GMC's guidance may inhibit research

Citation for published version:
DOI: 10.1136/bmj.322.7302.1601

Digital Object Identifier (DOI):
10.1136/bmj.322.7302.1601

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Publisher's PDF, also known as Version of record

Published In:
BMJ

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
Preservation is well worth the effort

Error—In his editorial on the General Medical Council, Smith asks a question that is in danger of becoming a self fulfilling prophecy. He fairly describes differences of view in the British medical profession about governance and the introduction of revalidation. He then asks whether it is worth expending the effort required to ensure the GMC’s survival on the grounds of its being dysfunctional, even suggesting that it might be better to scrap it and start again.

We write as a disparate group of senior doctors who have been intimately involved in the debate on the future of the GMC. We have held differing views about the solutions that might be offered but are united on the over-riding importance of professionally led regulation in partnership with the public. In this, we concur with Smith that most doctors wish to practise to the highest possible standards and that the model of the intrusive regulatory scrutiny practised by casino operators is totally inappropriate to the medical profession.

We believe, from very different perspectives, that the GMC should be allowed to develop into a better organisation for doctors and, more importantly, for patients.

Advice to authors
We prefer to receive all responses electronically, sent directly to our website. Processing your letter will be delayed unless it arrives in an electronic form.

We are now posting all direct submissions to our website within 24 hours of receipt and our intention is to post all other electronic submissions there as well. All responses will be eligible for publication in the paper journal.

Responses should be under 400 words and relate to articles published in the preceding month. They should include ≤ 5 references, in the Vancouver style, including one to the BMJ article to which they relate. We welcome illustrations. Please supply each author’s current appointment and full address, and a phone or fax number or email address for the corresponding author. We ask authors to declare any competing interest. Please send a stamped addressed envelope if you would like to know whether your letter has been accepted or rejected.

Letters will be edited and may be shortened.

GMC: approaching the abyss

Smith’s implication that we should start looking at fresh alternatives begs the question as to who would be entrusted to do this work and whether the result would be any better equipped for the challenges faced by a 21st century regulator in an increasingly complicated society. Any “fresh start” would still have to deal with governance and revalidation, which have been firmly placed on the current agenda by the present GMC.

The abyss Smith describes is certainly there, and the GMC may be at its edge. Despite its current problems, however, the GMC is the crucible of our professionalism and without it doctors in this country would become mere technicians.

Any alternative to professionally led regulation is unthinkable.

Brian Keighley elected member, Scotland, GMC
Balfron, Stirlingshire G63 0PY
bkeighley@compuserve.com

George Alberti elected member, England
John Chisholm elected member, England
Simon Fradd elected member, England
Barry Jackson elected member, England
Roderick MacSween appointed medical member
General Medical Council, London WIN 6JE

Hamish Meldrum general practitioner principal
Bridlington YO16 4LZ

David Pickersgill general practitioner
North Walsham NR29 0RQ

Mike Pringle professor of general practice
Department of General Practice, Queen’s Medical Centre, Nottingham NG7 2UH

Dr Keighley receives an honorarium as a medical screener.

1 Smith R. GMC: approaching the abyss. BMJ 2001;322:1196. (19 May)

People should be wary of the alternative

Error—As lay members of the General Medical Council, we know that we have a particular responsibility to discharge properly the GMC’s first duty: the protection of the public. We are in no doubt that all members of the council—medical and lay, elected and appointed—should take this duty seriously. Patients and carers; any other mechanism really could be a step into the abyss.

Graham Forbes lay member
Sue Leggate lay member
Bob Nicholls lay member
Bob nicholls@patrolxi.wacv.co.uk

Chris Robinson lay member
John Shaw lay member
General Medical Council, London WIN 6JE

1 Smith R. GMC: approaching the abyss. BMJ 2001;322:1196. (19 May)
2 Ferriman A. A Fall shows public still has trust in doctors. BMJ 2001;322:2694. (24 March)

GMC: keeping feet on firm ground

Error—Smith queries the functions of the General Medical Council in the new heavily regulated era for medicine. Coordinating the medical schools, constructing the profession’s ethical code, and setting baseline professional standards, are three of them and would not be done more appropriately by the state or its agencies. Professional
Letters

regulation (not self regulation) to protect the public requires a strong partnership between lay and medical representatives. Many doctors still think that choosing, through elections, the doctors on the regulatory body is better than any alternative.

Smith concludes that the GMC is failing. Before seeking fresh alternatives, as he suggests, many members of the Academy of Medical Royal Colleges are currently working hard to seek agreements to the two main issues of governance and revalidation.

Looking over an abyss can be one way of learning how important it is to keep your feet on firm ground.

Denis Pereira Gray chairman Academy of Medical Royal Colleges, London W1G 0AE dpereira@exeter.ac.uk

1 Smith R. GMC: approaching the abyss. BMJ 2001;322:196. (19 May.)

Time to go

Editor—It is time for the General Medical Council to go.1 With the possible exception of its health committee, it has a long history of being draconian, of incompetence, and of poor leadership. Its slogan, “Protecting patients, guiding doctors,” reflects typically muddled bifurcation thinking.

There is no future in revalidation. There is no instrument that will effectively detect a dysfunctional doctor with any degree of reliability until the doctor makes a mistake, when it becomes too late. It has to be ultimate folly to believe that doctors, apparently unlike any other professional, will willingly report failures and faults themselves. It is equal folly to assume that fellow workers will have the time, energy, or motivation to be watchdog and reporter.

The only solution for the GMC is disbandment. The work of the health committee has been of sufficient quality and standard as to be replaced by an equal.

Gareth Lloyd retired doctor Manchester M23 1PY
garethllwyd@aol.com

1 Smith R. GMC: approaching the abyss. BMJ 2001;322:196. (19 May.)

Australia may show way forward for the United Kingdom

Editor—It seems to be common ground that regulation of the profession by the General Medical Council is better than an alternative, state run, system.2 Ultimately, the argument concerns the power of the GMC or some other body to suspend or strike off a practitioner. Perhaps this is a false choice.

No doctor should be deprived of the ability to earn a livelihood other than as a consequence of due process when an alleged, serious misdemeanour has been investigated and proved. If that belief is shared by all, then the question is whether or not a body, constituted as is the GMC, in its present or any alternative form, is an appropriate body to execute such justice. There is always a risk of its being perceived as biased, either towards a favoured son or against a thorn in the side of the establishment.

One of the former British colonies resolved this problem many years ago. In New South Wales the powers of the medical board do not include suspension or deregistration. The Medical Practice Act gives this power to the medical tribunal. This comprises a judge of the district court; two medical practitioners appointed by the Medical Board from panels nominated by the colleges, the universities, the Department of Health, and the Australian Medical Association; and a lay person chosen from a panel nominated by the Minister for Health.

The medical board itself makes no adverse decisions about any doctor, other than about eligibility for initial registration. All inquiries that might have an adverse outcome for a doctor’s right to practise are conducted by committees that are independent of the board but governed by the Medical Practice Act.

Might this help the debate in the United Kingdom?

Peter Arnold former deputy president, New South Wales Medical Board Sydney, Australia

parnold@sesemail.com.au

1 Smith R. GMC: approaching the abyss. BMJ 2001;322:1196. (19 May.)

Assessing clinical competence and revalidation of clinicians

Simulated surgeries would have advantages

Editor—McKinley et al present cogent arguments for directly assessing the consultation competence of general practitioners undergoing revalidation.3 They identify the required attributes of an assessment as reliability, validity, acceptability, feasibility, and educational impact. They do not mention, however, that the methodology must also be capable of setting a consistent standard for pass/fail decisions for every candidate.

The model that they offer depends on the judgment of two observers watching 10 consecutive consultations, a task that they might undertake 12 times in a year. If the prevalence of insufficient competence was 2% they might encounter it once every four years. How could they apply a minimum standard reliably, along with their 1000 assessor colleagues? Just 10 randomly presenting cases will be too few to guarantee an adequate coverage of consultation skills, and in the absence of standardisation it will be hard to achieve a reliability score above 0.5. Furthermore, the patients will behave differently if they know that their doctor is under assessment, thus compromising validity.

The 12 case simulated surgery for the MRCP (membership of the Royal College of General Practitioners) examination is a model that would overcome these difficulties. The cases are written to test specific skills; the patients are role players who are trained to present the same challenge to each candidate; each examiner observes the same case throughout the circuit and marks the candidate’s performance on a predetermined schedule; each candidate is assessed by all 12 examiners, which minimises bias; and the pass mark is set by the aggregation of the judgments of all the examiners, based on the cases they have marked.

This examination has yielded reliability figures (coefficient α) in excess of 0.8 in all six administrations over three years. Face validity is high (“like a locum surgery”), and content validity is controlled. The method is acceptable (universally preferred to video by eligible candidates). The cost is less than £350 per candidate if the circuits are full. A profile of skill subscores can be presented to the candidate, providing formative feedback. If the administration was put in place, regular simulated surgeries could be offered for revalidation in regional venues throughout the United Kingdom.

Peter Burrows general practitioner Abbey Mead Surgery, Romsey, Hampshire S051 8EN

pjburrows@interalpha.co.uk


Video assessments might be effective screening method

Editor—McKinley et al have shown the reliability and feasibility of their consultation assessment for examining consultations in general practice, but they have glossed over some issues.4

The first such issue is the desirability of an assessment that tries to be both formative and summative. Trying to do both at the same time is generally accepted to be problematic.5 Although an assessment method may be valid when used in both ways, the stress of undertaking a summative assessment may affect performance adversely. The idea that the five attributes of assessment are multiplicative is not a true mathematical concept, and the absence of one does not negate the others. A summative assessment does not have to have educational impact after the assessment: its impact is in setting the learning aims and objectives for learning before assessment.

The second issue is that of patient acceptability. The authors raise the problem that certain types of patients decline to be videoed, but it might be expected that the same patients will decline to have two strangers sitting in the consultation. Videoing can be intrusive; but around three quarters of patients forget the camera during the consultation.6 It is far harder to forget two extra people.

The third issue is reliability. The table on bmj.com shows high figures for the validity, but the number of observers who were involved is not clear. Increasing the number of observers is likely to decrease the inter-observer reliability.

The summative assessment video component may only have inter-rater reliability.
that is “not impressive,” but its reliability in screening poor performers is reckoned to be 95%, these then undergoing further assessment.1 If the purpose of the exercise is to select out underperforming general practitioners then a similar tool would be effective, and possibly cheaper as a screening method. The problem of finding enough assessors remains.

Nick Gravestock  
general practitioner  
Measham Medical Unit, Measham DE12 7HR  
NickGravestock@aol.com

1 McKinley RK, Fraser RC. Model for directly assessing and improving clinical competence and performance in revalidation of clinicians. BMJ 2001;322:712-5. (24 March.)  

Authors’ reply

Editor—Burrows advocates the simulated surgery used during the MRCGP (membership of the Royal College of General Practitioners) examination as a potential tool for assessing consultation competence for revalidation.1 Although this approach has some commendable features (for example, a guaranteed range of clinical challenges), we have previously questioned its credibility, let alone validity.2 Burrows admits that the simulated surgery for the MRCGP examination does not test ability to make diagnoses or to elicit abnormal physical signs. Surely both are fundamental skills for all clinicians. The marking system is also peer referenced and not criterion referenced, which is essential for equity in regulatory assessments.

We can reassure both Burrows and Gravestock about the reliability that can be achieved with multiple assessors. We have reported a study of the assessment of the consultation competence of 180 medical students involving 86 trained assessors, most of whom assessed fewer than five students. The interassessor reliability of pass/fail decisions was 0.94.3 This high level has been replicated in regulatory assessments of over 140 general practice registrars in Kuwait, again involving multiple pairs of assessors, both internal and external (paper in preparation). With minimal screening, 10 patients provided sufficient clinical challenges. These data confirm that assessments such as we propose can be highly reliable when performed by multiple assessors.

Gravestock asserts that summative assessment need not have educational impact and, consequently, that the five essential attributes of an assessment instrument are not truly multiplicative. All candidates can benefit from explicit feedback on how to improve, and those who fail have a right to be informed why the assessors reached their judgment. This is particularly essential when the livelihood of a professional colleague is at stake. It is widely accepted by leading medical educationalists that the essential attributes are indeed multiplicative.4 Incidentally, all assessments can be stressful irrespective of methodology—this is a fact of life.

We agree with Gravestock that patient acceptability is important. Indeed, we emphasised this in our paper. Over 8000 patients have participated in our assessment studies in Leicester,1 Kuwait, and Hong Kong, and all these involved the presence of two assessors in the consulting room. The circumstances are fully explained to patients, whose consent is mandatory. There have been few refusals and no adverse comment by the patients.

The authors of both these letters support our contention that assessing clinical competence through direct observation must be central to the revalidation of clinicians. Like them, we do not underestimate the logistical implications. Nevertheless, the profession needs to get on with the task.

Robert K McKinley  
senior lecturer  
rkni@lc.ac.uk

Robin C Fraser  
director of quality in health care  
Leicester Medical School, University of Leicester, Leicester General Hospital, Leicester LE5 4PW


Results from pilot study using portfolio and 360° questionnaire

Entror—Regular appraisal of consultants is to become an integral part of the new NHS.1 McKinley et al addressed the problems inherent in the process.2 We present the initial results of a pilot study of appraisal using a portfolio and incorporating a 360° approach. The project included 20 consultants, who completed a portfolio based on the General Medical Council’s guidelines for revalidation.3 A 360° appraisal questionnaire was distributed by each consultant to 10 team members and 20 patients; it was based on the American Board of Internal Medicine validated questionnaire and had questions on attitude, communication, and skills.4 The return rate for patients was 50% and that for team members 84%. No problems were reported with completing the portfolio questionnaire, and consultants had no problem with job plans, including both NHS and independent practice. The only sections impossible to complete concerned critical incidents and complaints. Currently, this information is not collected centrally in our trust. The median score for all consultants for both team and patients was in the very good or excellent category. This was reassuring. Participants thought, however, that the distribution of questionnaires to patients and team members should be random and handled centrally. The anonymity of replies was considered to be crucial.

The broadest spread of replies came from clinicians with primary care responsibilities rather than those in service specialties. Scoring was consistent for individual clinicians, with the same spread seen in all questions. Comments from consultants showed the overall results of team and patient questionnaires varied from complimentary to outright rejection.

The time taken to undertake this pilot study in only 20 consultants was 40 hours and 2000 pieces of paper. A large institution with 500 consultants would need 1000 hours and 50 000 pieces of paper, as well as 2500 hours to conduct appraisal (a minimum of 5 hours per consultant, including preparation)—716 consultant sessions.

We conclude therefore that appraisal by portfolio and 360° assessment is feasible if properly funded. Further work is necessary to simplify the assessment of team and patient perception. Emphasis must be placed on minimising the time spent to reduce the impact on service delivery. If the process is handled sympathetically and with common sense, however, it will be a benefit to all.

Robert Mason  
assistant medical director  
r.mason@gstt.shs.nhs.uk

Louisa Zouita  
audit lead for surgery  
London SE1 9RT


GMC’s guidance may inhibit research

Entror—Academic clinical research, including the evaluation of new treatments, is central to providing high quality, cost effective care to patients, and it requires the cooperation and goodwill of the patients who volunteer to participate. The research process is externally regulated and monitored by ethics committees to ensure that patients are protected.

We welcome the debate on the Data Protection Act and access to patients’ records,1 and wish to raise a related concern about the General Medical Council’s recent guidelines on confidentiality and their effect on research.2 The GMC’s document focuses on patients’ rights to confidentiality and the protection of personal information. Guidance is important to protect both patients and doctors, and we recognise the value of consent in sharing confidential information.

In clinical research it is now clear that the physician within a healthcare team who...
is responsible for a patient’s care “must be satisfied that patients have been told, or have had access to written material informing them, that their records may be disclosed to persons outside the team” and “that they have the right to object.”1 The only exception is where obtaining consent is not practicable or “where the benefits to an individual or to society ... outweigh the public and the patient’s interest.”2

Presumably the public interest will rarely outweigh a patient’s rights and it will, therefore, be the responsibility of individual investigators and practitioners to ensure that compliance with guidance occurs. Because of the new guidance, difficulties may arise between healthcare teams within hospitals and between hospitals and general practices. Previously, for instance, a hospital team interested in investigating a new treatment for a condition that was mainly seen by general practitioners might have used records from the practice to identify patients to whom the general practitioner could then write. However, this would contravene the GMC’s current guidance, and alternative strategies have major implications for resources. In a general practice with links to several hospital research projects it might be sensible to ask all patients whether they would be willing to be approached, but this would be costly and take time.

These issues will need to be addressed if the NHS is to remain committed to such research, and we believe that addressing these issues is in the best long term interest of both patients and doctors. Nevertheless, we are concerned that there has been little response to the GMC’s document and that the current position inhibits clinical studies that might improve patient care.

Stephen J Leslie British Heart Foundation research fellow
David J Webb professor of clinical pharmacology
dj.webb@ed.ac.uk
Clinical Pharmacology Unit and Research Centre,
University of Edinburgh, Western General Hospital,
Edinburgh EH4 2XU


Optimising management of delirium

Placebo controlled trials of pharmacological treatments are needed

Editor—In reviewing the management of delirium, Meagher asserts that antipsychotic drugs are effective in patients with delirium.1 There is, however, little evidence to support this assertion. There are no placebo controlled trials of antipsychotic drugs in patients with delirium. One trial compared antipsychotic drugs with benzodiazepines and found that antipsychotic drugs were superior, but, given that it is widely acknowledged that benzodiazepines may worsen delirium, this result hardly constitutes evidence of efficacy.2 Most clinicians have gained the impression that antipsychotic drugs speed recovery in delirium, but their anecdotal observations must be doubted. Most episodes of delirium last only several days and will improve when the patient’s underlying medical condition resolves. In practice, medical management is always instituted simultaneously with prescription of antipsychotic drugs. As a consequence, it would be very difficult for clinicians to isolate the relative effect of an antipsychotic drug on the resolution of delirium. Uncontrolled trials suggesting efficacy will present the same problems.

Delirium often manifests with hallucinations, delusions, or thought disorder. In other psychiatric disorders, such as schizophrenia, these symptoms are improved by antipsychotic drugs, so it is reasonable to postulate that these drugs may also help in cases of delirium. But this hypothesis may be invalid. Treatments for asthma will not necessarily help pneumonia, although both illnesses cause shortness of breath. With so little evidence to support the use of antipsychotic drugs in patients with delirium, management strategies invoking them must be extremely cautious. Meagher proposes a strategy for the management of severe behavioural disturbance in patients with delirium that could quickly lead to doses of haloperidol of up to 100 mg per day. Doses this high may be associated with anticholinergic toxicity and akathisia—a sense of inner restlessness—that may worsen agitation rather than quell it. Such doses also entail an increased risk of torsades de pointes and the neuroleptic malignant syndrome.3

Moreover, if the analogy with schizophrenia is valid, it is unlikely that patients would benefit from more than 12 mg of haloperidol per day. Antipsychotic drugs should be avoided until all non-pharmacological management options are exhausted. If they are to be used, haloperidol is the drug of choice, but doses should not exceed 12 mg per day. If pharmacological management of behavioural disturbance is required after this, then benzodiazepines should be used, with the understanding that gaining control of the behavioural disturbance may involve an unavoidable perpetuation of the delirium that is driving disturbance. Obviously, there is an urgent need for placebo controlled trials.

Christopher James Ryan consultation-liaison psychiatrist
University of Sydney and Department of Psychiatry,
Westmead Hospital, Westmead, NSW 2145,
Australia
cryan@mail.usyd.edu.au

Competing interests: None declared.


Patients with delirium should be treated with care

Environ—With respect to Meagher’s review of delirium and its management we would like to raise a cautionary note.1 Measures that protect vulnerable (often elderly) people from the appearance of delirium, such as good nursing care and the provision of an appropriate ward environment, are always preferable to sedation with psychotropic medication of those who have developed the condition. Every medical and nursing student is taught the basic strategies to be used in managing a delirious individual that Meagher reviews, yet a visit to any busy medical ward shows that such principles are often forgotten in the face of shortages of skilled nurses, rapid discharge of patients, and harassed junior medical staff.

Chemical restraint of delirious patients should never be used as a substitute for simple nursing care. When medication has to be used, because of the hazards associated with psychotropic drugs, doses should be kept to an absolute minimum. Traditionally, haloperidol has been the mainstay of such treatment, and in our experience doses at the absolute lower end of those suggested by Meagher—for example, haloperidol 0.5–1.0 mg—are sufficient for effective control of agitated behaviour in delirium. As old age psychiatrists, we are surprised and disturbed by the high doses of haloperidol suggested in the article for the pharmacological treatment of severe disturbance in delirium, since most of those who will be treated are elderly. If one followed the treatment plan suggested, then this could involve giving up to 30 mg haloperidol intravenously within 30 minutes and repeating this in the following 30 minutes, with the worryingly reassuring message that up to 100 mg intravenous haloperidol every 24 hours is possible.

These doses may be suitable for the acute management of young patients with functional psychoses who exhibit disturbed or violent behaviour to which one of the references cited in support of this regimen pertains,2 but should not be taken as a guide in elderly medically ill or cognitively impaired individuals. Two thirds of patients with delirium have an underlying dementia and 20% of dementia patients have dementia with Lewy bodies.3 Hence, at least 10% of all cases of delirium will have dementia with Lewy bodies, and since this is characterised by exquisite sensitivity to neuroleptics,4 this represents a further need for extreme caution in management.

Nagi Tabet specialist registrar
rtabet@ip.kcl.ac.uk
Robert Howard reader
rhoward@ip.kcl.ac.uk
Old Age Psychiatry; Institute of Psychiatry; King’s College London, Maudsley Hospital, London
SE5 8AZ

Competing interests: None declared.

agents may be a useful option in these cases. Clinicians should consider the relative benefits and risks of treatment with haloperidol at high doses versus the not inconsiderable risks of uncontrolled disturbance in severely ill delirious patients, which include death. The available literature indicates that high doses of haloperidol have been used with therapeutic success in such situations. The management of this small number of extremely challenging cases should not be confused with the routine management of patients with delirium.

David Meagher
consultant psychiatrist
Midwestern Regional Hospital, Limerick, Republic of Ireland

Competing interests: None declared.

Withdrawal of Droperidol (droperidol)

Editor—Droperidol is a drug used by psychiatrists for its sedative and anti-psychotic effects. It is also, however, a widely used and highly effective antiemetic when used at low doses for both the prevention and treatment of postoperative nausea and vomiting.1,2 It has a very good side effect profile at these doses. It is also a drug that is commonly used in combination with morphine for patient controlled analgesia, where it has consistently been shown to reduce the incidence of opiate induced nausea and vomiting.3 A recent review suggests that it is the only antiemetic with any evidence of efficacy in these circumstances.4

It surprised us therefore to learn that Janssen-Cilag withdrew this useful drug on 31 March 2001. We appreciate that there may be a problem with the chronic usage of this drug in a psychiatric setting, the concerns being about the potential effect of droperidol on the cardiac QT interval. We find it hard to believe that this was the reason for withdrawal. We would not be surprised if the withdrawal was due to concerns other than those of efficacy. However, a review of the literature were not revealed.

We understand that an assessment of the risks and benefits assessment has been carried out, which led Janssen-Cilag to withdraw droperidol voluntarily, but we seriously doubt whether its short term, low dose use was included in this. Janssen-Cilag is the sole manufacturer of branded droperidol, and we are unaware of any generic alternative. It is likely that when supplies become exhausted soon after the withdrawal date we will have to turn to more expensive alternatives with its consequences for the national drug bill.


Animal research

Journal editors could help raise profile of three Rs of animal research

Editor—The RSPCA (Royal Society for the Protection of Cruelty to Animals) believes that the use of laboratory animals presents an ethical dilemma that afflicts everyone. Animals are used for a broad range of purposes, and thus it is not possible or constructive to make sweeping statements about scientific validity, justification, or suffering. Issues subject to such polarised debate are inevitably difficult to resolve. In this case, sentient animals capable of suffering are involved.

The human race has a moral imperative to reduce the pain, suffering, and distress that it inflicts on other animals to an absolute minimum. In the case of animal experiments, the principle of the three Rs—replacement, reduction, refinement—is an excellent practical starting point, and the RSPCA is committed to promoting and supporting it. Greater consideration is now given to implementing this concept, but it is not universally applied (or understood), and much is still to be achieved. One likely reason for this is that the three Rs are often seen as a separate issue and not part of mainstream life sciences.

One way to raise the profile of the three Rs, and push for them to pervade the whole of the life sciences, would be for journal editors to insist that published papers include comprehensive information about the life-time experiences of the animals involved. This could include their source, transport, husbandry and care, group sizes and structure, enrichment, what was actually done to the animals, protocol refinements, welfare problems (and what was done about them), and the animals’ eventual fate (and why).

Animal research

Journal editors could help raise profile of three Rs of animal research

Editor—The RSPCA (Royal Society for the Protection of Cruelty to Animals) believes that the use of laboratory animals presents an ethical dilemma that afflicts everyone. Animals are used for a broad range of purposes, and thus it is not possible or constructive to make sweeping statements about scientific validity, justification, or suffering. Issues subject to such polarised debate are inevitably difficult to resolve. In this case, sentient animals capable of suffering are involved.

The human race has a moral imperative to reduce the pain, suffering, and distress that it inflicts on other animals to an absolute minimum. In the case of animal experiments, the principle of the three Rs—replacement, reduction, refinement—is an excellent practical starting point, and the RSPCA is committed to promoting and supporting it. Greater consideration is now given to implementing this concept, but it is not universally applied (or understood), and much is still to be achieved. One likely reason for this is that the three Rs are often seen as a separate issue and not part of mainstream life sciences.

One way to raise the profile of the three Rs, and push for them to pervade the whole of the life sciences, would be for journal editors to insist that published papers include comprehensive information about the life-time experiences of the animals involved. This could include their source, transport, husbandry and care, group sizes and structure, enrichment, what was actually done to the animals, protocol refinements, welfare problems (and what was done about them), and the animals’ eventual fate (and why).

Animal research

Journal editors could help raise profile of three Rs of animal research

Editor—The RSPCA (Royal Society for the Protection of Cruelty to Animals) believes that the use of laboratory animals presents an ethical dilemma that afflicts everyone. Animals are used for a broad range of purposes, and thus it is not possible or constructive to make sweeping statements about scientific validity, justification, or suffering. Issues subject to such polarised debate are inevitably difficult to resolve. In this case, sentient animals capable of suffering are involved.

The human race has a moral imperative to reduce the pain, suffering, and distress that it inflicts on other animals to an absolute minimum. In the case of animal experiments, the principle of the three Rs—replacement, reduction, refinement—is an excellent practical starting point, and the RSPCA is committed to promoting and supporting it. Greater consideration is now given to implementing this concept, but it is not universally applied (or understood), and much is still to be achieved. One likely reason for this is that the three Rs are often seen as a separate issue and not part of mainstream life sciences.

One way to raise the profile of the three Rs, and push for them to pervade the whole of the life sciences, would be for journal editors to insist that published papers include comprehensive information about the life-time experiences of the animals involved. This could include their source, transport, husbandry and care, group sizes and structure, enrichment, what was actually done to the animals, protocol refinements, welfare problems (and what was done about them), and the animals’ eventual fate (and why).
Ethics committees have influenced animal experiments in Sweden

Editor—The debate in the United Kingdom on animal research1 and the impending Home Office review of the system2 prompted us to scrutinise the influence that ethics committees have had on animal experimentation in Sweden.

In Sweden the review of animal experimentation by animal ethics committees was made compulsory in July 1979. Until 1998 the decisions of the seven regional committees were advisory; after that date they became regulatory. Scientists may, if their application is rejected, appeal to a higher court.

We analysed whether and how the committees have approved the applications subject to minor changes. We explored the main reasons for these conditions and how their frequency varied over time by analysing protocols from the meetings of three ethics committees (Jan 1989-Sept 2000). Altogether 10 432 applications were processed: 7895 were approved, 1907 were approved with modifications, 427 were postponed, 105 were rejected, and the applicants withdrew 98. Some applications required more than one modification before approval. The table shows how the modifications to project applications that were required by the ethics committees before approval may be grouped.

The frequency of modifications required by the ethics committees varied over the years from 10% to 30% (overall average 18%). The three year moving average showed an increasing trend from 10% to 29% during 1999 and 2000. This may reflect a media debate during this period on the ethics committees’ role, which was initiated by a government investigation.3

The areas that the ethics committees focused on has varied with time. In recent years pain relief and ensuring the presence of a licensed supervisor seem to have received increasing attention, whereas the interest in introducing earlier humane end points seems to be decreasing.

About three quarters of the modifications may be categorised as refinement with respect to animal welfare, and the modifications requested have had a positive influence on project designs. The systems in the United Kingdom and Sweden cannot, however, be directly compared. The Home Office Inspectorate has played an active and constructive role in dialogue with individual applicants. The introduction of ethics committees in the United Kingdom might simply result in this important activity being moved from the inspectorate to being a responsibility of an ethics committee.

Jann Hau professor
Hans-Erik Carlsson associate professor
Joakim Hagelin research fellow
Department of Physiology, Division of Comparative Medicine, University of Uppsala, BMC Box 572, SE-751 23 Uppsala, Sweden


Three Rs should be registration, randomisation, and reviews (systematic)

Editor—Having found no reliable evidence from human clinical research about how much fluid should be given in the resuscitation of bleeding trauma patients, I am working with others on a systematic review of controlled trials of fluid replacement in animal models.1 To date we have identified about 70 controlled trials. Some trials are properly randomised but many are not. The potential for selective publication of trials showing more promising treatment effects is considerable, and few if any of the trials set their results in the context of a systematic review of all previous trials. Reducing bias is as important in animal research as in clinical research, and it would seem appropriate to apply the strategies used to improve the quality of clinical research to improve animal research.

I therefore propose the following three Rs of animal research:

- Registration: prospective registration of all trials in animals to reduce the potential for publication bias
- Randomisation: proper randomisation to reduce the potential for selection bias
- Reviews: systematic reviews to reduce bias and increase precision.

Jan Roberts senior lecturer in epidemiology
Institute of Child Health, London WC1N 1EH
jan.roberts@ich.ucl.ac.uk

Would middle ground approach give “added value”?

Editor—Forty years ago, before animal rights militancy had driven animal research behind a wall of secrecy, the University of Manchester invited an antivivisection group to tour its animal research laboratories and meet the research scientists. My friend, an animal rights activist with a highly polarised viewpoint, was determined to confront these “animal torturers.” When he returned he was, surprisingly, full of praise for the researchers.

He admired the university’s courage in opening its laboratory doors and facing frank discussion with “the enemy.” He found that the researchers, far from being the crazed animal torturers of his imagination, were reasonable and caring. They accepted proposals that the animal rights group put forward for improvements in the quality of life of the laboratory animals, and a follow up visit confirmed progress.

Aggression projected on to this animal research laboratory was unsustainable once a cooperative relationship had been established. When I drew attention to the turnaround in my friend’s views he rationalised it by saying, “I haven’t changed my mind about animal research. This laboratory is different from the others—it genuinely cares about its animals.”

Was this laboratory different from others? Perhaps it was, because it invested in communication and contact rather than condemnation and distance, or perhaps because it took a long and sensitive look at its activities in relation to the prevailing sentiment in society. A common pitfall for animal experimentation is that familiarity breeds contempt. I have encountered very caring doctors, scientists, and vets who became inured over time to what they were doing to sentient creatures in the name of medical or veterinary research.

Both sides of the animal research debate regale us with visions of how good life could be for humans or animals if we would just give them a free hand. Both sides are willing to torment, maim, and kill, as required. How many of these visions are fantasies, I wonder? How many are worth the price that society may have to pay?
We need visions to further our quality of life, including the vision of living harmoniously with other creatures. Should our society facilitate all the visions that people seek to promulgate? If not, how can we weed out those that are about ignorance, personal ambition, projected emotions, or commercial greed? All sectors of society have a part to play. I have proposed a model for such cooperation in the welfare of farm animals that could easily be extended to medical research (wwcspighealth.com).

Michael Meredith director Pig Disease Information Centre, Lolworth, Cambridgeshire CB5 6DS pdic@btinternet.com

More funding must go towards finding alternative non-animal methods

Editor—Throughout the recent, highly emotive debate regarding animal experimentation and the fate of the medical research firm Huntingdon Life Sciences' one crucial factor has been ignored—namely, the importance of non-animal alternative methods. The Fund for the Replacement of Animals in Medical Experiments (FRAME) is a charity that funds research into the development of alternative methods that do not require the use of animals. We were pleased to see Smith’s editorial, which acknowledged the crucial role that alternative methods can have in bringing about a reduction in the use of animals in research and testing.

British and European law dictates that animals can be used only when no non-animal alternative is available. The development of reliable alternative methods is the best way of achieving the fund’s ultimate goal of eliminating the need for live animal experiments.

Current levels of funding for research into alternative methods are disappointing. If the government wants the decline in the number of tests on animals to continue then this funding must be dramatically increased. As well as the government, the industries that currently rely on animal research to develop and market their products could support this research into non-animal methods. The Fund for the Replacement of Animals in Medical Experiments would like to see the industries putting considerably more of their resources into developing alternative methods.

The development and validation of non-animal methods is long and expensive. The rewards, though, are potentially great in terms of the benefits to science and to animal welfare.

Samantha Gray scientific officer FRAME (Fund for the Replacement of Animals in Medical Experiments), Nottingham NG1 4EE sami@frame-uk.denmon.co.uk

Various fallacies persist in vivisection debate

Editor—MacDonald might not have produced such a favourable review of Croce’s book on the ethics of experimenting on animals as he had the time and inclination to research his claims that animal research is scientifically flawed.

Thalidomide was never tested in pregnant animals before its use in patients. After the first publication describing fetal abnormalities in babies whose mothers had taken thalidomide during pregnancy the drug was shown to be teratogenic in rats, mice, hamsters, rabbits, and three species of monkeys. The mandatory teratogenic tests on potential medicines instituted by the regulatory authorities as a result of the thalidomide disaster prevented a similar tragedy with the oral acne treatment retinoin. This medicine, because of its efficacy, was marketed despite its known teratogenicity in laboratory animals. Since it was labelled as having a confirmed teratogenic risk, only a few cases of fetal abnormality occurred as a result of inadvertent exposure.

The claim that thalidomide is well tolerated in cats at doses 175 times greater than those considered safe for humans is also incorrect. The human data were gathered from patients taking isoprenaline during the hypoxic conditions of an asthma attack; if cats are rendered similarly hypoxic they also become sensitive to the cardiotoxic actions of isoprenaline.

The antivivisection literature is replete with emotive propaganda and exaggerated claims of “bad science.” A definitive examination of the literature, however, generally exposes criticisms as spurious. Their perpetuation in books such as Vivisection or Science does nothing for the ethical debate.

J H Botting retired 51 Woodhouse Avenue, London SW16 1UX rbotting@qmw.ac.uk

Wyeth responds to news story on oral contraceptives and DVT

Editor—In a News article, van Heteren reports on a Dutch radio broadcast about the issue of deep venous thrombosis and third generation oral contraceptives.

There is no truth in the allegation made in the broadcast that Wyeth suppressed the results of a research study. The study report was provided to the European Agency for the Evaluation of Medicinal Products in April 2000, and to other regulatory authorities. To repeat this allegation, and particularly to give it prominence in the title of the article, is irresponsible; this is a serious and unresolved scientific debate.

It is important to determine why there are reported differences between various studies carried out on the United Kingdom general practice research database. As we have made clear in past rapid responses to the BMJ, to help resolve this issue Wyeth has repeatedly requested independent scientific review of studies of combined oral contraceptives using the general practice research database.

We reject absolutely the reported assertion by Dr Alexander Walker, an epidemiologist at Harvard School of Public Health in the United States, that the differences in results are due to the source of funding. In our opinion it is the quality of the study, not whether it is industry sponsored or “independent,” which should be the most important criterion for reviewers.

Many research studies are not submitted for publication. The study in question added nothing to scientific knowledge on the subject, and the decision was taken quite properly not to submit it for publication.

The study was not designed to look at deep venous thrombosis as a primary end point. In addition, it had major design and implementation errors—including that the definition of current users allowed for the possibility that women could have stopped treatment and still be considered a current user; cases and controls were not matched by practice, which increases the possibility of prescriber bias; and patients with arterial events (for example, arterial retinal events) were included in the group with deep venous thrombosis as well as patients who had recently delivered a baby or had surgery (both these factors are predisposing factors for venous thrombosis). Wyeth remains committed to the resolution of this important public health issue through rigorous scientific evaluation.

P Brock medical director Europe Wyeth Ayerst, 555 East Lancaster Avenue, St Davids, PA 19087, USA brockgp@wclwyeth.com

1 Van Heteren G. Wyeth suppresses research on the pill, programme claims. BMJ 2001;322:571 (10 March)


C reactive protein and acute phase of ischaemic stroke

Editor—Higher C reactive protein concentrations indicate increased risk of coronary and cerebrovascular events in otherwise healthy individuals and a worse prognosis in myocardial infarction and ischaemic stroke. According to Pepys and Berger, the available data support its potential role as a marker of cardiovascular risk. To be of clinical use, however, the protein must have an independent prognostic value over and above that of the data already routinely available.

In patients with acute myocardial infarction or ischaemic stroke the extent of necrosis is the main but not the only determinant of prognosis. Age and vascular comorbidity are not necessarily related to infarct size but are nevertheless important predictors of...
prognosis. The reasons for a variable response to the necrotic insult are probably multiple and require a clear understanding as they may represent independent additional determinants of prognosis.

I looked again at data that colleagues and I obtained in a cohort of patients after ischaemic stroke. The C reactive protein concentrations increased (>5 mg/l) in about three quarters of patients within 24 hours after ischaemic stroke, and higher values were significantly associated with large infarct size (60% (n=87/146) vs 20% (n=12/47). P=0.0001, χ² test) and worse outcome (56% (n=52) vs 9% (n=4); P=0.0008, log rank test). Smaller increases were reported in patients with small infarcts (median 8 mg/l (25th to 75th centile 3.8 to 26.3 mg/l / 18 mg/l (10 to 35 mg/l); P=0.0002, Mann-Whitney U test) and deep infarcts (8 mg/l (3 to 26 mg/l) vs 19 mg/l (10 to 46 mg/l); P=0.0001).

The strong association between infarct size and increased C reactive protein concentrations may result from accurate quantification of cerebral infarction by computed tomography and from a variable intensity of the acute phase response to inflammatory stimuli (in this case, the extent of cerebral infarction). This possibility is suggested by the observation that 24 hour concentrations were much higher in patients with previous raised concentrations. If the intensity of the acute phase response was not proportional to the intensity of the inflammatory stimulus, the variable increase in the C reactive protein concentration might not just be a consequence of late recanalisation or persistent occlusion of the infarct related artery. Thus the prognostic importance of the 24 hour reaction to the necrotic insult are probably multiple and require a clear understanding as they may represent independent additional determinants of the intensity of the acute phase response. C reactive protein might indicate the inflammatory status during the acute phase of ischaemic stroke and might aid in current challenges posed in secondary prevention.

Mario Di Napoli consultant neurologist
Department of Neurology and Neurorehabilitation, Casa di Cura Villa Pini d’Abruzzo, 661080 Chieti, Italy
mariodinapoli@katarnail.com

What’s in a name?

To be medicine for the elderly, or not to be

Entorr—The specialty of geriatric medicine has not settled on a name, so I was interested to find out which name was the most popular. Additionally, I want to make a case for the use of a single name.

The “geriatric medicine” and “medicine sections” of the BMJ’s classified jobs section were surveyed for six months (May to October 2000 inclusive). The job title displayed in the heading or departmental title for each post was recorded. Jobs in all grades were recorded, providing the post had a “geriatric” component. Altogether 478 posts in “geriatric medicine” were advertised in 24 issues. The table shows the frequency with which each job title was cited. Commonest was “medicine for the elderly” (116 advertisements; 24%), then “geriatric medicine” (100; 21%), and “care of the elderly” (96; 20%). The words “medicine” or “medical” were used in 317 entries (66%).

The word “geriatrics” was coined by Nascher in 1909 from the Greek genes, meaning old man, and iatrikos, meaning “pertaining to a physician” (from iatria: cure). But geriatrics has not settled on a generic name for itself like similar specialties that combine titles, such as paediatrics or orthopaedics, perhaps because the term is thought to be stigmatising by many patients, the public, and some medical staff.

Having multiple titles for a single specialty implies impermanence and uncertainty, and it could increase confusion as to the function of the specialty. The BMJ and royal colleges have always called it “geriatric medicine.” I propose that departments should follow this established lead, but we must recognise that there are simply too many barriers to the universal adoption of the term “geriatric medicine.” I believe that the English version of “geriatrics”—that is, “medicine for the elderly”—would be less troubling to the non-geriatrician, as well as being a term already included in two thirds of departmental names.

The National Service Framework for Older People requires that elderly people be treated with equality; our specialty needs a single title that can be used when bidding for the health resources that older people are due. If the specialty is to continue as a specialty, it needs to establish to which mast it will nail its flag. The late Bernard Isaacs, professor of geriatric medicine at Birmingham University, said: “It is better to change the name of geriatrics, than the name,” but it is more realistic for us all to practise medicine for the elderly.

Richard Day consultant physician
Department of Medicine for the Elderly, Poole Hospital, Dorset BH13 2JB

Tautology, or not tautology

Entorr—Am I the only person to be irritated by the term “coronary heart disease,” which graces the title of our national service framework and has become increasingly accepted in medical literature? No doubt it took a working committee many hours at great expense to coin the term, but surely coronary artery disease, ischaemic heart disease, coronary disease, or heart disease would be more appropriate? If tautology has become an accepted product of medical spin can we look forward to using pulmonary lung function tests to assess asthma or dyspepsia guidelines for the gastric stomach?

Are there any tars out there who can throw light on this issue?

Fiona Gilroy general practitioner
Jubilee Field Surgery, Wiltshire SN14 6DQ
