Mortality associated with delay in operation after hip fracture: Scottish data provide additional information...

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Letters

Mortality associated with delay in operation after hip fracture

Scottish data provide additional information …

Editor—Bottle and Aylin's study provides evidence of an association between delay to hip fracture surgery and mortality,[1] a topic that has proved controversial.[2] However, as their analysis depended on routinely collected data, the study had important limitations. Scottish data provide additional relevant information.

Scottish hip fracture audit data are collected prospectively,[3] and records have been linked to routinely collected data for hospital admissions and mortality.[4] We studied one year mortality in patients undergoing hip fracture surgery between 1998 and 2003, in groups of patients stratified by the reason for delay to surgery (n = 8470). We used Cox proportional hazards regression analysis to adjust for potential confounding factors including age, sex, hospital, and residence before the fracture; American Society of Anesthesiologists' grade (a measure of systemic illness before fracture); and number and type of hospital admissions in the five years before the hip fracture.

Surgery was delayed by more than 24 hours after hospital admission in 3364 (40%) patients, of which 1432 operations (43%) were delayed for administrative reasons including restricted access to theatre, surgeon, or anaesthetist; 1315 people (39%) were initially medically unfit for surgery and 617 operations (18%) were delayed for other reasons. Overall, 2531 (30%) patients died in the year after admission for hip fracture. Compared with patients operated on within 24 hours, delay to surgery in patients who were initially medically unfit was associated with increased mortality (hazard ratio 1.3; 95% confidence interval 1.1 to 1.4). However, there was no evidence of an association between delay to surgery and mortality for patients whose operation was delayed for administrative reasons (hazard ratio 0.9, 95% confidence interval 0.8 to 1.0) or for other reasons (1.1, 0.9 to 1.2).

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These Scottish data support an association between delay to surgery and mortality after hip fracture, and show that the association persisted for at least a year after admission for hip fracture. However, the excess mortality seems only to be present when the delay was for medical reasons. The importance of delay to hip fracture surgery therefore remains open to debate.

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Competing interests: None declared.

1 Bottle A, Aylin P. Mortality associated with delay in operation after hip fracture: observational study. BMJ 2006; 332:947-50. (22 April.)
2 Gdalevich M, Cohen D, Yosef D, Tauber C. Morbidity and mortality after hip fracture: The impact of operative delay. *Archives of Orthopaedic and Trauma Surgery* 2004;124: 334-40.
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… but Italian data seem to contradict study findings

Editor—In contrast to Bottle and Aylin,[1] we found that delayed surgery alone seems not to increase mortality after hip fracture after adjustment for comorbidity, age and sex, and taking hospital level variability into account.

We examined data from regional hospital discharge registers in Friuli Venezia Giulia, a region in northeastern Italy (population 1 200 000), where each year more than 2200 elderly people are admitted for hip fracture. We selected all patients aged 65 and older with a main diagnosis of hip fracture that was surgically treated during 1996-2005, excluding patients with malignant neoplasm. In cases of multiple hip fracture we included only the first episode.

We considered all diagnoses coded in the hospital discharge records and in those of the previous year, calculating the Charlson comorbidity index for each patient[2] and dichotomising it such that 1 indicated presence of comorbidity and 0 absence. We dichotomised the waiting time for surgery by following the clinical indication in the medical literature (1 indicated immediate surgical treatment (same day or one day after admission) and 2 delayed surgical treatment (two days or more after admission)). We included the year in which the fracture occurred in the multivariate models to evaluate changing trends in mortality, after controlling for case mix of patients, and modelled this as a continuous variable. We estimated non-conditional logistic regression models and several multilevel logistical models to take into account hospital level variability.[3-5] We used a logistic regression model with robust variance estimates (Hubner/White/sandwich estimator) specifying hospitals as a cluster variable to obtain confidence intervals for the odds ratio adjusted for intraclass correlation. Confidence intervals were provided. We used Stata 7.0 for analysis.

In all, 13 822 patients were included, 4.7% of them dying in hospital. Bivariate analysis showed a significant association between mortality and age, male sex, comorbidity, and delayed surgery and a decrease in mortality from 1996 to 2005. Multilevel models showed no significant association between delayed surgery and increasing in-hospital mortality (odds ratio 1.18, 95% confidence interval 0.84 to 1.65). Comorbidity, male sex, and advanced age were associated with increased mortality in hospital and after discharge in all estimated models. Between 1996 and 2005 mortality decreased significantly.

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Competing interests: None declared.

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Panic disorder: propranolol and behavioural therapy

Editor—Barr Taylor clearly shows that selective serotonin reuptake inhibitors (SSRIs) are well accepted as first line treatment for panic disorder.[1] However, many patients are still prescribed propranolol along with diazepam as first line treatment in primary care trusts to treat the adrenergic symptoms of panic disorder—such as palpitations, etc—although β blockers have no proved efficacy in the treatment of panic disorder.

Considering patients' choice of treatments, many patients are generally quite keen on non-pharmacological methods such as cognitive behaviour therapy, especially after they consider the side effect profile of SSRIs. But if we consider the cost implications, one year's treatment with an SSRI—for example, paroxetine 20 mg—costs an estimated £289, including direct and indirect prescribing and including follow-up costs, which is around £10 more or less than other generic drugs. However, 16 one hour sessions of cognitive behaviour therapy delivered by a clinical psychologist cost an estimated £1056. That is more than £300 extra expenditure per patient per year.[2] In addition, the waiting lists of psychology departments are sometimes long.

Thus it is yet to be answered which is the most cost effective treatment for panic disorder, and only more thorough randomised controlled trials with patients receiving SSRIs and cognitive behaviour therapy can answer that.

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Competing interests: None declared.

1 Barr Taylor C. Panic disorder. *BMJ* 2006;332:951-5. (22 April.)
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Preterm delivery in primiparous women at low risk

Preterm birth or delivery? Study authors suggest new terms

Editor—The term preterm birth is used differently in the literature: some use preterm birth to refer to the number of infants born before 37 completed weeks,[1,2] and others use the term to specify the number of pregnancies ending before 37 completed weeks.[3] Still others have restricted their analyses to singleton pregnancies to avoid this difference.[4] The use of the alternative term preterm delivery varies in a similar fashion.

We noticed this difference in our study looking at infants born preterm and pregnancies ending preterm in Danish national data from 1995-2004 (22 April, pp 937-9). We found that the national proportion of preterm infants rose from 5.8% (4019/69 013) in 1995 to 7.2% (4650/64 223) in 2004; an increase of 24%. However, when mothers or pregnancies were counted, the proportions were 5.2% (3509/67 840) in 1995 and 6.3% (3975/62 814) in 2004, an increase of 22%. This discrepancy can easily be explained, as the proportion of twin gestations rose from 1.7% to 2.3% of all gestations during this 10 year period.

TINA STALLARD/SPL

We often asked ourselves: "Does a twin pregnancy that ends at 32 weeks count as one or two preterm births?" From the obstetrician's point of view this is most likely to be one preterm birth but from a paediatric point of view, two. The quality of the data collected for many national registers and studies makes it possible to make this distinction. To compare such data over time, as well as between populations, it is important that agreement on the definitions of these terms be reached, especially at a time when the proportion of twin pregnancies is increasing. The importance of identical international definitions in perinatal health is a precondition for evaluation of differences in outcomes between populations and has already been recognised in the PERISTAT project.[5]

We therefore propose two different, new, and distinguishable definitions: a preterm ending pregnancy ends before 37 completed weeks, and a preterm born infant is born before 37 completed weeks. A twin pregnancy delivered at 32 weeks will therefore be counted as one preterm ending pregnancy but as two preterm born infants.

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Competing interests: None declared.

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Could epidemic chlamydia contribute to rise in preterm births?

Editor—The rise in preterm births described in Denmark would give cause for concern, in terms of long term health consequences, in any country.[1] One risk factor that is not described in this study is infection with chlamydia,[2] which is rising rapidly among young women in urban areas of the United Kingdom.

Given that most affected patients are unaware of their infection, and that specialist screening and treatment facilities are not easily accessible for most populations, could this be the "invisible" factor driving higher rates of premature babies, among "low risk" mothers?

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Competing interests: WC is supervising a community research project on chlamydia.

1 Langhoff-Roos J, Kesmodel U, Jacobsson B, Rasmussen S, Vogel I. Spontaneous preterm delivery in primiparous women at low risk in Denmark: population based study. *BMJ* 2006;332:937-9. (22 April.)
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Is any involvement with the UK military unethical?

Editor—There are good ethical arguments for UK military staff to now refuse to participate in the military involvement in Iraq, as highlighted by the case of Kendall-Smith.[1] But are there major ethical problems with any association with the British military? Its possession of nuclear weapons and its failure to make substantive progress phasing these out,[2] despite disarmament being legally required by Article VI of the Nuclear Non-Proliferation Treaty (NPT), begs this question. Such a requirement has also been reinforced by the International Court of Justice ruling on the illegality of using nuclear weapons. Indeed, there are concerns that rather than disarming, the UK prime minister favours building a new generation of nuclear weapons to replace the Trident system.[3]

The Mutual Defence Agreement (MDA) between the United States and the United Kingdom can be considered to support nuclear proliferation by facilitating UK weapons development. Furthermore, a legal opinion from respected UK lawyers has concluded that: "In our view, it is strongly arguable that the renewal of the MDA is in breach of the NPT."[4]

With the world facing such critical issues such as climate change, environmental damage, and poverty, are the huge sums involved in nuclear military expenditure also unethical? For nuclear weapons this resource use is massive with the UK government recently announcing it intends to spend more than £1 billion during the next three years to ensure the continued reliability of the existing Trident warhead stockpile.[2]

For these reasons, health workers with any links to the UK military (and indeed all military staff) should question their association from an ethical perspective. Health professional organisations should also consider isolating nuclear capable militaries in the same way they have worked to isolate other industries that cause widespread harm, such as the tobacco industry.

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Competing interests: NW is chair of the New Zealand Affiliate of the International Physicians for the Prevention of Nuclear War (IPPNW).

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Compensation and complaints in New Zealand

Editor—In New Zealand complaints about quality of care are resolved independently from claims for compensation. The New Zealand Health and Disability Commissioner does not serve as a "gateway" to the no-fault compensation system.[1]

For 30 years New Zealand has essentially barred medical malpractice litigation. All patients who have a treatment injury are eligible to receive government funded compensation through the Accident Compensation Corporation. After reforms in 2005 the scheme is truly no-fault with no requirement to establish any error or negligence on the part of the healthcare provider.[2]

Separate and independent processes are available for responding to patients' non-monetary interests (such as the desire for an apology, an explanation, or corrective action to prevent harm to future patients).[3] In particular, the Health and Disability Commissioner resolves complaints by advocacy, investigation, or mediation.[4]

The commissioner's focus is on opening channels of communication between the doctor and patient, understanding what went wrong and why, and supporting doctors and healthcare organisations back into safe practice. The process is confidential, though the commissioner's findings are widely disseminated in an anonymised form so that lessons can be learnt from the adverse event.

Of course, some injured patients seek monetary and non-monetary remedies and may choose both to lodge a complaint and to file a no-fault compensation claim.

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Competing interests: None declared.

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Policing of information from internet breast cancer list

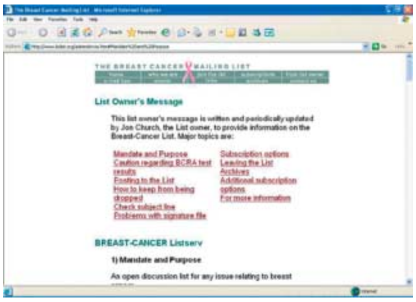
Findings may not be generally applicable

Editor—The article by Esquivel et al is misleading in some respects.[1] Their findings result from internet correspondence between individuals about a common condition that is given a lot of webspace and media attention.

My own (anecdotal) experience shows that a vast amount of ignorance remains when rarer conditions are considered. Between 2001 and 2003 I attempted to recruit women with hypoadrenalism for a study looking into adrenal hormone replacement. As this condition is very rare, I resorted to advertising for subjects on two websites, those of self help groups for hypoadrenalism (after this had been approved by the ethics committee).

I managed to recruit sufficient numbers for the study but kept myself enrolled to check on progress among my volunteers until mid-2005. I was surprised to see the depth of inaccuracy and distinct lack of knowledge among the people who posted on the sites. I refused to be drawn into discussions, as I would have ended up being the group doctor, which I had no intention of becoming. The one person on those sites who seemed to be giving the most information was a laboratory technician whose wife had hypoadrenalism.

Furthermore, from personal experience and that of my colleagues, the ever increasing band of "informed" patients who come to clinic armed with items they "found on the web," that vary from wildly inaccurate to frankly amusing, shows that many people refer to the web, but that an awful lot of nonsense is to be found there.



THE BREAST CANCER MAILING LIST

List Owner's Message

This list owner's message is written and periodically updated by Jon Church, the List owner, to provide information on the Breast-Cancer List. Major topics are:

Mandate and Purpose
Caution regarding BCRA test results
Posting to the List
How to keep from being dropped
Check subject line
Problems with signature file

Subscription options
Leaving the List
Archives
Additional subscription options
For more information

BREAST-CANCER Listserv

1) Mandate and Purpose

An open discussion list for any issue relating to breast

I have no problem with tackling the fears and questions of concerned patients, but when having to contradict the perceived wisdom of the all powerful internet, I wonder whether this is yet another reason to consider early retirement.

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Competing interests: None declared.

1 Esquivel A, Meric-Bernstam F, Bernstam EV. Accuracy and self correction of information received from an internet breast cancer list: content analysis. *BMJ* 2006;332:939-42. (22 April.)

"List mining" raises new issues in research ethics

Editor—"List mining" can be defined as the use, for research purposes, of messages sent to internet based mailing lists. The ethical questions raised by list mining are especially important for health related lists. For example:

- Should the people who were the original sources of messages sent to such lists properly be regarded as "research subjects"? This perspective raises questions pertaining to privacy, informed consent, whether the research is intrusive and has potential for harm, and whether the list should be perceived as "private" or "public" space
- Should they be regarded as "published authors"? Although most participants may not even regard themselves as "amateur authors," issues of copyright and proper attribution are to be considered if messages sent to such lists are cited verbatim
- Should they be regarded as "members of a community"? If so, how best to deal with individuals in such communities whose messages may need to be examined critically because they might endanger public health?

Fortunately, the article by Esquivel et al provides evidence that, on the breast cancer mailing list, self policing works.[1]

Relevant references about internet research ethics are available.[2]

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1 Esquivel A, Meric-Bernstam F, Bernstam EV. Accuracy and self correction of information received from an internet breast cancer list: content analysis. *BMJ* 2006;332:939-42. (22 April.)
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The cause for quiet celebration

Editor—Perhaps we can help put Robert Jacoby and the dozen other men who found our editorial distressing out of at least a little of their misery?[1 2]

The reason for the quiet celebration we suggest is that it has generally only been in extremely poor countries that women have died earlier than men in recent decades. By 2006 almost nowhere in the world seems so absolutely poor (at least in this sense) that this continues to be the case.

We perhaps should have been clearer in what we wrote—but then no woman seems to have misunderstood the cause for quiet celebration, at least none who has responded to the editorial. Whether the United States has a "federally funded Office of Women's Health" (which seems to exercise Jacoby) is immaterial as to whether slightly fewer women in the poorest countries in the world now die than used to, often while delivering their (and their partner's) baby.

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Competing interests: None declared.

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Boom to bust in the NHS

Income in general practice

Editor—Maynard and Street state that general practitioners have received a pay rise and are receiving "fees per service for targeted care of chronically ill patients."[1]

In fact, general practitioners have received a reduction in pay in real terms. The minimum practice income guarantee has been frozen for three years running, resulting in a reduction in pay of 10% in real terms.

The only new money is for collecting data for the quality and outcomes framework, which is not fee for service but performance related pay. This work is unambiguously new and is in addition to the requirements for providing general medical services. Income generated by performing these new tasks has hidden the underlying pay cut.

Headline increases in practice income are misleading as the responsibility for funding the employer's contribution for pensions has been transferred to the contractors.

The pay rate of £90 per hour quoted for out of hours by the authors is equivalent to about £37 per hour for daytime services provided (agenda for change levy of 50% for unsociable hours, 14% reduction for employer's pension payment, 15% reduction for holiday and study leave entitlements, 10% reduction for insuring against loss of earnings through illness, and 4% for indemnity). This (£37 per hour) may be excessive, but is subject to market forces. Perhaps the increasing cost of providing out of hours care is caused by the loss of the substantial subsidy general practitioners have given to the service in the past.

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1 Maynard A, Street A. Seven years of feast, seven years of famine: boom to bust in the NHS? *BMJ* 2006;332:906-8. (15 April.)

Consultant productivity

Editor—Over recent years consultants have had to spend more and more time on things that don't increase productivity.[1] Some of these are worth while (such as talking to patients), and some perhaps not (such as satisfying the bureaucracies of appraisal, continuing professional development, research and development, and clinical governance). Consultants are also doing things previously done by junior staff. The new contract was implemented without officialdom recognising how much many consultants were doing—and as trusts cannot pay for the time required to do it, it's no surprise that the new contract has done little for consultant productivity. If consultants are being paid more for less, it's partly because they weren't paid for much of what they did under the old contract.

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Questions on productivity

Editor—Maynard and Street's article raises many questions.[1]

After the "feast" we have had so far, what is the absolute spending on health relative to gross domestic product? Is it still below other top economic nations?

What is the productivity of other health systems, and how have these changed during 1998-2004?

Has productivity in fact improved?[2]

Why no mention of confidence interval or sensitivity analysis for the change in productivity?

Is the concept of instantaneous change in productivity scientifically realistic? Genuine healthcare outputs depend on biology, and here the law of diminishing returns really does have a solid basis. Change in productivity could thus at best follow a logistic curve. One would also expect a substantial time delay between change in input and any changes in output to show through—for example, increase in life expectancy from better management of angina.

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1 Maynard A, Street A. Seven years of feast, seven years of famine: boom to bust in the NHS? *BMJ* 2006;332:906-8. (15 April.)
2 Lee P. *Public service productivity: health.* London: Office of National Statistics, 2006.

Money for nothing, and your kicks for free

Editor—You know you've upset the profession when a local colleague stops you in the car park to say you've got it wrong. I merely suggested on a Scottish news programme that the general practitioners' pay rise was excessive and divisive.

We have seen record spending on health care—to catch up for years of the NHS underfunding.[1] We were the backward medical child of Europe, with our French, German, and Italian cousins enjoying much better health care. This of course was a complete false premise—merely doing more operations, having more specialists, and taking more medicines should not be confused with quality—but that's politics. More spending indeed runs the very real risk of overdiagnosis and unnecessary interventions. The NHS had for decades made the best of its lot—poverty giving it clarity and priority. We were well paid, with a generous pension, and we worked hard. Grumbling was a popular and enjoyable pastime.

Unfortunately, this government has squandered its cash. Wasted on "bling-bling" waiting list initiatives. A drug culture not only accepted but promoted. Negotiators impressed by the professional muscle and hard street talk shelled out big money for less work and no control over quality of care. A right rock and roll swindle. Now many trusts are in trouble, but wait until next year. Their financial wheels lashed by a 60% increase in quality point payments—the iceberg looms, the band is practising, but the lifeboats are missing.

Paying doctors more has no impact on patient care and may reduce the incentive for well paid professionals to do extra. We do need more doctors and nurses, but paying general practitioners £100 000 a year will attract only candidates motivated by status and financial gain. We need a return to some old fashioned ideals. Become a doctor because it's important, it's fulfilling, and it's a vocation. If lawyers, accountants, or even footballers get paid more, does it matter?

Sorry for the offence caused to the profession by such a radical suggestion—see you in the car park.

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1 Day M. Prime minister tells troubled trusts to "hold their nerve." *BMJ* 2006;332:927. (22 April.)

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