The British Journal of General Practice

Viewpoint

Child Injury Prevention: time for action

It was the memory of a critical incident during my vocational training that later offered the emotive subject of childhood accidents for my MD thesis. A literature review unearthed the following seminal passage, written over 70 years previously: '*The child is burned! I never hear that announcement without a shudder, for it has opened the portals to a long avenue of pain and distress, an avenue that may lead to an age-long disfigurement and too often by shorter ways, to the tragedy of death. Let us take counsel together about it. Wherein are its dangers? What are the risks? How can disaster be mitigated or avoided?*'[1]

Accidents continue to be a major cause of morbidity and mortality in all developed countries, but paradoxically have received little attention. In Britain, despite a new emphasis on improving young people's health, accident prevention trails behind other initiatives related to anti-smoking, anti-bullying, substance misuse and sexual health measures, among others. Deaths from accidents are the leading cause of death in children, but is only the tip of an iceberg; accidental injuries account for an estimated 120 000 hospital admissions and over two million attendances at casualty departments in England and Wales each year.[2] There are opportunities to implement a systematic programme of child injury prevention in the UK, but a concerted effort will be needed to increase awareness of the issues and stimulate involvement. Success will continue to elude us unless there is a strong national lead with co-ordination and ownership at a local, primary care group level.

The prevention of accidents was identified as a key priority for action in both *The Health of the Nation* in 1992 and earlier this year in *Our Healthier Nation*. The recent Green Paper brings together the Government's previous policy decisions relating to public health issues. The document proposes a national contract for better health. A new national performance framework will be used to measure progress against targets. Locally, multi-disciplinary alliances will allow professionals to work together with parents and children. Good data will be needed if results are to be meaningful. Primary care groups, drawing on locally formulated Health Improvement Plans, can consider how to plan and provide services for their community. Health authorities will also be expected to work in partnership with other organizations to improve health and reduce inequalities. There is a steep social class gradient for accidents such as house fires and road traffic accidents. For example, child pedestrian casualty rates are highest in deprived inner-city areas, and there are four times as many pedestrian deaths in children in social class V than in social class I.[3]

If roads are dangerous, the home is dangerous too. Most accident deaths in pre-school children occur in the home. There is scope for integrating child injury prevention routinely within child health surveillance in primary care. However, raising awareness of the issues in injury prevention within primary care teams has been largely neglected. Training is an area that has previously been prioritized for health visitors, but not general practitioners nor community paediatricians. Work from America[4] confirms that an injury prevention programme can easily be incorporated into primary care paediatric settings.

In the UK, Royal Colleges and professional associations have an important role to play through the dissemination of research findings on injury prevention; highlighting what has been shown to work. Again, the example of America is instructive – there, 10 years ago, experts collaborated to produce a report, *Injury in America*.[5] Following its publication, the subject began to receive the attention that it deserved. The National Center for Injury Prevention and Control at the Centers for Disease Control and Prevention was set up to co-ordinate prevention activity and research. In the UK, an advocacy role could be applied to childhood injury, involving the RCGP with the Royal College of Paediatrics and Child Health and the Faculty of Public Health Medicine. To this end, a joint conference is being held in London on 19 December to launch a new publication, *Action on Injury*. It is hoped that *Action on Injury* will have the same impact as its American counterpart. And about time too.

Yvonne Carter

References

1. Fraser J. The treatment of burns in children. *BMJ* 1927; **i**: 1089-1092.
2. Towner E, Dowswell T, Simpson G, Jarvis S. *Health promotion in childhood and young adolescence for the prevention of unintentional injuries*. London: Health Education Authority, 1996.
3. Office of Population Censuses and Surveys. *Occupational mortality: childhood supplement*. London, HMSO, 1988.
4. Bass JL, Christoffel KK, Widome M, *et al*. Childhood injury prevention counselling in primary care settings: a critical review of the literature. *Pediatrics* 1993; **92(4)**: 544-550.
5. Committee on Trauma Research, Commission on Life Sciences, Medicine NRCI. *Injury in America: a continuing public health problem*. Washington (DC): National Academic Press, 1995.

The Back Pages...

'a masterful exposition of the clash of culture between science and the law when the two are brought together in the courtroom'

Ian McKee reviews Angell's *Science on Trial*, page 1720

contents

Accrediting Research in General Practice

The first RCGP research practice was appointed in 1994.[1] Since this time we have seen further developments at a regional level, nationally in the first round of Culyer awards[2] and through other organizations, such as primary care research networks.

Accurate figures on the number of research practices are hard to find, but an estimate of over 1000 in the UK is not unreasonable. The MRC alone has 902 Research Framework Practices across the UK. In addition to this, there were nearly 70 successful primary care applications in the first round of Culyer bids within England alone, with support funding for both research practices and networks.

The current climate within the NHS emphasises not only primary care,[3] but also the future development of the primary care R&D capacity and quality markers.[4] Existing accreditation schemes within general practice encourage excellence and quality, both in overall terms and within specialized areas. However, despite the growing commitment to both project and infrastructure funding within primary care, there is no formal assessment strategy for research within general practice.

The development of such a scheme on a national scale would encourage those not yet active to participate within primary care research, as well as giving those who are active a 'gold standard' to achieve. This would help both practices and funding bodies in several ways:

- It would promote high standards and guide resource allocation.
- Practices may value a 'quality marker' as patients increasingly become more discerning in their choice of practice.
- It would help prospective students, GP registrars, health authorities and other organizations if they could identify practices with an established high quality research capability.[5]

Recent funding from the NHS Executive South and West Directorate has resulted in a partnership with the RCGP, to develop a system for accreditation of research practices. Such a scheme aims to encourage individual practices to develop their research experience, and to foster a wider culture of research. Current objectives include accreditation at two levels – 'developmental' and 'experienced' – in order to provide an inclusive model for all practices involved in research. Although the scheme ultimately aims towards a 'gold standard', it primarily aims to encourage practices to go through a professional development process.

Relevant dimensions for accreditation criteria include training, management (including quality assurance), and ethics, as well as technical expertise and research output, with 'developmental' practices needing different criteria from those accredited as 'experienced' research practices. Evidence of meeting these criteria will be obtained from the submission of written documentation, as well as visits to individual practices. It is anticipated that full accreditation could last for three to four years, after which it will be necessary for the practice to seek re-accreditation.

The pilot accreditation scheme is taking place in the South and West Region, with plans to put forward recommendations for a national system. We may then envisage a network of research practices across the UK with different levels of expertise, organizational structure, and experience. The future vineyard of research will then include a great variety of wines, including the classic vintage – years in the making and ever-pleasing to all – as well as the up and coming New World wines: not as established in the market, but making steady progress and growing in popularity. Like the wine market, variability will always be beneficial and, as different wines please different palates, so different research practices may suit different tasks and achieve different goals.

Yvonne Carter and Sara Shaw

Further information is available from the Research Group at the College, tel 0171 581 3232 ext 338.

References

1. Smith LFP Research general practices: who, what and why?' *Br J Gen Pract* 1997; **47:** 83-86.
2. Carter YH. (1997) Funding research in primary care: is Culyer the remedy? *Br J Gen Pract* 1997; **47:** 543-544.
3. Medical Research Council. *Topic Review on Primary Health Care.* London: MRC, 1997.
4. Mant, D. *R&D in Primary Care: National Working Group Report.* NHS Executive, 1997.
5. Smith LFP, Carter YH, Cox J. Accrediting research practices. *Br J Gen Pract* 1998; **48:** 1464-5.

We would like to apologize for the error in the reference accompanying the Viewpoint in the September Back Pages; the correct reference should read: Fugelli P, Heath I. The nature of general practice. *BMJ* 1996; **312:** 456-457.

The RCGP in a New Initiative on Low Vision Services

Over a million people in the UK have a visual impairment. With an ageing population, that figure is projected to rise by one-third by the year 2020.

Most of the people affected have some useful sight and, with the right help from low vision services, can maintain their independence. Unfortunately, in many parts of the country, low vision services do not currently meet people's needs.

In March 1998, The Royal College of General Practitioners, along with a wide range of statutory, professional, and voluntary bodies concerned with sight, was represented at a consensus conference chaired by Lord Jenkin, to establish what needed to be done to improve low vision services. There was much common ground regarding these issues, and those at the conference agreed that what was needed was a national framework for the delivery of low vision services, which would provide both organization and direction nationally, but leave interpretation and implementation decisions to made locally.

The Conference agreed to set up a Working Group to produce the framework, and the Group has already begun its work. It aims to involve as many groups as possible working in the field, both in the preparation of the framework and in the issuing of the final report, with the seal of approval of as many professions and organizations as possible. This would give the report an authority and validity, which should ensure the prospect of its recommendations being implemented and supported, both locally and nationally.

The RCGP's representative on the Working Group is ... T D W Smith.

If you wish to contribute to the discussions, or seek further information, please contact him via the RCGP, or at:

Latham House Medical Practice
Sage Cross Street
Melton Mowbray LE13 1NX
tel 01664 560101, fax 01664 501825
T D W Smith

New Medical Director for RCGP International Development Programme

Garth Manning has been appointed Medical Director of the RCGP International Family Medicine Development Programme (IDP).

He will lead this global programme, which aims to improve standards of patient care through better health care delivery. The programme delivers development projects in partnership with local people. A variety of models and ideas are used as reference points, drawing on UK and international knowledge and experience. This ensures outcomes appropriate to the culture, health needs and resources of partner countries and, ultimately, to sustainability when the project ends.

The IDP is currently involved in initiatives in 16 countries including Argentina, Bangladesh, Kuwait, the Lebanon, Nepal, Palestine and the Ukraine.

The move to appoint a new Medical Director to the IDP comes as part of a wider expansion to increase both staff and medical resources. An International Development Unit has been established as part of a new International Department at the College's London headquarters, to respond to the significant increase in demand for co-operation and collaboration in international activities. The Department will provide greater support to all areas of International Committee activities, including the 1000 members of the Overseas Faculty. From October, the team of three staff, headed by an International Manager, will work closely with the medical team led by Dr Philip Evans, Chairman of the International Committee, and Dr John Howard, recently appointed Vice-Chair.

Dr Manning, completing the core team of six, brings a first-hand knowledge of international medicine and health care to the position, having served as a GP within the Royal Air Force for 14 years in posts around the world including Germany, Cyprus, and Belize in Central America. As part of his career in the armed forces he served as Medical Team Leader at the time of the release of the British hostages from the Lebanon and the evacuation of casualties from Bosnia and Herzegovina.

After leaving the RAF in 1994, Dr Manning took up a career in international consultancy, predominantly in the field of primary health care. His work has taken him to Croatia, Poland, Hungary, Russia, and more recently, Bosnia and Herzegovina. He has carried out freelance consultancy work for high profile organizations, including the United Nations Commission for Refugees (UNHCR).

From his personal experiences, Dr Manning has seen how simple measures such as better training and use of resources can make an enormous difference when it comes to reforming health systems.

Dr Philip Evans, Chair of the RCGP International Committee, points out that interest in primary medical care has grown beyond all expectation in the last decade. 'The pivotal role of family medicine in aiming for comprehensive health care for all with limited resources is being globally recognized. The RCGP has an important contribution to make to this process as a world leading academic institution.'

Master Classes in Primary Care Research for Health Professionals

The Research Group at the College has designed a series of Master Classes in primary care research, aimed at general practitioners, nursing staff and practice managers. They are designed to encourage hands-on learning and help health professionals to gain both understanding and experience of primary care research.

The first series of four Master Classes are running from November this year until March 1999. Each Master Class runs for one day, and will be accompanied by resource materials which will be published as a series of practical workbooks.

The current series includes the following, all of which will all be held at the College:

An Introduction to Qualitative Methods for Health Professionals
Dr Madeleine Gantley and Dr Geoff Harding, Department of General Practice and Primary Care, Queen Mary and Westfield College

T*he Use and Design of Questionnaires*
Mrs Elaine McColl, Centre for Health Services Research, University of Newcastle and Mr Roger Thomas, Research Director, Survey Methods Centre

Statistical Concepts
Professor Deborah Ashby and Sandra Eldridge, St. Bartholomew's and the Royal London School of Medicine and Dentistry

Randomized Controlled Trials and Conducting Multi-practice Research
Professor Phillip Hannaford, Director of RCGP Centre for Primary Care Research and Epidemiology; Dr Martin Underwood, and Dr Madge Vickers, MRC Epidemiology and Medical Care Unit

We are offering discounts for three or more bookings by any individual, or different individuals, within the same practice or department.

Further information and an application form for current and future Master Classes are available from the Courses and Conferences Unit at the College on tel 0171 823-9703; fax 0171 225 3047, or email *courses@rcgp.org.uk*

Outside the ivory towers: evidence-based medicine in the real world

1. Carr-Hill R. Evidence-based health care: flaws in the paradigm? *J Roy Soc Med* 1998; **91:** [Suppl. 35], 12-14.
2. Hart JT. Response rates in south Wales 1950-96: changing requirements for mass participation in research. In: Maynard A, Chalmers I (eds) *Non-random reflections on health services research*. London: BMJ Publishing Group, 1997: 31-57.
3. Epstein S. *Impure science: AIDS, activism and the politics of knowledge*. Berkeley: University of California Press, 1997.
4. Haynes B, Haines A. Barriers and bridges to evidence-based clinical practice. *BMJ* 1998; **317:** 273-276.
5. Grimshaw J, Thomson MA. What have new efforts to change professional practice achieved? *J Roy Soc Med* 1998; **91:** [Suppl. 35], 20-25.
6. Zimmerman DL, Daley J, Kizer K, Feussner JR. *Using outcomes to improve health care decision making: a primer*. Management Decision and Research Center, Washington DC, USA. Available as a downloadable file from Internet site **http://www.va.gov/resdev/ps/pshsrd/outcomes.pdf**
7. Aday LA, Begley CE, Lairson DR, Slater CH. *Evaluating the healthcare system. Effectiveness, efficiency, and equity*. Chicago: Health Administration Press, 1998.
8. Greenhalgh T and Hurwitz B (eds) *Narrative based medicine: dialogue and discourse in clinical practice*. London: BMJ Publications, 1998.
9. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence-based medicine: what it is and what it isn't. *BMJ* 1996; **312:** 71-72.
10. Sullivan FM, MacNaughton RJ. Evidence in consultations: interpreted and individualised. *Lancet* 1996; **348:** 941-943.
11. Fletcher RH, Fletcher SW, Wagner EH. *Clinical epidemiology: the essentials*. London: Williams and Wilkins, 1996: 4-6.

Box 1: 'Bottom line' clinical variables used in outcomes research.[11]

Death - especially if untimely
Disease - or the subjective experience of illness)
Discomfort - includes pain, nausea, breathlessness, etc
Disability - loss of function in activities of daily living, work, or recreation
Dissatisfaction - emotional reaction to disease or its care (includes sadness, anger)
Destitution - loss of financial or social status as a result of illness

Whose evidence is it anyway?

Why is the evidence-based medicine movement revered in some circles and deeply unpopular in others? It has been accused of sanctimoniously claiming to be the voice of objectivity and impartiality in clinical care. In reality, say its critics, the message of 'best evidence' in the late 1990s is inextricably bound up in an overriding political agenda that is dictated more by the rising tide of consumerism, accountability, and performance management in health care than by scientific progress *per se*.[1]

Scientific enquiry has never been, and never will be, independent of prevailing political, ideological, economic, and technological forces. The principles of clinical epidemiology are not new. But, repackaged as evidence-based medicine, they have risen to spectacular popularity over the past 10 years. The forces (in addition to the narrower biomedical aspects of clinical research) that should be recognized as having contributed to this phenomenon include the following:

- Medical costs rise inexorably, yet we know that not all common or expensive procedures are necessary, and some may be harmful.
- Variation in outcomes have been observed between centres and clinicians.
- Patients and their advocates are more aware that they have (or should have) choices, and are more vocal in pursuing choice.
- Clinicians, health care managers, and, increasingly, lawyers, acknowledge that decision-making in health care should involve the patient and be based on best evidence of effectiveness and harm.
- Comprehensive lists of research papers, indexed electronically and accessible via standard search techniques, have become available at little or no cost over the Internet.
- Statistical tools, especially those of meta-analysis, are better understood and more widely used. Hence, precise and cumulative estimates of effectiveness and harm tend now to be published soon after the relevant trials are complete.
- The discipline of critical appraisal of research papers has become both more rigorous and more accessible to the non-expert through the publication of basic guides and structured checklists.

All these influences, and more, have combined to produce a contemporary climate of beliefs and attitudes, broadly shared by professionals, public, press and politicians, which hold that clinical care should be:

- based on the strongest possible research findings, as defined by established principles of quality and validity
- judged by 'bottom line' outcomes (Box 1)
- delivered at a cost that society can afford, and restricted according to explicit criteria that reflect society's values and priorities.

The research base for clinical care

Another accusation levelled at the 'ivory tower' of evidence-based medicine is the partisan and parochial nature of its research base. Arguably, the entire sequence of clinical research – including the choice of research question, the selection of an 'appropriate' sampling frame, the delivery of the intervention, the assessment of outcome, and the presentation and dissemination of results – are not, as is often assumed, dictated by a self-evident dialectic of scientific progress. Rather, they are determined by practical and economic constraints, consumer pressure, the availability (and source) of funding, the goodwill of trial participants, and the ability, commitment, and cultural biases of the research team.[1]

Professor Julian Tudor Hart has described a series of research studies in the Rhondda Valley, South Wales, between 1950 and 1996,[2] in which response rates usually exceeded 97%. Tudor Hart is under no illusions that this level of mass participation in research had important explanations that went beyond his own commitment and abilities as a researcher. In particular, he cites a strong local tradition of public participation in research fired by the political forces of unionized socialism.

Another example of social forces shaping the nature (and determining the success or failure) of clinical trials is the role of patient-activists in the search for more effective and safer drugs for HIV infection.[3] These examples, I think, illustrate the folly of compartmentalizing research, researchers, and the researched upon, into separate boxes. GPs know this, intuitively.

Effective professional practice: applying 'best evidence' every time

There is a huge difference between efficacy (how well something works in the laboratory or the controlled environment of the clinical research trial) and effectiveness (how well it works in the 'real world' of the hospital ward, the clinic, the home and the community).[4]

Brian Haynes and Andy Haines have recently reviewed the five steps of implementation that link efficacy and effectiveness: generating evidence from research, synthesizing the evidence into an assim-

ilable form (such as a systematic review), developing evidence-based clinical policies (such as guidelines, protocols, and decision support systems), applying the policies at an organizational level (e.g. access to investigations), and applying the evidence in the individual clinical encounter (incorporating the patient's values, preferences, family circumstances, and co-morbidity).[4]

Grimshaw and Thomson have described the latest evidence from the Cochrane Effective Practice and Organization of Care (EPOC) review group on the methods of changing professional practice.[5] They conclude that delays in implementing research findings are still common, doctors' (and nurses') behaviour remains difficult to change, and that a combination of methods is more effective than a single intervention (Box 2).

Effective service delivery: measuring what works in the real world

The systematic measurement of effectiveness, as distinct from efficacy, is known as *outcomes research*, where a working definition of outcomes might be 'the results [in the real world] of specific health care services and interventions'.[6]

The perfect health intervention would be effective in many different ways. Not only would it predictably and reliably cure the patient and increase his or her well-being, but it would be available, acceptable, affordable, free of adverse effects, easy to administer, readily amenable to quality control measures, compatible with other necessary health and social interventions, and, for good measure, it would increase job satisfaction in the health professional who delivers and monitors it. The many dimensions of effectiveness in the real world demand many different measures of success, and Box 1 lists some aspects of this challenging field. Outcomes research is comprehensively covered in a recently published textbook.[7]

Effective care for the individual: applying population-based evidence to the patient's unique experience

A friend of mine was told by his doctor to take allopurinol after two attacks of gout. There is good evidence from randomized clinical trials that allopurinol prevents gout. But my friend had many additional questions. What were the chances of the drug preventing all new episodes of gout in him personally? What were the side-effects with these tablets, and would he develop them? Could he leave off taking them if he went on an overnight business trip? What would happen if his two-year-old accidentally swallowed a tablet?

Even in this simple clinical scenario, the 'pure' research evidence is an important but relatively small piece of the decision-making jigsaw. The summary statistic derived from a research trial, i.e. the number needed to treat (NNT) for allopurinol in the prophylaxis of acute gout, is, at best, an 'off-the-peg' measure of how well the intervention *might* work. It cannot be mechanistically applied to episodes of illness or individual patients, whose behaviour, as my friend's situation illustrates, is unavoidably influenced by chance, choice, and a range of confounding factors.

The sample of participants in a randomized controlled trial is typically drawn from those deemed most likely to benefit from the intervention. It usually excludes the very young or old, the 'non-compliant', and those with co-existing illness. Within this already restricted frame, each individual trial participant's unique and many-dimensioned experience in response to the intervention (or the placebo) is expressed as, say, a single dot on a scatter plot, to which the researchers apply mathematical tools to produce a story about the sample as a whole. The 'best evidence' that we seek to glean from research trials pertains to the sample's (and, hopefully, the population's) story, not the individual trial participants' stories, and certainly not to the personal story of the patient we are considering treating.[8]

The call by Sackett and colleagues for an *integration* of research evidence with clinical expertise and clinical wisdom[9] requires careful attention to the narrative and contextual aspects of illness experience (including the patient's values and preferences, and conflicting personal, family, and cultural priorities) – a subject which is considered in more detail elsewhere.[8,10]

Conclusion

The evidence-based medicine movement is evolving. It retains the fundamental premise that the efficacy and safety of interventions should be assessed in population-based research studies using the tools of objective scientific measurement, with special status rightly accorded to the randomized controlled trial. But it increasingly recognizes three additional areas of interest, which might be termed the 'interface zones' between evidence-based medicine and the real world, and which, I contend, depend on the qualitative methods of the social sciences as well as (and sometimes instead of) those of quantitative research:

- Clinical research trials are planned, funded, undertaken (or abandoned), analysed, discussed, published (or withheld from publication), and disseminated in a particular historical, political, economic, and cultural context. This context must itself be defined and understood.
- The large gap between establishing evidence of efficacy in research trials and delivering effective practice[4] requires attention to both clinical outcomes and to sociocultural aspects of professional behaviour and organizational change.
- The clinical encounter is an interpretive and creative act that goes beyond objective scientific enquiry and must be separately studied by appropriate techniques.[8]

Trish Greenhalgh

Box 2. Methods for changing professional behaviour that have been reviewed by the Cochrane Effective Practice and Organization of Care Group.[5]

Method	Comment
Printed educational materials aimed at health professionals	Ineffective in the absence of supporting or reinforcing strategies
Audit and feedback	Trials comparing audit with no intervention for specific aspects of clinical performance showed moderate (and probably worthwhile) benefit. Effectiveness, and cost-effectiveness, of audit outside the research setting remains disputed
Educational outreach (visits to clinicians in the practice setting)	Effective in changing prescribing behaviour in the short term, especially when combined with social marketing. Value of educational outreach in other clinical areas is less well established
Opinion leaders (health professionals nominated by colleagues as educationally influential)	Studies show inconsistent (but sometimes powerful) effect of local opinion leaders in changing behaviour in a range of clinical areas
Interventions aimed at improving doctor–nurse communication and multidisciplinary working	No studies with sufficiently rigorous research designs were identified

Should breast reduction be performed on the NHS?

There have been pressures in the past to eliminate 'cosmetic' operations by 'rationing'. With the advent of local commissioning groups it will become commonplace for direct purchasing discussions to take place between clinicians. Inevitably, the subject of the availability of aesthetic procedures will be raised. A breast reduction takes up a substantial part of an operating session, and, by not allowing them on the NHS, we would, with such large numbers on our waiting lists, have drastically improved the statistics. I would hope that there can be no-one who would condone such a decision.

The operation of breast reduction is often viewed as being 'cosmetic' and, by inference, frivolous. A patient recently presented me with an essay entitled 'The reason for hating myself'. Her plight highlights some of the problems endured by these patients.

'At the age of 12 my biggest wish was to have breasts, but as soon as they arrived I immediately hated them and began to hate myself. School was a nightmare, I was developing faster than all the other girls in my year; in the changing rooms I would race to a corner so that I could stand in it with my back to the other girls, trying to cover myself.

'The boys had more interest in my boobs. I was never left alone; they all still called me names but also they began to want to touch. I would be in a lesson, the teacher would leave the room and it was always "Let's get Susan". I couldn't stand it: they would all dive on me trying to get into my shirt, and unfasten my bra. All the girls would just laugh.

'I began to get lower back pains; I found these were more painful when I sat down, as I was sat hunchbacked. The weight of my boobs would make me lean forward, I couldn't sit up straight and I still can't. If I sit on a straight-backed chair I automatically lean forward resting my elbows on my knees, and if I sit on the settee I always slouch back to take the weight off myself. The pains have now reached my actual boobs: I get pain across the top of my boobs and all down the side underneath my arms, my nipples are constantly sore and tender. When I walk up or down stairs I have to hold my boobs because when they move slightly they ache and hurt, and my bra straps dig into my shoulders: I am in a size 34GG.'

We must, however, be critical of which patients are selected for surgery. The American insurance model restricts payment only for those reductions greater than 350-500 grammes per breast. Unsuccessful attempts have been made to define preoperatively whether a reduction was cosmetic or reconstructive, on the basis of weight and volume.[1,2] Those patients who exhibit the standard symptoms of neck, shoulder or back pain, rashes beneath the bust, and deep strap grooves are almost always improved by reduction mammoplasty.[2] It has also been pointed out that post-reduction patients go on to attain a more normal body weight.[2,3]

Insurance guidelines indicate that they will finance only the treatment of disease processes. When does macromasia become a disease? The presence of symptoms, whether physical or psychological, must be the guiding principle. It has been shown that patients gain enormous benefit from surgical correction,[4,5] and the operation scores highly in quality of life enhancement scales.[6]

There are drawbacks to the operation in the form of permanent scarring, and must obviously be very carefully considered in the young patient, but this is usually felt to be a small price to pay for the physical ease which surgery confers. Caution is required before deciding to operate on an obese patient – recent work has shown that patients over 80kg or with a BMI >30 are almost certain to encounter problems with their operation.[7] It is in the patient's own interest to have reached an acceptable weight prior to referral, before inclusion on a waiting list.

'I am sure it is time for me to live my own life now instead of my boobs living it for me.Please help.' The request for a breast reduction does not usually stem from vanity, but from patients who exhibit real and distressing symptoms and who should be considered for surgery

Roger Green

References

1. Schnur PL, HoehnJG, Ilstrup DM, Cahoy MJ, Chu C-P. Reduction Mammaplasty: Cosmetic or Reconstructive Procedure? *Ann Plast Surg* 1991; **27**:232-237
2. Miller AP, Zacher JB, Berggren RB, Falcone RE, Monk J.Breast Reducion for symptomatic Macromastia: can objective predictors for operative success be identified? *Plast Reconstr Surg* 1995; **95**:77-83
3. Hollyman JA, Lacey JH, Whitfield PJ. Surgery for the psyche: a longitudinal study of women undergoing reduction mammaplasty.*Br J Plast Surg* 1986; **39**:222-224
4. Dabbah A, Lehman JA, Parker MG,Tantri D, Wagner DS. Reduction mammaplasty: An outcome analysis. *Ann Plast Surg* 1995; **35**:337-341
5. Harris DL. Self-consciousness of disproportionate breast size: a primary psychological reaction to abnormal appearance. *Br J Plast Surg* 1983; **36**: 191-5.
6. Cole RP, Shakespeare V, Shakespeare P, Hobby JAE. Measuring outcome of low priority plastic surgery patients using Quality of life Indices. *Br J Plast Surg* 1994; **47**: 117-121.
7. Budney PG, Vesley M , Coleman DJ. The effect of body weight and body mass index on outcome and complication rates in breast reduction surgery. British Association of Plastic Surgeons Summer Meeting, Leicester, July 1996

The Eunuchs of Opera

A papal edict near the end of the 16th century changed the face of opera for 300 years.[1] The edict banned women from opera in Italy; in turn this led to the custom of castration before puberty of boys with promising voices. They thus developed into near normal adults with adult lungs, but retaining their treble voices.

Before long music teachers toured the towns and cities of Italy (the practice was more or less confined to that country) in search of small boys with above average voices.

It was, of course, first necessary to convince the parents concerned of all the advantages of the operation. In some cases, real or imagined disabilities were cited; in addition the long-term benefits would be stressed, including the financial ones. Once parents had agreed (and many of them did, especially those with large families and many mouths to feed), the boy himself was approached, and told what a golden opportunity beckoned.

These strange beings, after lengthy training, would be used in one of two fields – in opera, where they would take female roles, or in church choirs, where they would sing the treble line in anthems and set services.

A fortunate few, who reached the top of their particular tree, would earn vast salaries, be feted by their adoring audiences, and lead lives of luxury. The result, in many cases, would be the development of *prima donna* behaviour.

There was, of course, no means of inducing anaesthesia in those days. There were, however, other methods available, such as the administration of alcohol, with or without tincture of opium, with the occasional resort to a gentle tap on the head. The boy would then be immersed in a bath of icy water, to minimize bleeding, or in a bath of milk to soften the sexual organs. Complete bilateral removal of the testes was of course essential.

Occasionally there were unforseen problems. Apparently, one famous subject had an empty scrotum from birth, and so was trained along with the other boys. All went well, until one day he had to make an extra effort on stage, whereupon both testes descended into the scrotum. Puberty of course followed, with the loss of his valuable soprano voice.

The boys, once recovered from their operation – there was a certain mortality from haemorrhage and infection – were sent to the local conservatoire for voice training. Conditions were rather severe with strict discipline. The boys were given a good general education, along with concentrated voice training; they were moreover given a better diet than the 'ordinary' pupils.

After a lengthy training, at the age of 18 or so, the fortunate ones would be allocated to a particular town or opera company, or indeed in some cases abroad. Those slightly less fortunate would be attached to cathedrals or monasteries, while those less fortunate still would be taught an instrument or entered for the priesthood.

The majority of castrati chose to appear under names other than their own. Some would adopt the name of their home town, for example Senesino from Sienna, and L'Aquilano from L'Aquila; others would take the name of sponsors or other benefactors, for example Caffarelli owed much to his teacher Caffaro, while Farinelli was helped by the Farina brothers.

While most of the successful castrati did well, both financially and socially, others had mixed fortunes, others still fell by the wayside. A surprising number of them married, but they were, of course, completely sterile.

These strange beings were at the height of popularity in the 18th century, but their numbers declined rapidly during the 19th. Hardly any survived into the present century, though it is said that one survived till 1920.

Peter Wintersgill

Barbier P. [Tr. Crosland M.] The *world of the Castrati: The History of an Extraordinary Operatic Phenomenon.*. London: Souvenir Press, 1998.

Science on Trial –
the clash of medical evidence and the law in the breast implant case
Marcia Angell
WC Norton, 1998
PB, 267pp, £9.95, 0 393 03973 0

A tale of mendacity, deceit, vanity and greed is usually what you take with you on holidays to escape from the routine cares of this humdrum world. How shocking, then, to realize that the events described in this book not only take place in real life but impinge uncomfortably closely on our everyday professional lives.

Marcia Angell, an executive editor of the *New England Journal of Medicine*, became interested in the issue of breast implants after two manuscripts had been submitted to her journal. The first, in 1992, was an article by FDA Commissioner David Kessler, explaining why he had banned silicone gel-filled breast implants from the market. In his opinion, they had not been proved safe. The other, in 1994, was the first epidemiological study of whether breast implants increased the risk of certain diseases – no link could be found. Yet in the intervening time thousands of lawsuits had been filed and huge damages recorded, one woman receiving $25 million. How could the courts be so sure? And what did it say about American life?

Angell patiently unravels the complicated threads of this story, which she then tells with consummate skill. Alas, few of the participants in this drama come out with any credit. The manufacturers of the implants and the plastic surgeons who implanted them are condemned for seeming to care little about the long-term safety of the devices which they prescribed with gusto. The menfolk who prize large breasts above the safety and comfort of their women, and the women who gratify this desire then eagerly jump on the compensation bandwagon are hardly free of criticism either.

But the main villains are the lawyers and doctors who prosper from litigation. In the USA, the contingency fee is the customary method of paying lawyers. No win, no fee, but about a third of the entire award if successful. Huge sums can be earned by successful lawyers who become expert at esoteric arts such as jury selection and advertising for litigants. So successful are advanced practitioners that companies with blameless products often settle out of court to avoid the risk of enormous, punitive damages. Angell cites cases where, solely on the claim of non-provable symptoms such as tiredness or muscle pains, a plaintiff can expect to receive about $700 000 compensation.

Angell considers the role of medical 'experts' in breast implant litigation, some earning their entire income in this way. One Houston haematologist, whose work is now largely devoted to women with breast implants, specializes in diagnosing lupus-like diseases in them. He also gives advice about the sort of information that should be obtained from other practitioners to help in legal action. Non-specific problems like chronic fatigue or myalgia are, apparently, particularly useful. According to the *New York Times*, this haematologist diagnosed 93% of patients consulting him as ill, and 90% went on to litigation. In 1994 he earned $2 million.

Apart from the convincing evidence of greed as a strong motivator of human behaviour, this is a masterful exposition of the clash of culture between science and the law when the two are brought together in the courtroom. The law comes to its conclusions after adversarial debate, while the scientist opts for a slow accumulation of knowledge from many sources. As a result, the best lawyer sounds convincing even in the face of uncertainty, while the best scientist is the last to be convinced, even by seemingly unassailable evidence. Judges, brought up in the legal tradition, sometimes therefore discount perfectly valid scientific evidence because it is so tentative.

There were two things about this account that I found particularly disturbing. The contingency fee system of payment to lawyers is coming to these shores and we must brace ourselves for similar scenarios in the years ahead. And so frightened are manufacturers of financial ruin following from litigation such as described in this book that they are withdrawing from the field altogether. Who will make the implants, Teflon grafts, and pacemakers of the future? What of the 350 000 American males with penile implants, 150 000 of whom now claim to be experiencing 'silicone-related' disease, seeking redress?

I could not put this book down and recommend anyone to borrow, steal or even buy a copy.

Ian McKee

The Anatomist
Federico Andahazi
Doubleday, 1998
HB, 251pp, £12.99
0 385 410011 5

Every season requires a trendy novel in translation (Süskind and *Perfume*, Ende and *The Neverending Story*, *et al*) and there will be no more fashionable tome this autumn than *The Anatomist*. Andahazi's first novel investigates the Renaissance re-discovery of the clitoris, competent story-telling spiced with theological intrigue and enjoyable prurience. Venice and Padua, with virginal writhings in Florence, all feature prominently and irresistably.

First novels of course benefit from scandal, as does this one – *The Anatomist* won the Argentinian equivalent of the Booker, only to be disowned by Señora Booker ... denounced as 'the work of a Communist pornographer' ... guaranteeing thousands of sales per day and an unseemly squabble for translation rights – duly won by Doubleday, who have excelled themselves in producing a book that looks and handles gorgeously.

Essential reading. Enjoy.

AL

Doctor Chekhov: A Study in Literature and Medicine
John Coope
Cross Publishing, 1997
HB, 159 pp, £15.00, 1 873295 21 9

Doctor Keats is supposed to have reacted to his first haemoptysis with the words, *'Bring me a candle, Brown. That is arterial blood, I cannot be deceived in that colour. It is my death warrant.'* Doctor Coope tells us that Doctor Chekhov reacted very differently. Chekhov also began to cough blood soon after his qualification, but steadfastly refused to acknowledge its significance throughout the remaining thirteen, incredibly productive, years of his life.

Early in this period he left his family, his Moscow practice and the soiree-round of a celebrated writer and set off, in conditions of extreme hardship, 5000 miles overland to study conditions on the penal island of Sakhalin, off the Siberian coast. Rising daily at five o'clock and using census cards of his own devising (which still exist) he completed a survey of the entire population of the desolate, 600 mile-long island. His subsequent, meticulous description of the squalor and brutality he found there forced an official enquiry and eventually some reform.

During the cholera epidemic of 1891 (still coughing blood) he went to practice his scientific medicine in a village 50 miles south of Moscow, and stayed there for the next seven years as a country doctor. His letters leave no doubt that what he did there was the job that we recognize:

'... to start and tremble at night when the dogs bark and there's knocking at the gates. Have they come for me to go out on those uncharted roads?'

As well as founding various medical facilities he also supervised and helped to finance the building of no fewer than three schools for the peasants:

'Raising funds for these enterprises found him and his sister Marya running bazaars, selling paintings donated by his friend Levitan and even organizing local amateur performances. Chekhov himself designed the buildings and hired local workmen to erect them.'

This was quite a man. And this is quite a book. It is beautifully written, produced and illustrated. For a hardback of this quality it is extremely good value. The structure is original and in my opinion, entirely successful. Each chapter deals with a distinct theme. For example, Chekhov's fascinatingly contemporary disagreement with the anti-science stance of his friend Tolstoy. Yet there is a skilfully managed overriding chronology. In other words, the hero dies at the end as he should. Along the way John Coope lets Chekhov speak eloquently for himself, linking the many extracts and quotes with a deft narrative line which makes every page a delight to read. Whole-page reproductions remind us of the superb quality of early photographs while those pictures taken of convicts in Sakhalin are (one almost says 'of course') Chekhov's own. Where maps are needed, they are there and exactly right.

So what are modern GPs to make of the extraordinarily admirable polymath depicted here? Is there any common ground at all, now that a century has passed?

The answer is on the fly-leaf: Doctor Coope, who is manifestly a writer of great excellence, is also a country GP who conducts a choral society, directs an arts centre and takes part in operas and plays. The affinity with Doctor Chekhov, who used to organize amateur theatrical performances to raise money to build schools for his peasant patients (what a wonderful thought that is) is obvious. Buy this book and keep it; it is inspiration of the highest order.

James Willis

Sexual Health Promotion in General Practice
Simon Barton *et al*
Radcliffe, 1995
PB, 152pp £16.50, 1 85775 131 0

Managing Family Planning in General Practice
Sam Rowlands
Radcliffe, 1997
PB, 160pp, £16.50, 1 85775 205 8

Handbook of Sexual Health in Primary Care
Yvonne Carter *et al*
RCGP, 1997
PB, 208pp, £18 (RCGP members £16.20), 0 85084 238 7

'Life is a sexually transmitted disease', so says the now infamous piece of graffiti, and what better place to ensure protection than in general practice; or maybe better still the ownership of these three paperback books

So, are they worth reading? The first, *Sexual Health Promotion in General Practice*, is now a little old – first published in 1995 – and it already shows. Clearly produced in response to HIV infection and AIDS, it is neatly structured into eleven manageable chapters with a comprehensive reading list at the back. Its age is manifest because the section on HIV-testing is immersed in counselling. Thankfully, times have changed.

Managing Family Planning in General Practice, sharing the same publisher (and size) as the first, is officially approved by the Family Planning Association and is written by Sam Rowlands, a GP, with contributions from two family planning nurses. It complements the above text perfectly; the information is well presented and the style is open, user-friendly and not too technical – aspects of books I particularly favour. A good buy, and vindication that a team approach to family planning is feasible and workable.

Lastly, the RCGP handbook, the most recent and by far the best of the bunch. Twelve chapters comprise the total publication – itself a collaboration between the College and the Margaret Pyke Centre – and the contributors form an eclectic coterie of family planning doctors, nurses, and research staff, as well as GPs and other specialists. Each chapter has various sub-sections (that's why it is so 'busy'), and chapters finish with key-messages, references and additional reading. I particularly liked sexual history-taking in primary care chapter – perhaps because of its immediacy and direct relevance. Overall, it is a first-class referential text containing a wealth of information, and it is not too intimidating for the general (practice) reader. Moreover, every medical student should dip into it now and again. I have one small criticism: it is not really a handbook on account of size, so why not call it a textbook?

To conclude, should I comment on whether these texts ought to be part of the standard practice library? Now, that's for you to find out and for me to judge.

Surinder Singh

Officers' Terms of Office
John Toby nears the end of his three-year tenure as Chairman of UK Council, and Iona Heath similarly approaches the end of her spell as a Vice-Chairman of Council. Denis Pereira Gray, President of the College, thanked both for sterling service.

Ballot for GP Registrar Observer on Council
Simon Hambling has completed his two-year term as one of the two GP Registrar Observers on Council. If you know of any GP Registrar who may be interested in standing for election, please request further information and a nomination form from Central Secretariat, tel 0171 581 3232 ext 302.

Assessment and Management of Erectile Dysfunction – sildenafil
Council considered a paper from John Toby on the Assessment and Management of Erectile Dysfunction, pending the introduction of sildenafil. Council agreed that in principle it is appropriate for GPs to prescribe the drug on the NHS, on the basis of clinical need which can be properly assessed and managed in general practice. Appropriate education will be necessary. In view of the inevitable demand for treatment, however, Council emphasized that it is essential that Government provides funds to allow the prescription of the drug. Council recognized the wider issue of resource management in the NHS, and agreed that it is essential for the Government and the public to enter into a dialogue about these wider issues, to which the College would be willing to contribute.

Quality in the NHS
Council welcomed the College response to the NHS Executive's consultation document *A First Class Service*, and recommended that a summary of it be disseminated as widely as possible. The response emphasizes the College's long association with Quality from its foundation, through the establishment of the Examination for Membership in 1965, the setting up of vocational training for general practice in 1976, the Quality Initiative in 1983, and the introduction of Fellowship by Assessment in 1989. It points to a number of current initiatives, including Membership by Assessment of Performance, the continued development of the Examination, the Accreditation of Continued Professional Development, Practice Accreditation, and the Quality Practice Award. Council suggested that parts of the response needed some further development, including the section on the clinical and legal aspects of the role of the accountable officer in Clinical Governance and further reference to the role of research in general practice. These and other points will be taken into account in the discussions with the Department and others over the next few months.

Council also welcomed the publication of Chairman-Elect Mike Pringle's reports *Primary Care Groups and Local Health Groups – Risks, Opportunities and the Way Forward*, and *Recognising Quality of Care in General Practice*, approved at the June Meeting of Council. These reports will be used as a basis for further development of advice on Clinical Governance in Primary Care Groups and Local Health Groups.

The Meaning of Membership
Council considered a paper from John Toby on the Meaning of Membership. This sets out to recognize recent concerns within society about professional self-regulation and the need for professional organizations to set out explicitly the responsibilities and expectations of their members. It also seeks to identify ways in which the College supports members personally and professionally, to ensure that members may appreciate better their responsibilities to the College and the College's responsibilities to them, and to ensure that patients and others may appreciate their reasonable expectations of GPs who describe themselves as members or fellows of the College.

In the course of a thoughtful debate, Council acknowledged that membership of the College is concerned with quality and standards and a continuing commitment to postgraduate study while in active practice. It noted, however, that the paper needed expansion, to encourage current members who are not active in College activities to take part in them and to encourage those doctors who have passed the Examination, but have allowed their membership to lapse, to re-join the College. There needs to be a greater emphasis on supporting members and publishing the College's initiatives over the whole range of quality issues, as set out in the response to *A First Class Service*. A further paper will be considered by October CEC.

Diplomas
John Toby introduced a paper on diplomas. Council acknowledged that MRCGP tests the core competencies of general practice but recognized that diplomas are proliferating and can be introduced without any input from general practice. Council asked CEC to look at the whole issue of diplomas, i.e. when should the College participate in the introduction of diplomas, and with whom should the College cooperate.

Membership by Assessment of Performance
Vice-Chairman Iona Heath reported on the continuing work of the Working Group on MAP. The pilot visits are continuing through the Autumn and comments have been received from Faculties and Members of Council on the criteria agreed at June Council. Detailed discussions are taking place with the Privy Council who have to approve any change to the Ordinances of the College. The AGM in November will consider the formal resolution to change Ordinance 3. If passed, and if the Privy Council approve the change, it is hoped to bring in a system of Membership by Assessment in the first half of 1999.

College Approval of Guidelines
Lindsay Smith introduced a paper on criteria for College approval of guidelines. The College is increasingly asked to comment on guidelines, often produced by other Royal Colleges and specialist bodies with little or no input from general practice. This results in guidelines which are of little or no relevance to general practice. Council agreed that the College should only be involved in internally produced guidelines and external jointly developed guidelines.

The Abuse of Older People
Council noted a draft report from Action on Elder Abuse on *The Abuse of Older People*. The document sets out information for doctors – who are often the first professionals others turn to if they are worried about abuse – on the types of abuse that exist, possible signs of abuse and what to do if abuse is suspected. The report will be disseminated later in the autumn.

Annual General Meeting
Friday 20 November at the Royal Geographical Society, Exhibition Road, London. You should receive your Agenda in October.

Next Meeting of UK Council
Saturday 21 November, Princes Gate

Bradley Cheek

Computer - Two

The practice plugged in a new computer system about three months ago. This one is in colour and comes with useful utilities like the electronic BNF for speeding up those irritating moments when you can't remember the name of that new drug. Luckily, the lucrative brain waves of Bill Gates are familiar to me, too. I know Windows aren't what you stare out of in the few of those idle hours you get in general practice, and my less computer-literate partners are finding this out as well.

There were supposed to be several days of training, and there were: everybody was given protected time to attend their allotted slot. Yes, the once familiar sequence of updating repeat prescriptions seems to involve a few more steps, but mistakes are much less likely to occur in future. If the tiny pill bottle to the left of the drug name is blue, then I can authorize another script – much more pleasing to the eye and much more intuitive than that depressing black and green terminal screen.

New technology, new jargon: doctors, receptionists, nurses and secretaries are getting to grips with icons, the mouse, its mat, and clicking-on. Adverse reactions flash up on-screen quickly whenever an inappropriate drug is prescribed. Funny, I seem to take more notice of them now, graded according to importance, and relevant to the patient sitting beside me – and I've learned a few new interactions. It is much more comfortable now that the new VDU is so much bigger. I just can't resist the idea of the screen becoming the third party in my negotiations with Mrs Smith, and the box purrs away, a whispering aural reminder that the art of medicine now incorporates the science of information technology. Now that the machine rarely doesn't respond to my commands (perhaps it is paying me back for understanding it) I can concentrate on the flow of the consultation rather than scrabbling in my drawer for an old-fashioned prescription pad – and the FP10 is readable!

Now, I agree, there is no excuse not to go 'paperless'. Several of my partners have already agreed to this Shangri-La state of data shift. Dispense with all those Lloyd George envelopes, the fat ones and the thin ones. Think of the advantages. You are only able to recognize the heartsink patients by name – no more preconceptions. No more notes to lose underneath car seats. No more running out of continuation cards and scribbling illegibly in ever-decreasing letters over the Secretary of State's claim to ownership. We are sorely tempted. This new system even allows me to write essays of free text without keyboard gymnastics. But paperless?

At lunch time my computer in-tray is filled with digitized hospital letters, internal e-mail requests for sick notes, electronic details of postgraduate meetings and Word97 minutes of the last practice meeting. My untouched paper in-tray now only contains NHS Executive glossy magazines. No over-stuffed records to take on visits, only two pages of readable printout. Ah, that sort of paperless. No need to ask 'Anyone seen Mrs Smith's blood result?' 'It's on the computer.' Ah, that sort of paperless. The security of holding a form in the hand, not letting it out of my sight until the appropriate action is taken, is something from which I seem to have moved forward from. All pathology results are lurking in the patients' computer files. The best thing is that the system is fault-tolerant and unlikely to crash … and never again will Mrs Smith's Lloyd George records suddenly and mysteriously turn up the morning after her appointment.

(With apologies to Jill Thistlethwaite)

our contributors

Yvonne Carter is Professor of General Practice at St Bartholomew's and the Royal London School of Medicine and Dentistry, Queen Mary and Westfield College (there must be a good acronym somewhere in that lot ...) She is also RCGP Chairman of Research and a practising GP in Tower Hamlets, East London

Bradley Cheek rather likes his computer. He is a principal in Berwick-on-Tweed and secretary of the North Northumberland Trainer Group. He is an LMC member

Roger Green is a consultant plastic surgeon at the Mersey Regional Plastic Surgery and Burns Centre, Whiston Hospital, Merseyside

Trish Greenhalgh welcomes feedback on her almost-completed series on research methodology. Web site at **http://www.ucl.ac.uk/primcare-popsci/uebpp/uebpp.htm**. She is at her best at 5.30am ... a common trait in academic circles

Ian McKee may sit in Scotland's newly devolved Assembly, as a Scottish National Party representative for Edinburgh Central. He is a GP in Craigmiller, at the *Trainspotting* end of Edinburgh high society, and is publisher of the *Scottish Medical Journal* and *Scottish Medicine*

Sara Shaw is Research Facilitator at the RCGP

Surinder Singh is a GP in Lewisham, London, and enlivens meetings of the *BJGP* editorial board

Timothy Smith is a GP in Melton Mowbray, home of the nation's finest pies. He is the College's representative on the Low Vision Services Working Group

James Willis 'leads a rich life', embedded in his local community, in Hampshire. He has been known to frequent high-society weddings in his gardening clothes

Peter Wintersgill recently retired after twenty years of service in Huddersfield Health Department. As is becoming mandatory in this section of the *BJGP* he has been an enthusiastic choral singer, and has published widely on the health of composers

All our contributors can be contacted via the Journal office

James Willis

On top of the world

Eagle view from our light aircraft over the African bush. Enveloped in engine-roar and sun pouring down through the screen. Young pilot beside me in shorts, eyes on artificial horizon, deep in headphones and his thoughts.

Gesture behind me for quality outdoor hat, 'Sorry to be a pain, Love, I need it after all'. That's better. Magnificent, endlessly smooth terrain. Superior. Far-seeing. Words like that come to mind. Indisputable. Nothing blocking the view. What a holiday! 'I know – those grey circles I've been watching must be dried-up salt-pans, like the ones we saw in the book.' Stretch around in seat-belt with the camera. Four of them nicely in frame. Click. That one should be good.

Eagle view of the treatment of hypertension. From high in the ivory tower. Enveloped in the roar of knowledge and bathed in the sun of certainty. Looking down on the multitude teeming beneath, clear to see where the evidence is based. No time for intervals in our confidence up here!

Pilot stirs beside me in his clip-board and his suit. Reading the panel of instruments, blinking, ticking, vibrating, mysterious beneath the screen. Unerringly predicts our course: 'Double the enalapril and the diastolic will drop by 3.7mm'. 'Aye Aye Sir. Steady as she goes. Adverse cerebrovascular events reduced by 0.04% (assuming Caucasian) Sir!' That one should be good.

Coming in to land on the little strip in the Okavango. Bouncing to a stop. Taking the bags from the smiling pilot, dust getting in our sandals. Suddenly a different world, now we're on the ground. Something to do with perspective, and different kinds of 'noise'. The smooth terrain has gone, as completely as the noise of the engine. Reality now rears up all around us. Down here in the thick of it. Strange birds' and insects' sounds all around . Warm breezes, Christmas dinner-scented through the wild, wild sage. Trees, bushes, termite-mounds loom high above our heads.

An elephant! 'Hold this lens a moment, Love, sorry to be a pain.' Stretch to frame the setting sun under the arch of the trunk. Brilliant. Squeeze the shutter. Slowly. Click. That one should be good.

Back to work with a bump. I'm seeing Mrs X for her blood pressure check. 'Yes, I've had a lovely holiday. Oh yes, lots of animals. Well, a one-off really. Very expensive but a wonderful, wonderful experience. Right – let's do your blood pressure and we'll see how the tablets have worked. You've been taking the bigger ones have you? Good. Good. Dum de dum de dum. Oh yes, still on top of the world.'

Mrs X's diastolic blood pressure has, I find, gone up by 10mm mercury since I doubled her enalapril. Slightly more when I take it again. I am not too surprised by this, though naturally disappointed, because I know that I am back down on earth, with dust in my sandals, in the thick of the noise of the jungle. Having a wonderful time.

We have to come back from holiday in the end.