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Read all about it
(John Stuart Mill would be sad)
Migraine not hot news

Although our results are striking, the crude publication ratio has limitations. The size of the numerator depends on the proportion of papers indexed in Medline, and Medline's accuracy depends on correct identification of publications that focus on the disease of interest. We made no assessment of the quality of the identified publications. We would have calculated a "controlled trials ratio" were it not for the low specificity of the Cochrane controlled trials register (many studies within it are not controlled trials). We chose the best available data on disease frequency,[1] although the quality of such data is often imperfect.

We could have chosen to compare research interest with measures of disease burden other than the number of people affected.[4] For example, mortality, years of life lost, and disability adjusted life years correlate with funding by the National Institutes of Health of research into a selection of diseases in industrialised countries.[2] Incidence, prevalence, and hospital inpatient days do not show such a correlation.

Some doctors might justify the lower interest in common conditions on the grounds that their aetiology, prognosis, and treatment are better defined. This is not true for many common neurological illnesses—the greatest good for the greatest number is not being achieved. With consumers becoming increasingly involved in research, the public might expect a more utilitarian approach.[5]

Some of the differences we have observed might be excused by the political, economic, and scientific interest surrounding some diseases. However, we suspect that part of the explanation is also to do with the fashionable nature of some conditions, the availability of research funding, and the character of neurologists themselves. Are other specialists any different? Perhaps they too should examine their track records.

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Competing interests: The research interests of the authors are stroke (RAS and CPW) and Creutzfeldt-Jakob disease (RGW) and, of course, they are all neurologists.

1 Warlow CP. The frequency of neurological diseases. In: Donaghy M, ed. *Brain's diseases of the nervous system.* 11th ed. Oxford: Oxford University Press, 2001.
2 Gross CP, Anderson GF, Powe NR. The relation between funding by the national institutes of health and the burden of disease. *N Engl J Med* 1999;340:1881-7.
3 *The 10/90 report on health research.* Geneva: Global Forum for Health Research, 2000.
4 Frankel MA. The natural history of waiting lists—some wider explanations for an unnecessary problem. *Health Trends* 1989;21:56-8.
5 Tallon D, Chard J, Dieppe P. Relation between agendas of the research community and the research consumer. *Lancet* 2000;355:2037-40.

Wanted—more answers than questions: literature review

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The purpose of medical research is to advance knowledge and solve clinical problems. These high ideals are difficult to achieve. Instead, academia sometimes draws criticism for apparently doing research for its own sake. I therefore carried out a systematic literature review to examine whether published research was providing more questions than answers, or vice versa.

Methods and results

I used "more questions than answers" as a search term in the Medline database, spanning from 1966 to March 2001. To limit the potential number of hits, only the title and abstract were used as search fields. I also searched on the phrase "more answers than questions." All article types were included if they had an English abstract.

Two terms occurred in 166 articles (reference list available on request). However, only three articles (0.018%) purported to describe more answers than questions. Of the remaining 163, 119 used the term in the title and 13 prefixed the phrase with the word "still." No article suggested an equal number of answers and questions. Had the prevalence of answers to questions been a matter of chance, each search term would have yielded 83 articles (95% confidence interval 70 to 97); hence the finding is highly significant ($P<0.001$, binomial test).

The articles seem to be evenly distributed between basic science and clinical publications. The journals ranged from the *Acta Gastroenterologica Belgica* to *Zeitschrift für Gastroenterologie* (but gastroenterologists were not over-represented). I also tested a secondary

hypothesis: are psychiatrists, notorious for answering one question with another, over-represented? Apart from two psychiatrically related articles, one on methadone treatment and the other on counselling, and a third written by two psychiatrists on the epidemiology of fatigue,[1] there were only two articles in mainstream psychiatric journals (not including the must-read "Pornography, erotica, and behavior: more questions than answers"[2]). Only one article used the phrase legitimately: "More questions than answers: a study of question-answer sequences in a naturalistic setting"—this was published in the *Journal of Child Language*.[3] Comments on the proportions of such articles in different branches of medicine, and indeed as proportions of all scientific publications, are at best speculative since the denominators are unknown.

No particular theme unified the three papers that valiantly claimed to have more answers than questions. One was a review of advances in ischaemic heart disease research, and one was about newly discovered neurosecretory functions of the hypothalamus—suddenly we have a whole range of proteins that we weren't expecting, and questions on what they do soon followed. The third article considered the mysterious case of spontaneous regression of Merkel cell carcinoma. The authors' solemn answer? It regressed spontaneously.

As a follow on, I carried out a similar literature search for the phrase "need more research." This yielded 162 articles, only one of which—a thought provoking polemic on aromatherapy—suggested the need for less research.[4]

Comment

Overwhelmingly more medical publications conclude that there are more questions than answers. Those claiming the opposite turn out on closer scrutiny to have an excess of questions too. The negative stereotype of medical research as being of little practical help finds support in these data. The frequent claim that we need more research is hard to sustain given the apparent outcome of this effort. It could be argued that the phrase "more questions than answers" is merely a cliché and not an accurate representation of the state of the field, or that finding the right question is a worthy aim. Hence it would be premature to advocate a major reduction in research funding on this basis. Nevertheless there is clear need for a moratorium on the use of clichés in scientific writing. For researchers aspiring to write a "classic paper"[5] there can be only one conclusion: avoid clichés like the plague.

Q's and A's we count
Q's abound, A's so few. But why?
Wish we knew the A

Contributors: ASD put the jokes in and the *BMJ*'s editorial team took them out.

Competing interests: ASD is an academic.

1 Lewis G, Wessely S. The epidemiology of fatigue: more questions than answers. *J Epidemiol Community Health* 1992;46:92-7.
2 Fisher WA, Barak A. Pornography, erotica, and behavior: more questions than answers. *Int J Law Psychiatry* 1991;14:65-83.
3 Van Hekkan SM, Roelofsen W. More questions than answers: a study of question-answer sequences in a naturalistic setting. *J Child Lang* 1982;9:445-60.
4 Vickers A. Why aromatherapy works (even if it doesn't and why we need less research) [editorial]. *Br J Gen Pract* 2000;50:444-5.
5 David AS. How to do it: write a classic paper. *BMJ* 1990;300:30-1.

Christmas presents and Christmas past

The December issues of magazines for general practitioners often contain articles about patients giving presents to their doctors. These articles urge unsuspecting registrars to consider the hidden agenda of patients bearing gifts and make suggestions about how to respond. However, there is one solution with which I live comfortably and have never yet seen suggested in print—give them something back. I can almost hear the gasps of horror, yet this is not nearly as onerous as it sounds and should not involve anything expensive. Nevertheless, it is certainly not appropriate for everyone.

I am talking about the chronic givers—elderly people and those who are doctor dependent. One woman has kept me in eight varieties of home made jam for years. To her I give excess produce from my garden (whether it is suitable for incorporation in jam or not). Patients who insist on bringing chocolate for my children on every visit receive some sort of confectionery from them at Christmas. You may argue that by this reciprocity I am perpetuating the situation. I feel it restores a balance. Some patients do not like it, which is fine by me. If they refuse to accept a gift from me how could I possibly take one from them?

At this point I have to admit that I was brought up giving presents to patients. I clearly remember, as a child in the 60s, doing the Christmas round with my father, who was also a general practitioner. The back of his car contained a large cardboard box of poinsettias and half a dozen individually wrapped baby bottles of champagne. As darkness fell and Christmas lights came on in windows we would drive from one fusty home to another, greeting impossibly old and decaying and undoubtedly lonely people. Everywhere the welcome was warm; sometimes there were drinks and mince pies, and we collected chocolates and bottles ourselves as the afternoon progressed.

These patients had become special to my father over the years by virtue of their age, their disabilities, their social isolation, or just their personalities. Moreover, I suspect that giving as well as receiving at Christmas helped him to maintain a position of strength through the ensuing 12 months of regular visiting, a feature of general practice in those days.

Times have changed, and so far I have had only one of these old fashioned "specials"—an elderly widow whose only child died in infancy 60 years ago. On my first visit to Ethel at home I found her to be very sad and lonely. She also had considerable charm. We chatted. I looked at her notes. In an unguarded moment I commented that her birthday was a couple of days after mine. When the time came she had not forgotten, although I no longer remember what her present was. I felt it appropriate to give her something small in return—I expect it was a plant. We fell into a pattern of remembering each other on birthdays and at Christmas, and once or twice, in time honoured tradition, I took my children to visit her.

One day Ethel made a serious attempt to take her life, and a few months later she died. How could I have imagined that my intermittent interest might alleviate her daily despair?

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