

Diagnostic and therapeutic procedures among Australian hospital patients identified as Indigenous

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TO THE EDITOR: Cunningham has shown that in Australian public hospitals patients identified as Indigenous are significantly less likely than other patients to have a principal procedure recorded.¹

This finding is based on data collected by the Australian Institute of Health and Welfare using the coding scheme of the *International classification of diseases*, 9th revision, clinical modification (ICD-9-CM). No information was available about the clinical indications for conducting a principal procedure. Despite this crucial omission, Cunningham speculates about the reasons for the disparity in the rate of procedures between Indigenous and non-Indigenous patients. These speculations include alarming suggestions such as the possibility of systematic discrimination against Indigenous patients of both an institutional and personal nature. She then concludes that “Work is urgently needed to characterise more fully the nature, level, sources and consequences of institutional and interpersonal discrimination so that we can reduce unfair treatment, ensure equitable care and improve outcomes for the most disadvantaged Australians”.

These speculations and conclusions are simply unjustified by the data. In addition, such comments may cause more harm than good — Indigenous people have become extremely sensitive about medical and social research and may reject future investigations that are essential to their welfare.

There are reasons other than adverse discrimination which may explain the data. These include the common rejection by

Indigenous patients of medical advice to have a procedure (they may well be adopting the wisest action), and their more frequent admission to hospital (rather than outpatient care), as they may have travelled from remote communities (ie, there are social criteria for admission without the need for medical procedures). Furthermore, the quality of the data must be questioned, as many Indigenous patients are admitted to hospitals where the data forms are completed by unskilled personnel who do not understand the meaning of a “principal procedure”.

1. Cunningham J. Diagnostic and therapeutic procedures among Australian hospital patients identified as Indigenous. *Med J Aust* 2002; 176: 58-62. □

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IN REPLY: Lawson suggests that my conclusions¹ are not justified, and that they may “cause more harm than good”. I strongly disagree.

He suggests a number of alternative explanations, including “social” admissions for remote patients, and poor coding, but these do not account for the differences observed. Over half of the separations identified as Indigenous were of urban (19%) or rural (33%), rather than remote, area residents. Disparities in procedures for Indigenous and other patients were evident for each area. Almost half (46%) the separations identified as Indigenous were in principal referral or major hospitals, where coding should be of a high standard. Indigenous–non-Indigenous disparities existed within each hospital category. The results presented in my report¹ were adjusted for area of residence, hospital category, as well as several other factors, and large differences in procedures remained.

Lawson also suggests that rejection of medical advice by Indigenous patients may play an important role. Rejection of advice certainly occurs on occasion, by both Indigenous and non-Indigenous patients. I question whether it is “common”, as Lawson suggests, but that is not really the point. It would be far more productive to ask why and how this occurs, and how interactions between healthcare providers and Indigenous patients can be improved.

Lawson takes exception to my raising the possibility of systematic discrimination in the Australian healthcare system, referring to it as “alarming”. In that we are in complete agreement, I, too, find it alarming. However, unlike Lawson, I choose not to deny it, but to accept it as an important challenge. My aim is not to make medical practitioners defensive, but to invite them to participate in finding ways to reduce disparities. Systematic discrimination can occur even when well-meaning people are trying to do the right thing. The systems in which we work can defeat our best intentions, even when we don’t realise it. The reasons why a procedure was not performed on a particular patient may be perfectly sound given the circumstances. What we must ask ourselves is how those circumstances came to be, and what we can do to change them.

I agree with Lawson that some Indigenous people are sensitive about research, but I do not accept that they will “reject future investigations that are essential to their welfare”. On the contrary, I expect that many Indigenous people would be happy to participate with healthcare providers in the development and implementation of creative solutions to improve the healthcare system.

1. Cunningham J. Diagnostic and therapeutic procedures among Australian hospital patients identified as Indigenous. *Med J Aust* 2002; 176: 58-62. □

Correspondents

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Hindsight bias in medicolegal expert reports

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TO THE EDITOR: It is possible to diminish bias, especially in litigation concerning general practitioners.¹ First, request all the defendant’s clinical notes about the patient, not merely the records of the incident. Then, before reading the allegations or the history following the incident, read the entire history of the patient’s contacts with the doctor or the practice: frequency of

attendances, nature of complaints, details of history and examination, referrals for tests or second opinions — all give insight into the nature of that patient–doctor relationship.

Reading the notes from the beginning allows the expert to approach, anterospectively, the consultation(s) at which things went awry. If the relevant consultation cannot be identified, the expert has to correlate the patient's story, as presented by the solicitor, with the doctor's records.

As he or she progresses through the records, the expert can assess whether or not the doctor's recorded acts accorded with responsible practice. Unrecorded omissions can also be identified, based on what is written in the records: why didn't the doctor ask about X, examine for Y, request a test for Z or refer to a specialist? Of course, these things might have been done, but not recorded.

One would hope that barristers for both parties would frame their questions based on a similarly anterospective approach, and that judges would focus their attention and that of a jury (if there is one) on the appropriateness of process rather than on the unfortunate outcome.

I cannot conclude without mentioning one solicitor's claim that the doctor had failed to use a retrospectoscope.

Competing interests: P C A, at the request of both plaintiffs and defendants, provides expert opinions for the courts.

1. Hugh TB, Tracy GD. Hindsight bias in medicolegal expert reports. *Med J Aust* 2002; 176: 277-278. □

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TO THE EDITOR: I read with interest the recent article by Hugh and Tracy on hindsight bias in medicolegal expert reports.¹ As they themselves admit, "the very seeking of an expert opinion usually indicates that there has been an adverse outcome". In my experience, the unfortunate outcome can usually be predicted within reading the first few paragraphs of the brief. I do not think withholding information on outcome would prevent the occasional use of the "retrospectoscope".

I wondered whether the views of the authors might have been slightly biased on the basis of the particular cases they had reviewed as Chairmen of the Australian Cases Committee of the Medical Defence Union. Did these cases range across all specialties and subspecialties?

The problem of hindsight bias is, in my view, greater when there are no clearly accepted guidelines for diagnosis and management, or where the case is unusual and falls outside the exposure of experienced clinicians.

They mention clinical practice guidelines as a way to improve the objectivity of experts, but then seem to exclude them on the basis of the expense and time involved in their development.

In cardiology, there are now internationally accepted guidelines developed by the American College of Cardiology and the American Heart Association for the diagnosis and management of all common clinical situations.² These are regularly updated and have been sometimes modified for Australian use by the Quality of Health Care Committee of the National Health and Medical Research Council (NHMRC) or the Cardiac Society of Australia and New Zealand.³ These guidelines provide an important baseline for any expert opinion in this specialty.

More universal clinical guidelines will educate reviewers. It will reduce the problems of hindsight and the overzealous expert. It will also allow the expert to be tested by the well-prepared barrister. Human nature being fallible, it will not eliminate personal bias.

1. Hugh TB, Tracy GD. Hindsight bias in medicolegal expert reports. *Med J Aust* 2002; 176: 277-278.
2. American College of Cardiology/American Heart Association guidelines for the evaluation and management of chronic heart failure in the adult: executive summary. *Circulation* 2001; 104: 2996-3007.
3. Clinical exercise stress testing. Safety and performance guidelines. The Cardiac Society of Australia and New Zealand. *Med J Aust* 1996; 164: 282-284. □

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IN REPLY: We agree with Arnold that, ideally, expert witnesses should attempt to assess management decisions before acquainting themselves with the outcome and allegations in negligence cases. In practice, we suspect this is rarely done. In any case, the mere seeking of an expert opinion conveys the information that there has been an adverse outcome and, as we noted, there is evidence that, even if experts attempt to guard against it, hindsight bias is unavoidable in such circumstances. The central problem is that the expert is, as it were, looking back down one fork in the pathway of events, whereas the treating doctor was looking forwards at many possible and often uncertain forks.¹

Hickie's statement "in my experience the unfortunate outcome can usually be predicted within reading the first few paragraphs of the brief" epitomises the very problem we address. Such retrospective snap judgements are characteristic of hindsight bias and are often accompanied by the telltale phrase, known to be a marker for hindsight bias,¹ "it should have been obvious".

We are unable to understand Hickie's statement that our "views . . . might have been slightly biased on the basis of . . . cases . . . reviewed as Chairmen of the Australian Cases Committee of the Medical Defence Union". The Committee contained representatives from the major specialties, including two consultant physicians, and the cases ranged over all specialties and subspecialties. Experts from subspecialties, including cardiology, were co-opted when appropriate.

We agree with Hickie that clinical practice guidelines are useful. We did not recommend that they be excluded, but we did draw attention to their difficulties and limitations.

We acknowledge the admirable work done by the American College of Cardiology in developing an impressive range of guidelines, but our view remains unaltered that they are costly in terms of time and effort to produce, cannot cover all clinical contingencies, and have limitations when applied to negligence cases. The guidelines for heart failure referred to by Hickie took more than three years to prepare, involved numerous committee members and no fewer than 26 reviewers, and were not subsequently updated for six years. Relatively few guidelines have been modified for Australian use and some are obviously deficient. For example, the current National Health and Medical Research

Council (NHMRC) guidelines relating to the common problem of chest pain² are six years old, and have been criticised on the grounds that they have not been rigorously tested to ensure clinical usefulness and do not include appropriate management strategies for patients with non-cardiac chest pain.³

We adhere to our view that these problems make it likely that clinical practice guidelines will have a limited role in negligence cases.

1. Cook RI, Woods DD. Operating at the sharp end: the complexity of human error. In: Bogner MS, editor. *Human error in medicine*. New Jersey: Lawrence Erlbaum, 1994; 255-310.
2. Working party of the NHMRC Standing Committee on quality of care and health outcomes. *Clinical practice guidelines: diagnosis and management of unstable angina*. Canberra: National Health and Medical Research Council, 1996.
3. Eslick GD, Talley NJ. Non-cardiac chest pain: squeezing the life out of the Australian healthcare system? *Med J Aust* 2000; 173: 233-234. □

snapshot

Fatalities from bread tag ingestion

PLASTIC BREAD CLIPS are a rare but potentially avoidable cause of gastrointestinal obstruction or perforation which can be fatal.

Case 1: A 79-year-old woman presented with peritonitis thought to be the result of a perforated viscus. Her condition was too poor for immediate operative intervention, and despite supportive treatment she died the same day. At autopsy, ileal perforation was identified related to a firmly adherent plastic bread tag (Figure). Two adjacent foci of congestion and mucosal distortion 24 cm proximally suggested a prior clip attachment site. She had suffered from dementia and her meals were made by her husband, who was blind.

Case 2: An edentulous 82-year-old woman presented with a one-day history of abdominal pain. A laparotomy showed ileal perforation related to a bread tag attached to the mucosa. Postoperatively, she developed bronchopneumonia which proved fatal. Three months before presentation, she had suffered a less severe episode of abdominal pain which had resolved on conservative treatment from her general practitioner.

In Australia most bread bags are sealed by hard plastic clips. These are cheap and convenient, enabling the bag to be resealed after use. However, some countries have withdrawn their use because of

gastrointestinal problems after ingestion.^{1,2}

Patients swallowing clips are typically elderly and edentulous. The clips tend to snag on the small bowel mucosa, which may obstruct, erode or perforate. Impaction in the oesophagus, stomach or colon has also been reported.³ The tags are generally not seen on plain x-ray² and patients are often unaware that they have swallowed them. Because of the high risk of complications, early endoscopic removal is advocated.⁴ With an ageing population, the proportion of edentulous people is likely to rise, increasing the risk of foreign-body ingestion.

Alternative plastic bag sealers are available, although some also present health hazards. For example, ileal perforation has been reported after swallowing a freezer bag tie containing a wire.⁵

Bread bag clips have recently been replaced with tape in the United Kingdom for safety reasons (A Bennett, Allied Bakeries Customer Services Representative, Allied Technical Centre, Maidenhead, Berkshire, UK, personal communication). Abandoning the use of hard plastic bread tags in Australia in favour of adhesive tape would counter this health hazard.

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Bread tag from the patient in Case 1, detached to reveal the site of ileal perforation. Scale is in centimetres.

1. Cook DS. Dietary dangers: ingestion of a bread bag clip [letter]. *J Clin Pathol* 2001; 54: 79.
2. Newell KJ, Taylor B, Walton JC, Tweedie EJ. Plastic bread-bag clips in the gastrointestinal tract: report of 5 cases and review of the literature. *CMAJ* 2000; 162: 527-529.
3. McKaigney J, Cole M, Simon JB. Picking up the tab: obstruction of the gastrointestinal tract by plastic bread bag clips [letter]. *Gastrointest Endosc* 1985; 31: 112-113.
4. Ellul JP, Hodgkinson PD. Problems with a plastic bread-bag clip [letter]. *Arch Emerg Med* 1989; 6: 156-157.
5. Al-Fallouji MA. A hazard of modern life [letter]. *Lancet* 1983; 2: 334. □