

PARACETAMOL WITH IBUPROFEN

Ibuprofen increases soft tissue infections in children



NINA HELLSBROW/GETTY IMAGES

Because ibuprofen is more effective as monotherapy than paracetamol in controlling fever in children Hay and colleagues conclude that ibuprofen should be administered first to feverish children in discomfort.¹ Paracetamol should be added after 24 hours if recovery is not occurring as expected.

However, a few reports suggest an association between ibuprofen or ibuprofen and paracetamol and an increased risk of soft tissue infections, some of them very serious—such as necrotising fasciitis.²⁻⁵ Paracetamol carries no increased risk of such infections.^{3,4}

The main risk factors for developing necrotising fasciitis associated with non-steroidal anti-inflammatory drugs include age and a co-existing viral infection. The study by Hay and colleagues included 57 children with viral diseases (36.5%), and although five children were admitted to hospital because of serious adverse events, no additional information is given other than the medicines taken.

Although the combination of ibuprofen and paracetamol may be more effective for treating fever in children, precautions have to be taken when administering this combination to children with viral infections—especially chickenpox. In such children, paracetamol should be considered as monotherapy, lowering the risk of developing soft tissue infections such as necrotising fasciitis.

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TACKLING HEALTH INEQUALITIES

Closing the gap between generations

A key determinant of social and healthcare inequities is missing from the World Health Organization's report to reduce health inequities related to social injustice^{1,2}: interest in patients decreases as they become "geriatric" patients.

After the deaths of thousands of elderly people in the heat wave of summer 2003, affected countries discovered that many elderly people were totally isolated and socially excluded.³ This illustrates a tendency to focus less on elderly people, except on special occasions. General medical journals, including the *BMJ*, have such a tendency and underestimate the importance of geriatric care.

Using the age specific search strategies recommended by Kastner et al,⁴ we found that between 1980 and 2005, numbers of publications indexed as geriatric in the five most cited general medical journals were around 11% and falling (S Tassy et al, unpublished data). During the same period, the numbers of people aged 65 and older constantly increased, and this age group in the United States and Canada accounted for more than a third of total health spending.

A clear gap therefore exists between the level of geriatric publications in journals, which are a major source of medical information, and the demographic reality of health care provided. Such an attitude may be characterised as ageism or age blindness.⁵

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Inequity in the market place

Another aspect of inequity in health care warrants attention.¹ Direct to consumer advertising in the US targets not only insured healthcare consumers. Inequity in the US healthcare system has created a large pool (well over 40 million by some accounts) of uninsured healthcare consumers who are being targeted through advertisements to participate in clinical trials. Over 3.2 million people participate in clinical trials in the US a year, and a growing number cannot afford basic health care.²

This inequity is exploited by advertising to uninsured people medical care that they do not normally receive but can access by participating in medical research. It is also being framed or marketed as a viable healthcare choice and opportunity for people who do not have insurance.³ Many research participants will not only lose some form of medical care when a clinical trial ends but will also not be able to afford the very medical product that is being tested on them when it comes to market.⁴ Some choice. A market opportunity indeed.

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INJECTING DRUG USE IN PREGNANCY

Outcome in infants exposed to methadone in utero

We want to respond to Bell and Harvey-Dodds, comments on the safety of methadone in pregnancy, specifically regarding postnatal development.¹ Concerns are increasing about nystagmus and delayed visual development in infants born to drug misusing mothers,² and we have shown alteration in visual evoked potentials in newborn infants exposed to methadone in utero compared with controls.³

A recent Australian study has shown adverse neurodevelopmental outcome in a cohort of 133 singleton infants delivered to compliant methadone-prescribed women.⁴ These infants were found to have significant delay at 18 months and 3 years on various different scales of infant development. In the same paper, the authors undertook a literature review of neurodevelopmental outcome which confirmed that infants exposed to opiates in utero are at significant risk of psychomotor developmental delay, low IQ, and behavioural problems.⁴

Most of these women use illicit substances in addition to methadone,^{2,4} and whether the visual and developmental problems noted in these infants are attributable to illicit substances, prescribed maternal methadone, pharmacological treatment of the neonatal abstinence syndrome, or other medical or social issues is not yet clear. Substantial healthcare resources are required for the care of these infants—in our unit over three years 478 infants born to drug misusing mothers represented 3% of births and used 18% of neonatal unit cot days.

Difficulties in separating the effects of drug exposure and environment on postnatal outcome in infants born to drug misusing mothers should not detract from the need for follow-up, support, and further research in these highly vulnerable infants.



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EUROPEAN WORKING TIME DIRECTIVE

Experience of directive in the Netherlands

When in 1993 the Dutch parliament approved a law restricting the working time of junior doctors to 48 hours a week, the surgical community in the Netherlands experienced all of the classic stages of mourning as described by Kübler-Ross. Major concerns were the reduction in training time, resulting in less experienced young surgeons, and the problems of devising rotas. The same worries are felt in the UK.¹

The Dutch Ministry of Labour has been making site visits to hospitals since 1997, inspecting the rotas and fining hospitals heavily if they didn't comply with the rules. What are the results 15 years after the first introduction of the working time reduction?

Many departments of surgery struggled with the rotas. More non-training junior doctors were appointed to take care of the routine workload. Surgical procedures were considered to be training episodes unless otherwise stated and staff were made responsible for the continuity of patient care.

What were the new law's effects on training? Although we don't have data on the amount of overall exposure to patients, we do on the number of operations performed by surgical trainees over the years.

Every year the Dutch Association of Surgical Trainees sends questionnaires to all surgeons in training, with questions on working hours, working conditions, and the like. Although the number of hours per week fell substantially between 1990 and 2005, when we examined the number of operations reported at the time of registration as a surgeon with the national specialist registry we found that the mean number of cases per trainee per year did not change substantially during this period (mean 195, range 35-450).

Working hours reported by the trainees fell from 57 hours a week in 1999 to 55 hours in 2005²; 76% of the trainees approved of this while only 19% found this "too little."

Although surgery is still considered by medical students as one of the more demanding specialisations, applicants for surgical training continue to outnumber the available slots by two to three times. With an acceptable workload, surgery remains an attractive career option.

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Competing interests: OTT worked 80-100 hours a week during his surgical training.

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MANAGING THEORETICAL vCJD RISK

Policy to reduce the risk costs the environment dear

Many millions have been spent since Dyer's piece in 2001¹ to improve the decontamination of surgical instruments. The Department of Health (England) deems that nail nippers should be treated as surgical equipment—that is, the same standards are being applied to nail cutting as to neurosurgery. The debate about whether nail cutting is surgery has been dealt with in the *BMJ* before.² As a consequence, "disposable" nippers are used each time a patient's nails are cut now in many NHS settings (but not in the private sector).

The annual number of deaths from variant CJD (vCJD) was five in 2005, 2006, and 2007.

Prion infectivity varies, with nervous tissue being most highly infectious and skin non-infectious. No studies on the infectivity of nail or hoof could be found.

A community podiatry service serving a population of 300 000 sees 90 000 patients a year and needs to use nippers 54 000 times a year. If disposable instruments were used this would cost £250 000, extrapolating this for England means £40 000 000. But worse is the environmental cost:

- Energy and raw materials for manufacture of instruments and packaging
- 1 000 000 kg stainless steel waste, treated as hazardous
- Fossil fuels used and carbon dioxide generated in transporting the instruments from Pakistan, where they are manufactured.

The risk of environmental damage should outweigh the infinitesimal risk of contracting variant CJD from sterilised nail nippers.

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MEDICAL ERROR

Lessons health care can learn from aviation

When it comes to risk, aviation and health care have more in common than you might think.¹ For some years, the Medical and Defence Union of Scotland (MDDUS) has been working with Terema, an organisation run by a group of doctors and former British Airways pilots that focuses on managing the “human factors” in risk. We are currently hosting a series of risk management masterclasses around the UK. The 1989 Kegworth crash, in which pilots shut down the wrong engine, and the 2004 GMC hearing that criticised a surgeon for removing the wrong kidney, are just two case studies cited.

The masterclasses, for any healthcare professional, focus on a single question: what can we in health care learn from our aviation counterparts? The challenge is to study and adapt the insights gained by UK aviation in 20 years of experience of managing the human factor in risk to ensure that medical errors, either minor or catastrophic, become increasingly rare, and when they do happen, are reported, so that organisations can learn from them. For example, at one NHS hospitals trust, after training, reporting of adverse incidents rose from 50 to 700 reports per month over three years. Subsequent reforms based on these reports reduced patient slips, trips, and falls by a fifth.

One plastic surgeon, after training, introduced regular short breaks between cases to keep staff fresh and focused, and was astonished to find that his team completed the same number of cases, on time. Elsewhere, a matron for emergency services noticed a potentially misleading display on new intravenous pumps. Staff were alerted and training minimised the chances of that mistake—the kind of human error that has in the past seen pilots shut down the wrong aeroplane engine in an emergency.

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PHARMA AND MEDICAL EDUCATION

Some progress in UK psychiatry



Moynihan describes the defeated efforts of a group of psychiatrists to free the annual Congress of the Royal Australia and New Zealand College of Psychiatrists from drug company sponsorship.¹ These psychiatrists can take heart from the fact that the British Royal College of Psychiatrists conducted its 2008 annual meeting without reliance on any industrial sponsorship. The success of the conference shows that a rigorous and stimulating academic meeting can be held without funding from the drug industry, albeit in less plush surroundings than usual.

The Critical Psychiatry Network has been encouraging the college to take action for several years, and we applaud the decision to run the annual meeting without sponsorship. The recent college policy on relations with the pharmaceutical industry also takes some important steps, such as prohibiting company sponsorship of speakers or attendees at college run meetings, and the commitment not to use commercial sponsorship for public education campaigns.² However, the policy misses some important opportunities.

It fails to recommend the freeing of continuing medical education from direct drug company influence by the use of blind trusts, and it does not follow the example of the Academy of American Medical Schools and recommend a comprehensive ban on the provision of gifts and free food.³

We were also disappointed that the college decided not to follow our suggestion to compile a public register of interests of their members, so that everyone could become aware of the scale of commercial income received by individual psychiatrists, including leading academic and opinion leaders. Competing interest disclosures in journals and meetings do not require that the amount of income is declared, but this is often what is truly shocking. By abrogating responsibility for this policy to local institutions, the college failed to provide the leadership role that it is so well placed to assume.

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Who else but pharma will fund medical education?

Current medical training places much emphasis on attending accredited external teachings, seminars, workshops, and conferences, as part of continuous professional development.¹ All doctors must earn a minimum number of credits per year to be eligible for recertification. A trainee doctor in the United Kingdom has an annual training allowance of about £700, which is insufficient to cover a two day course in a big city. Sadly, few accredited teachings are taking place in hospitals. Many commercial courses run by trainers in conjunction with pharmaceutical companies have mushroomed to replace the good old hospital teaching in clinical settings.

Without the support of pharmaceutical companies, most trainee doctors would be unable to attend these meetings. With no alternative source of funding in sight the pharmaceutical companies will still have a major role in doctors' education. More emphasis should therefore be given to educating doctors about their ethical and moral duties, ensuring that they keep their patients' interests uppermost when recommending any treatment.

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Matters arising from industry link to education

The recent debate on the role of industry in the continuing education of medical professionals¹ prompts the following considerations. Industry has successfully determined what professionals (will and can) learn (and otherwise) during conferences, meetings,

and workshops and through sponsored sessions and the glitz and glamour that go with them. This is a major departure from the practice of scientific committees determining the academic content and programme. Professionals are therefore exposed to education that may not be required, warranted, accurate, or appropriate. Imagine if school or college education involved such practices: there would be an instant uproar.

The practice of sponsored sessions has gained considerable legitimacy through open declaration in the programmes of conferences. However, this legitimacy (or legality) does not replace the issue of whether it is ethical or moral. The latter aspect has not been considered in depth.

Industry is capable of hiring eminent speakers who deliver presentations and are paid a fee. Declaration of funding sources again settles the issue of legitimacy; but the ethical and moral components often remain open to question. Such practice is often no different from advertising.

Industry participation certainly adds to the elegance, comfort, and glamour of conferences, but professionals need to determine whether these should be permitted at the cost of academic independence.

As there are no free lunches anywhere, the ultimate cost of these expensive learning exercises is borne by society, in particular those who are already suffering. This is another aspect that needs careful consideration.

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HYPERCHOLESTEROLAEMIA (AGAIN)

More reasons for caution with statins and other such

There is little doubt about the statistical benefit of cholesterol lowering drugs in regard to heart disease,¹ but much of the argument (and advice) seems to have ignored the practical benefits and also the side effects.

Many patients coming to my clinics are taking statins even if their baseline cholesterol is only just above normal and with no account of any change in risk with age. It strikes me as absurd to be starting 84 year old patients on lipid lowering agents, but the protocols for lipid management seem to have resulted in a completely uncritical prescribing phenomenon, largely driven by targets and without regard for

common sense. The doses recommended get higher and higher; the likelihood of side effects increases likewise.

As a patient who is disabled by the side effects of statins (muscle weakness, cramps, and early fatigability) and by the effect of ezetimibe-fenofibrate (acute myolysis) I find it difficult to advise patients with similar symptoms that they should stop their treatment to see if life becomes bearable again. This is because they have mostly been programmed to believe that they will have an immediate heart attack if they follow my advice.

It is frustrating to deal with iatrogenic disease, especially if the patients prefer to suffer it than take a cardiac chance. Statin myalgia or myolysis is not uncommon. It is time for a full reassessment of risk of these drugs not least as the benefit does not appear to me to outweigh the risk, especially round the edges of minimal change and great age.

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1 Struthers M. Reasons to be cautious about cholesterol lowering drugs. *BMJ* 2008;337:a1493. (3 September.)

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NATIONAL QUALIFYING EXAMS

Authors have missed gap between theory and reality

On first reading, who can disagree with what Ricketts and Archer say?¹ However, look closer. On checking the GMC register, only one of them is actually registered, but not on either the specialist or general practitioner register. They may well be able to guarantee the ability of their institution's new medical graduates, but they seem to do it from within an educational bubble, whose experience of medical education stops when the undergraduate period finishes.

The standardisation of final, licensing, and fitness to practise examinations may make educationalists weep with joy, but there is no

clear evidence that it makes for better doctors. My colleagues and I deal with the immediate postgraduate training of juniors and know that, regardless of where the doctors have qualified, their practical education starts when they start working with patients for real.

Why is it so important to rank medical graduates at the end of their undergraduate training? Attempting to judge the profession's future academics, specialists, generalists or, as the authors' article implies, also-rans, on the basis of an exam taken at the end of the student period is a form of educational and career apartheid. The medical school thicko of today may become the leading clinician and academic of tomorrow. The glittering undergraduate star may be as much use as a chocolate fireguard at postgraduate level. To have career prospects set in stone as early as the authors would like bears no resemblance to how medical careers develop.

Finally, as a practising clinician, I am getting fed up with being told by educationalists with very limited experience of modern clinical practice about the medical new Jerusalem that awaits if only we embrace their nostrums. I invite any of them who takes offence at my comments to spend two weeks working in my clinical area, so they can gain actual, hands-on, experience of what they are meant to be preparing their students for.

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1 Ricketts C, Archer J. Are national qualifying examinations a fair way to rank medical students? Yes. *BMJ* 2008;337:a1282. (22 August.)

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The joy of diversity

My son is currently thinking of studying medicine. We have been interested by the range of responses we have received from different universities regarding A level choices. King's College, London, is enthusiastic about an ethics and philosophy A level, whereas Birmingham would not even recognise it.

Medicine is an enormous church. A national exam would lead to a national curriculum,¹ which would lead to political interference. Let's maintain the beautiful diversity we have in our medical schools and remember that it is not your final exams that determine how good a doctor you become.

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1 Noble ISG. Are national qualifying examinations a fair way to rank medical students? No. *BMJ* 2008;337:a1279. (22 August.)

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