

Is the NHS getting better or worse?

Making use of information is the key

EDITOR—Smith in his editorial indicates that the NHS needs to gather more information.¹

Although more information is a common call from researchers and policy makers alike, it can lead to change only if it is used (presumably we collect information so that if the NHS is doing well we can all sit back and relax, if not it's time to try something new).

The recent opinion piece from Alan Maynard in the *Sunday Times* makes it clear that information that is currently collected is typically poorly used in the NHS.² What use is a new agency to collate information if it still isn't used? We need to make sure that information gathering doesn't simply stop there, and that information will lead to real change.

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Competing interests: LB works for a consultancy firm and is paid by the private and public sector for research. No financial gain will be made from comments on this topic.

- 1 Smith R. Is the NHS getting better or worse? *BMJ* 2003;327:1239-41. (29 November.)
- 2 Maynard A. Statistics that could cure the NHS. *Sunday Times* 2003 Nov 23. Available at www.timesonline.co.uk/article/0,,8128-906929,00.html (accessed 22 Dec 2003).

Role of information in assessing quality is undervalued

EDITOR—Smith's editorial on assessing quality of and in the English NHS underscored the essential role of good information at all levels.¹ It appeared on the same day that the Nuffield Trust launched a volume of essays on the importance of vision, value, and innovation in health information.²

However, the editorial perpetuated the frequent confusion between information and data and assumed that evidence would emerge by osmosis. The government, NHS, health professions, and commentators all continue to abuse the information sector in health—assuming that top-down direction on information technology and short term programmes will automatically yield the "right" answers to expedient questions.

But true investment in information, its development and use, and above all in trust in the data and authoritative analyses, get sidelined. At the same time, the leadership role of the NHS Information Authority is

undermined and the field fragmented by the allocation of sections of activity to the central procurement function and to the Modernisation Agency, so no one body is empowered to lead the information function.

Other models exist but are ignored—for example, in Canada the Canadian Institute for Health Information is managed and funded jointly by the government and the provinces (www.cihi.ca). Detmer has recently called for a new authoritative independent UK body to guide health policy development, founded on the impartial gathering and analysis of evidence.³

An integrated commitment to a true health information function seems more robust than fragmented special agencies, but is politically unattractive. We may not be sure whether the NHS is getting better, as we lack the information. But we can be certain that the understanding of and commitment to health information are not improving as they should despite investment in technical systems, because of the lack of core commitment to an objective integrated approach.

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- 1 Smith R. Is the NHS getting better or worse? *BMJ* 2003;327:1239-41. (29 November.)
- 2 Rigby M, ed. *Vision and value in health information*. Abingdon: Radcliffe Medical Press (in press).
- 3 Detmer DE. Improving the United Kingdom's Health System: an adaptive model to harness information and evidence. In: Rigby M, ed. *Vision and value in health information*. Abingdon: Radcliffe Medical Press (in press).

Better to be vaguely right than precisely wrong

EDITOR—In his editorial Smith asks whether the NHS is getting better or worse.¹ By falling into the reductionist trap of assuming that the healthcare system can be understood by dissecting it into its component parts, he succeeds in being precisely wrong rather than vaguely right.

Underpinning his argument is a belief that the transfer processes that relate inputs to outputs in each element of health care are well understood. Information is used as feedback that is compared with a desired state (performance assessment), allowing the



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How do we know if the patient is improving?

system to be engineered towards the desired objectives by using incentive manipulation (performance management). He infers that all we need are enough data, and a "complete, validated, interpretable, and uncontested" picture will be revealed. The truth really is out there.

His observation of muddling through against a background of improvement, stasis, and deterioration offers the metaphor of an ecosystem rather than a machine. All parts are adapting by learning to survive in a topography that is provided by co-existing and changing elements. This approach sees health care as a network of interrelated systems that interact in a non-linear fashion—small inputs can have large and unexpected consequences in any part of the system. The characteristics of the system are not represented by the sum of its parts; each element cannot be understood in isolation.^{2 3}

Evidence is beginning to emerge that this model, underpinned by insights from chaos theory, may be a more accurate representation of the healthcare transfer process and why measures such as waiting times are a very poor indicator of system performance.⁴

An overemphasis on outcome measurement constrains us within a set of unreliable assumptions about the relations between cause and effect in health care and invariably numerous unhelpful conclusions.

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- 1 Smith R. Is the NHS getting better or worse? *BMJ* 2003;327:1239-41. (29 November.)
- 2 Kernick D. The demise of linearity in managing health services: a call for post-normal health care. *J Health Serv Res Policy* 2002;7:121-4.
- 3 Kernick D. *Complexity and health care organisation. A view from the street*. Abingdon: Radcliffe Medical Press (in press).
- 4 Papadopolous M, Hadjiitheodossiou M, Chrysostomu C, et al. Is the national health service at the edge of chaos? *J R Soc Med* 2001;94(12):613-6.

We need to ask the right questions

EDITOR—Smith's editorial is entitled "Is the NHS getting better or worse?"¹ Better or worse at what? Maybe one of the reasons we don't have the data to answer the question reliably is that the question is not well formed. This is a basic starting principle of evidence based medicine: to get a clear answer you need to ask a clear question. What do we want to know?

Maybe asking how much harm is caused by the NHS would be one question worth asking. What are the rates of iatrogenic morbidity and mortality? If those figures are shrinking then at least we can argue that the NHS is getting better at not subjecting patients to harm. However, to focus only on the question of harm, fails to provide us with answers about the positive impact of the NHS.

It's a bit like defining health as the absence of disease. Maybe we should ask about numbers—numbers of doctor-patient contacts, numbers of nurse-patient contacts, numbers of procedures carried out, amounts of drugs prescribed. At least these numbers are data. However, do they tell us anything other than how good the NHS is at being busy? Being busy is no guarantee of quality or effectiveness.

If the NHS exists to reduce the burden of human suffering then it will not be able to demonstrate whether it is achieving that simply by accumulating data. It needs to effectively describe patient experience.

It's not that we need better data to answer the question, it's that we need to have a debate about what question we want to ask. Then we need to devise the ways of understanding (not just measuring) the experience of the individual people the NHS was created to serve.

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¹ Smith R. Is the NHS getting better or worse?. *BMJ* 2003;327:1239-41. (29 November.)

Just who gets to choose which data will matter?

EDITOR—Smith's editorial asks an important question about whether the NHS is getting better.¹ He places a lot of faith in gathering better data about the workings of the NHS to help us answer this question.

However, this approach begs the question of "what would the appropriate data be?" And behind that is the intensely political question of, "Just who gets to select the data?"

Data have the facade of being somehow neutral and objective. Data may be seen as factual, and figures may seem to add up. However, the real smoke and mirrors trick has already been laid by the person who has chosen the frames of reference around which data are to be selected. We may have

been set up by this frame to react in a predictable way, even before any data are presented.

Behind even the simplest data someone in the background is choosing to highlight some facts, and to fade others out. As we do not have an agreed idea about what a working NHS would consist of, any statements such as "the NHS is working" or "the NHS is not working" at present have no clear meaning, and serve largely as political slogans rather than debatable propositions.

We need first to decide what we would mean by a "working NHS" and then choose what data would give us the measure of our concept. Both doctors and patients need to make their concept far clearer than the politicians' meaningless phrases and grasped straws of data.

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¹ Smith R. Is the NHS getting better or worse?. *BMJ* 2003;327:1239-41. (29 November.)

Hysterectomy and sexual wellbeing

Data were misrepresented

EDITOR—The study by Roovers et al on hysterectomy and sexual wellbeing addresses a subject of great concern to women.¹ Unfortunately, the stated conclusions of the study are not borne out by the data presented.

My calculations show that 126/310 (40%) of the women had "any sexual problems" and 29 (9%) women had new sexual problems after surgery. Therefore, the conclusion that sexual pleasure significantly improved in all patients, independent of the type of hysterectomy, quoted by the media worldwide, is unfounded. Women (and their doctors) should understand that this study does not predict improvement for an individual woman.

Curiously, only women with male partners were analysed, as if that is the only type of sexual pleasure that counts. Thus 34 women were excluded from the analysis, as were 10 women who were not sexually active after surgery, perhaps because of symptoms induced by the surgery. Sexual activity, discomfort, lubrication, orgasm, and arousal could have been evaluated for self pleasure or same sex pleasure as well. Importantly, it is not stated whether oophorectomy was performed or oestrogen used postoperatively, both of which can affect sexuality.

Women who were "slightly bothered" were included in the "not bothered" group for statistical analysis. Women with chronic pelvic pain or heavy bleeding often accommodate to these symptoms and may not

deem them very bothersome. Moreover, "slightly bothered" should be bothersome enough for an activity that should be pleasurable. I believe the mis-stated conclusions of this paper do a disservice to women.

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¹ Roovers JPWR, van der Bom JG, van der Vaart CH, Heintz APM. Hysterectomy and sexual wellbeing: prospective observational study of vaginal hysterectomy, subtotal abdominal hysterectomy, and total abdominal hysterectomy. *BMJ* 2003;327:774-8. (4 October.)

More questions are yet to be answered

EDITOR—Roovers et al take subjective distress into account in their examination of sexual outcomes after hysterectomy.¹ This is a much needed aspect of the research on this topic. I am disappointed that, as so often in this type of research, the method does not include the use of a well validated interview or self report measure to assess sexual function.

I am concerned about the interpretation of the results for the women who developed new sexual symptoms after their operation. New sexual problems developed in 9 (23%) patients after vaginal hysterectomy, 8 (24%) patients after subtotal abdominal hysterectomy, and 12 (19%) patients after total abdominal hysterectomy. For previously asymptomatic women undergoing hysterectomy the rate of new sexual problems (about one out of five) is troubling and does not imply that sexual symptoms after hysterectomy are rare. Moreover, more women than not (according to the paper, more than 50%) continued to be troubled by existing sexual problems after hysterectomy. I hesitate to accept the authors' conclusion that sexual pleasure is enhanced after hysterectomy, particularly since they did not directly measure sexual enjoyment or satisfaction. Sexual pleasure cannot simply be inferred from the absence or presence of a few symptoms.

Several elements are curiously absent from prospective studies of hysterectomy and sexual function, including a consideration of the incidence of sexual problems in the general population compared with that among women undergoing hysterectomy. Strong evidence either for or against the hypothesis that hysterectomy may affect sexual function negatively is lacking. Neither the study by Roovers et al nor other research to date has successfully addressed this question.

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¹ Roovers JPWR, van der Bom JG, van der Vaart CH, Heintz APM. Hysterectomy and sexual wellbeing: prospective observational study of vaginal hysterectomy, subtotal abdominal hysterectomy, and total abdominal hysterectomy. *BMJ* 2003;327:774-8. (4 October.)

Authors' reply

EDITOR—We emphasise that we never intended to suggest that hysterectomy might be a treatment for sexual problems. Indeed, our study does not predict improvement for every individual woman.

In contrast to Bradford's interpretation, we directly measured sexual satisfaction (methods section, p 775). In the appendix we presented only the questions of the questionnaire that assessed problems during sexual activity.

The reason that we presented only the results concerning women with a male partner is that the number of women with a female partner or without partner was too low to allow a well powered statistical analysis. So the results of our study are applicable only to women who have a male partner.

We did not study in detail whether the change in sexual activity before and after hysterectomy was related to the operation performed or to other circumstances in life. As we did not study it, we prefer not to speculate about a possible relation to hysterectomy.

With respect to bilateral oophorectomy, this procedure was simultaneously performed in only 3.8% of the study group. All premenopausal women who underwent hysterectomy and bilateral oophorectomy were given hormone replacement therapy.

If the indication for hysterectomy is well considered, the patient is severely bothered by the symptoms. On the basis of fear of worsening sexual wellbeing, patients may avoid a treatment that could be very effective. Our study shows that doctors can tell patients who have this fear that in general sexual wellbeing will improve.

Ignoring the results of this prospective study, and continuing to base counselling on less well developed studies, does a disservice to women.

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NSAIDs during pregnancy and risk of miscarriage

True risks or only suspicions?

EDITOR—The finding of Li et al of an association between an increased risk of miscarriage and use of non-steroidal anti-inflammatory drugs (NSAIDs) relies on biased data.¹ For the same cohort of women, previous analysis showed that exposure to magnetic fields was a risk factor for miscarriage,² and this variable should have

Univariate analysis of spontaneous abortion risk in percentages (absolute numbers) related to characteristics of 1557 women studied

Characteristic	Miscarriage		Relative risk (95% CI)
	(n=180)	(n=1377)	
Use of NSAIDs	Yes	No	
Yes (n=281)	16 (45)	84 (236)	1.51* (1.11 to 2.07)
No (n=1276)	11 (135)	89 (1141)	
Age (years)			
≤24 (n=105)	10 (11)	90 (94)	1
25-9 (n=363)	10 (35)	90 (328)	0.92 (0.48 to 1.75)
30-4 (n=610)	11 (66)	89 (544)	0.97 (0.53 to 1.77)
≥35 (n=470)	14 (65)	86 (405)	1.03 (0.56 to 1.89)
			$\chi^2=3.1$
Smoked since last menstruation			
Yes (n=238)	10 (24)	90 (214)	0.85 (0.57-1.28)
No (n=1319)	12 (156)	88 (1163)	
Previous pregnancy			
No (n=706)	10 (71)	90 (635)	0.79 (0.59-1.04)
Yes (n=851)	13 (109)	87 (742)	
Previous miscarriage			
Yes (n=205)	11 (22)	89 (183)	0.92 (0.60-1.40)
No (n=1352)	12 (158)	88 (1194)	
No of drugs taken			
1 (n=713)	9 (67)	91 (646)	1
2 (n=367)	11 (39)	89 (328)	0.88 (0.61-1.29)
3 (n=210)	16 (34)	84 (176)	1.72 (1.17-2.53)
4 (n=112)	12 (13)	88 (99)	1.24 (0.71-2.16)
5 (n=68)	15 (10)	85 (58)	1.57 (0.85-2.90)
6 (n=37)	22 (7)	78 (30)	2.01 (0.99-4.07)
≥ 7 (n=50)	20 (10)	80 (40)	2.13 (1.17-3.88)
			$\chi^2=10.54^*$

*P<0.05.

NSAIDs=non-steroidal anti-inflammatory drugs.

been included. Moreover, 103/170 women had already had a miscarriage at the time of the interview³; this information should also have been taken into account.

With regard to the widespread use of NSAIDs⁴ a cohort study was performed on 1557 pregnant women (gestational age < 20 weeks) who contacted a drug information centre was performed, collecting follow up data on pregnancy outcome after delivery.⁵ The NSAID users were 281 (10% aspirin, 90% other anti-inflammatory agents) whereas 1276 used other drugs (11% psychotropic drugs, 10% systemic anti-infective agents), with an average of 2.2 drugs per woman (range 1-14).

In addition to a significant association between miscarriage and exposure to NSAIDs (table), a significant trend became apparent ($\chi^2=10.54$, P=0.0011) for the number of drugs taken since the last menstruation. A logistic regression analysis using a backward stepwise selection then showed a significant association between number of drugs taken and miscarriage (odds ratio 1.15, 1.06 to 1.25), but not for use of NSAIDs.

Interpretation of data should include all possible confounding factors. In this case scant methodological approaches indicated exposure to NSAIDs early in pregnancy as a substantial risk factor for miscarriage, but only well designed studies and complete analysis can produce more concrete evidence.

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- Li DK, Liu L, Odouli R. Exposure to non-steroidal anti-inflammatory drugs during pregnancy and risk of miscarriage: population based cohort study. *BMJ* 2003;327:368-72. (16 August.)
- Li DK, Odouli R, Wi S, Janovic T, Golditch I, Bracken TD, et al. A population-based prospective cohort study of personal exposure to magnetic fields during pregnancy and the risk of miscarriage. *Epidemiology* 2002;13:9-20.
- Li DK, Janovic T, Odouli R, Liu L. Hot tub use during pregnancy and the risk of miscarriage. *Am J Epidemiol* 2003;158:931-7.
- Collaborative Group on Drug Use in Pregnancy (CGDUP). Medication during pregnancy: an intercontinental cooperative study. *Int J Gynaecol Obstet* 1992;39:185-96.
- Kasilo O, Romero M, Bonati M, Tognoni G. Information on drug use in pregnancy from the viewpoint regional drug information centre. *Eur J Clin Pharmacol* 1988;35:447-53.

Authors' reply

EDITOR—Although exposure to magnetic fields during pregnancy was associated with miscarriage,¹ it was not associated with use of non-steroidal anti-inflammatory drugs (NSAIDs). Therefore it was not a confounder, and adjustment for exposure to magnetic fields did not make any difference to the association between NSAID use and miscarriage. With regard to interviews after miscarriage, please refer to our previous

response on bmj.com.² The bottom line was: had we included only women who were interviewed before their miscarriage (prospectively ascertained), the association between NSAID use and miscarriage would have been even stronger.

If Schiavetti et al intended to disprove our findings with results from their study they failed to provide enough information to allow readers to evaluate their study. On the basis of the limited information they provided, they clearly did not have adequate data to address the relation between NSAIDs and miscarriage.

Firstly, their study was based on selected populations (volunteers who took drugs during pregnancy and called the centre).

Secondly, there was no information on indications for drug use and gestational age at entry for users of different drugs. Their use of logistical regression, which assumes entry at the time of conception for all study participants, could result in biased estimates. In addition, what was considered to be NSAID use was not clear.

Thirdly, they did not provide information on the correlation between NSAID use and the number of drugs used. If these two variables were highly correlated, putting both variables in the logistic regression model and letting the model decide which one was the risk factor for miscarriage would represent a misguided approach in data analysis and subsequent interpretation of results.

Finally, the fundamental weakness in their study was the comparison group. Users of other drugs could easily have a higher miscarriage rate than that in the general population simply because of their underlying conditions (depression, reproductive tract infections, etc) or the use of other drugs.

The striking contrast of a strong association between NSAID and miscarriage, and a lack of association between acetaminophen and miscarriage observed in our study provides strong evidence against the argument that NSAID-miscarriage association was due to generic association with any drug use. Such striking contrast supported by underlying biological plausibility has laid a solid foundation for the NSAID-miscarriage association.

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2 Li DK, Liu L, Odouli R. Authors' response to Questions regarding methodological details. *BMJ* 2003. <http://bmj.bmjournals.com/cgi/eletters/327/7411/368#36109> (accessed 11 Dec 2003).

Danish group reanalyses miscarriage in NSAID users

EDITOR—Li et al reported that use of non-steroidal anti-inflammatory drugs (NSAIDs) in the first half of pregnancy is associated with an 80% increased risk of miscarriage, which is in accordance with our previous results.^{1 2}

We have since accessed a recent update of our dataset covering 1998-2002, including gestational age, which was not originally accessible.

We obtained data on miscarriage, and birth and drug exposure were obtained from a hospital discharge registry and a prescription database.² We identified 1599 women with first recorded miscarriage, of whom 45 had filled prescriptions for NSAIDs in the last 12 weeks before the miscarriage. As controls we used 10 primigravidas delivering after the 28th gestational week in the corresponding gestational period (n = 15 990).

Cases and controls were classified as drug exposed if they had redeemed NSAID prescriptions at appropriate gestational periods. We assessed the association between miscarriage and NSAID use in five periods before miscarriage and found a consistently positive association between miscarriage and exposure to NSAIDs in the weeks before miscarriage, with odds ratios from 3.35 to 0.58 (table).

Sampling on the specific gestational age substantially reduced the strength of our previously reported association between use of NSAIDs and risk of miscarriage. However, the association remains consistently positive in all analysed time periods, with a trend towards a stronger association when looking at the periods closer to the miscarriage. Whether this association is caused directly by NSAIDs or by the indication for prescribing the drug is still not solved.

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2 Nielsen GL, Sørensen HT, Larsen H, Pedersen L. Risk of adverse birth outcome and miscarriage in pregnant users of non-steroidal anti-inflammatory drugs: a population based observational study and case-control study. *BMJ* 2001;322:266-70.

Different versions of Glasgow coma scale in British hospitals

The 14 point scale may be worth defending

EDITOR—Wiese surveyed the use of different versions of the Glasgow coma scale in British hospitals.¹ When passing on information about any scale the parameters of the scale must be declared. The Glasgow coma scale should include a numerator and denominator to avoid confusion: saying 14/14 or 14/15, for example, would show which version of the scale is being used.

It can be quite difficult for people unless they see it regularly to separate abnormal flexion—which is flexion, adduction, and internal rotation of the shoulder—from flexion and withdrawal—which is flexion, abduction, and external rotation of the shoulder. In the 14 point scale this differentiation is unnecessary.

Even the terms differentiating M4 and M5 of the 15 point scale are variable. If the reproducibility of the observations cannot be guaranteed between observers perhaps the simplified scale is better.

With correct training the 15 point scale is superior because it is the international standard for research and audit. For patient care, however, reproducibility across the multidisciplinary team is important. A changing coma scale is also important. Knowing how the score is generated is much more informative than simply being presented with a number over the telephone. It allows the receiving doctor to compile a clear picture of the clinical state of the patient. If a flexion motor response is described it can be clarified.

I wonder how conscious level is being assessed in the four observation units listed as not using the Glasgow coma scale.

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Association between miscarriage and NSAID use as assessed in five periods before miscarriage

Week before miscarriage	Without gestational age ²		Including gestational age (new analysis)			
	Odds ratio	95% CI	Cases exposed to NSAIDs (n=1554)	Controls exposed to NSAIDs (n=15 677)	Odds ratio	95% CI
1	6.99	2.75-17.74	3	8	3.35	0.88 to 12.79
2-3	3.00	1.21-7.44	5	33	1.50	0.58 to 3.86
4-6	4.38	2.66-7.20	18	122	1.50	0.91 to 2.47
7-9	2.69	1.81-4.00	16	100	1.59	0.93 to 2.70
10-12	1.26	0.85-1.87	3	50	0.58	0.18 to 1.85

NSAIDs=non-steroidal anti-inflammatory drugs.

Distinction must be made between real clinical condition and numbers

EDITOR—We disagree with Wiese that the universal use of the revised 15 point Glasgow coma scale is the panacea to solve the recurrent problems communicating with local neurosurgical units.¹⁻³

We believe that much of the difficulty and confusion is due to assigning a number score to an individual's motor, verbal, and eye responses and subsequently totalling up the three components. At best, this requires decoding by the receiving clinician, and, at worst, valuable information can be lost because of the impossibility of conversion back to clinical responses unless the component scores and denominator are known. To avoid these problems the actual clinical response, rather than a numerical code, should be communicated and documented in the notes.

The original Glasgow coma scale by Teasdale and Jennett does not describe a numerical system.² The subsequent introduction of such a tool has facilitated stratification of groups of patients in research settings.

As a point of interest the neuro-observation charts in use in our unit and, perhaps more importantly, at the Institute of Neurological Sciences in Glasgow continue to describe the original 14 point scale, casting some doubt on Wiese's quote that the revised scale has been the accepted version for 25 years. The important message is providing information in a simple and easily understandable form, whichever version of the Glasgow coma scale is preferred.

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1 Wiese MF. British hospitals and different versions of Glasgow coma scale: telephone survey. *BMJ* 2003; 327:782-3. (4 October.)

2 Teasdale GM, Jennett B. Assessment of coma and impaired consciousness: a practical scale. *Lancet* 1974;2:81-4.

3 Teasdale GM, Jennett B. Assessment and prognosis of coma after head injury. *Acta Neurochir* 1976;34:45-55.

Author's reply

EDITOR—These authors highlight communication issues concerning the Glasgow coma scale and point out the greater ease of use of its original version. Teasdale and Jennett themselves were well aware of the difficulties that distinguishing between normal and abnormal flexion may pose to non-specialists.¹

The inventors of the scale never gave any explanation for introducing the additional point in 1976 and continue to use the original scale in their own unit in Glasgow.² In spite of this, and although no research has examined which scale is the better one, the original version has curiously disappeared from medical literature and

teaching. Most healthcare professionals working today are therefore only familiar with the 15 point scale. Accordingly, staff interviewed during the survey were often surprised when the observation charts in their unit were showing the original version. Most had never noticed this before.

In many cases, hospitals may have not updated their stationery consistently. As a result, staff in the United Kingdom need to be mindful of the parallel existence, sometimes in the same hospital, of the two scales. But can it really be justified that doctors and nurses should have to worry about which one to use every time they change jobs? Teasdale's and Jennett's views on this matter would surely be of interest.

I did not explore how the level of consciousness is assessed in the units not using the Glasgow coma scale.

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2 Teasdale GM, Jennett B. Assessment and prognosis of coma after head injury. *Acta Neurochir* 1976;34:45-5.

Five Ps in mix of public health advocacy

EDITOR—The over 140 truly rapid responses to Enstrom and Kabat's smoking study demonstrate the use and abuse of the mix of public health advocacy.¹ Contrary to a muted response to another article on the same theme,² responses to this article were characterised by Smith as "more remarkable for [their] passion than [their] precision."³ My formulation of the mix in public health advocacy includes three additional Ps—promptitude, perseverance, and personality.⁴

The antismoking passion of most respondents was palpable, but only 3% showed commensurate precision by detailing the article's scientific flaws. The promptitude of response should be viewed in the context of recent advances in knowledge about tobacco's effects, which make the study seem anachronistic. However, without adequate precision, much of the passion and promptitude seem misdirected.

Perseverance is most effective when advocates are able to show continually the reliability and validity of their perspectives. In this context, two controversial issues need to be addressed rigorously.

The first issue is the extent to which the study was flawed by the authors' definition of passive smoking and the deficiencies of their methods. Repace has made progress in this respect,⁵ but such analyses need to be more focused on disproving the authors' rationales.³

The second issue is the level of acceptable conflict of interest for publication of scholarly articles.³ The authors insist that any perceived conflict falls well below this acceptable limit. If incontrovertible evidence against the authors' position is obtained, the *BMJ* should consider its publication in its upcoming theme issue: "What doesn't work and how to show it."

The towering personality of the *BMJ* as a leading medical journal partly explains the feelings of betrayal by critics of the study. Ironically, by not properly applying the mix of public health advocacy, some responding antismoking advocates have inadvertently compromised their personality as objective seekers of knowledge.

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Competing interests: NA is an active anti-smoking campaigner and the initiator of a structured smoking cessation programme for prisoners in New South Wales.

1 Enstrom JE, Kabat GC. Environmental tobacco smoke and tobacco-related mortality in a prospective study of Californians, 1960-98. *BMJ* 2003;326:1057.

2 Laurent AM, Bevan A, Chakroun N, Courtois Y, Valois B, Roussel M, Festy B. Health effects of chronic exposure to tobacco smoke on a non-smoker population. *Rev Pneumol Clin* 1992;48:65-70. [In French.]

3 Correspondence. Passive smoking. *BMJ* 2003;327:501-5. (30 August.)

4 Awofeso N. Influence of "bounded ness" on public health advocacy—lessons from polio and tuberculosis advocacy outcomes. *Eur J Public Health* (in press).

5 Repace JL. Passive smoking risks: from publication, not bias. Electronic response to: Passive smoking. *bmj.com* 2003. bmj.bmjournals.com/cgi/eletters/327/7413/503-a#42025 (accessed 3 Dec 2003).

Anecdotalism may be associated with age

EDITOR—With reference to Aronson's filler,¹ I thought that anecdotalism was the tendency of ageing doctors to say "I don't care what the evidence is, the way I've always done it is best."

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Competing interests: I am now 40 and am concerned that I may be prone to anecdotalism.

1 Aronson J. Anecdotalism. *BMJ* 2003;327:1276. (29 November.)



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