It's not an accident that evidence based guidelines more or less began with clinical preventive services. Unlike treatment for problems that produce symptoms, preventive medicine is optional. We have the luxury of time to gather and evaluate the evidence for the efficacy and even effectiveness of screening tests and counselling. When someone rushes into your surgery bleeding or doubled over in pain, it would hardly be acceptable to send them away untreated to await the results of a randomised controlled trial for their problem. But that is just what we do when people want to know whether they should undergo computed tomography to screen for lung cancer or be given vitamins to prevent heart disease. "Sorry," we say, "insufficient evidence."

And this is even truer for children—at least when the question is whether to screen them for early signs or symptoms of adult diseases. Firstly, we need to know whether the problem will even persist into adulthood. Secondly, do we have a safe and effective treatment? And most importantly, does treating the problem in childhood have any effect on clinical outcomes in adulthood?

Which brings us to the case of dyslipidaemia in childhood. New guidelines for screening and treatment from the American Academy of Pediatrics have caused a lot of controversy in the United States (BMJ 2008;337:a813). The paediatricians recommend screening with a fasting lipid profile every three to five years for all children aged 2 to 10 years who are overweight or have diabetes or a family history of cardiovascular disease. It's reasonable to ask, especially as the epidemic of childhood overweight and obesity has increased the number of children who will be screened, what this screening will accomplish.

Does heart disease start in childhood? It probably does, as autopsies of children who die from other causes have found. And some studies have correlated autopsy findings with dyslipidaemia in children.¹² So it would be nice to try to identify children who are at risk of developing heart disease, assuming that we could find them and actually do something that would make a difference when they are adults. But there are a number of problems.

One is that lipid measurement in children is not a perfect marker for present or future heart disease. Lipid concentrations vary during childhood, especially around puberty.³⁴ They also vary with sex and race.³⁵⁶ And they don't "track" into adulthood perfectly: somewhere between 30% and 50% of children with raised cholesterol concentrations won't have them as adults.⁷¹⁰

A further problem is the treatment for children with raised lipids. Exercise and diet management work, but only in research settings. It's very hard in the real world to get an individual child to eat better, exercise more, and lose weight—and to maintain all of that until adulthood. And, as usual, long term studies that follow such children until they are old enough to have cardiac related health outcomes are almost impossibly difficult to do.

But the real controversy behind these new guidelines is drug treatment. In a striking departure from previous recommendations the American Academy of Pediatrics endorses the use from the age of 8 of statins for children who have raised lipid concentrations that haven't responded to diet, weight reduction, and exercise. Admittedly this will be a small subset of all children; but commitment to what is likely to be at least 50 years of statin treatment raises many questions.

Do statins lower lipid concentrations in children? Yes, they do. Short term clinical trials of children with familial hypercholesterolaemia have found statins to be safe and effective in lowering concentrations of low density lipoprotein (LDL).¹¹⁻¹³ What about clinical outcomes? As children don't



This is no longer just a discussion of what to do with a very small group of children with an autosomal dominant genetic disorder that virtually guarantees disastrous cardiac outcomes as adults



have heart attacks, investigators have looked at the effects of statins on endothelial dysfunction and carotid intimal medial thickness, early markers for atherosclerosis in adults. Controlled studies in children show that, in comparison with control children, statins improve these.^{14 15} So it looks as though statins can make a difference, at least in the short term.

But what about evidence that dozens of years of statin treatment in children with raised lipids will actually improve cardiac outcomes in adulthood? That, of course, is the holy grail, and such data are not available. It is likely that they never will be, at least for the foreseeable future. And that is a big problem.

I think the obesity epidemic really raises the stakes in this discussion. This is no longer just a discussion of what to do with a very small group of children with an autosomal dominant genetic disorder that virtually guarantees disastrous cardiac outcomes as adults. Now we are moving to mass population screening and treatment of a rapidly increasing number of fat children. Most of them will not have familial hypercholesterolaemia, and we really don't know what we are doing by treating them for 50 years with statins.

The obesity epidemic is real. We don't have to just stand by and watch it progress. We can and should improve many things, including food and exercise policies in schools, the built environment, and families' diets and physical activity. But I'm very wary of committing a generation of obese children to a lifetime of drug treatment on the basis of pathological markers for possible future disease.

This is preventive medicine, after all. Without good evidence, rather than say, "Don't just stand there—do something," I'd advocate the opposite.

Douglas Kamerow is chief scientist, RTI International, and associate editor, *BMJ* dkamerow@rti.org Cite this as: *BMJ* 2008;337:a886 References are on bmj.com