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SUMMONS



JOURNAL OF THE MEDICAL AND DENTAL DEFENCE UNION OF SCOTLAND



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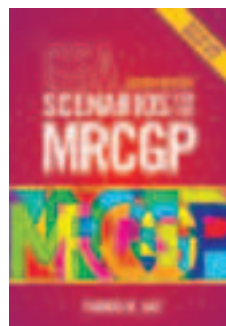


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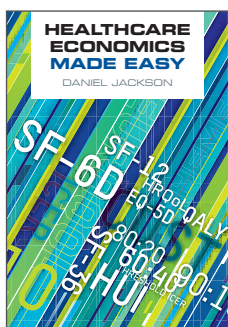
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IN THIS ISSUE

I JUST want to say one word to you. Just one word. Haptics. Apologies here to *The Graduate* – but this is the key message in Adam Campbell's article on virtual reality (VR) training on page 12 of this issue. Haptics is defined by Wikipedia as "tactile feedback technology that takes advantage of a user's sense of touch by applying forces, vibrations, and/or motions to the user" – or say in the case of an advanced surgical simulator, mimicking the firmness of arterial tissue when placing a stitch.

The technology holds great promise according to Professor Mike Larvin, director of education at the Royal College of Surgeons of England: "If we had really good VR with the proper haptic feedback, we could get trainees through far more exercises before they got on to a real patient. So when it comes it is going to contribute greatly to safety."

Adam's article also looks at how other VR and gaming technologies are being applied to the training of doctors

and dentists.

On page 14, Helicopter Emergency Medical Services pilot Andy Rooney relates an incident in which his team respond to a road traffic accident in horrendous weather conditions. He then looks at how considering "human factors" is essential in avoiding catastrophic errors.

Dr Terry Simpson provides a highly practical solution to auditing dental record keeping (page 18). The method, commissioned by the Lothian Committee for Quality in Dentistry, utilises a gathering tool with "Yes", "No" or "NA" questions and yields a single compliance figure that can be used to measure future progress.

Few GPs will have not at some time experienced anxiety and diagnostic uncertainty when faced with an ill and feverish child. Dr David Willox offers advice on avoiding pitfalls in diagnosis and referral (p 16).

Jim Killgore, editor



14

12 VIRTUAL TRAINING

Adam Campbell explores simulation technologies being used to help train doctors and dentists

14 THE HUMAN FACTOR

Helicopter pilot Captain Andy Rooney champions the value of team resource management skills

16 CLINICAL RISK REDUCTION

Acute febrile illness in children – Dr David Willox highlights the risks

18 HOW'S YOUR RECORD KEEPING?

Dr Terry Simpson looks at a new audit tool for assessing dental records



16



12

REGULARS

4 Notice Board

6 News Digest 8 Q&A: Dr Nigel Carter 9 Ethics: An ethical ending

10 MDDUS: Mutual aims, mutual protection 20 Case studies:

A call regarding a sick child, Unreasonable behaviour, Presume nothing 22 Addenda: The 'treacly pot', the ugly duchess, Crossword and Vignette: Sir Ronald Ross



Cover image: The Park by Alison Mountain. The painting was gifted to the Art in Healthcare Collection in 1997. Alison Mountain trained in Fine Art at Leeds University and at the Slade School of Art in London,

working alongside figurative artists such as William Coldstream, Euan Uglow and Lucien Freud. She also holds a BDes and MDes in Illustration and Printmaking from Duncan of Jordanstone College of Art and Design in Dundee, and has taught at Scottish Further and Higher Education Colleges across the country.

Art in Healthcare (formerly Paintings in Hospitals Scotland) works with hospitals and healthcare communities across Scotland to encourage patients, visitors and staff to enjoy and engage with the visual arts. For more information visit www.artinhealthcare.org.uk, Scottish Charity No: SC 036222.

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Undiminished growth at MDDUS

MEMBERSHIP numbers at MDDUS continue to grow with a 2.74 per cent increase in the year 2010 and 7.6 per cent of the growth among GPs outside Scotland. These are some of the highlights of the MDDUS Annual Report and Accounts 2010 published last month and reported at the Union's Annual General Meeting.

Our total membership at 1 July 2011 stood at 29,782 and we expect to break the 30,000 mark later this year. Our estimated market share among GPs in England has grown to over 13.6 per cent compared to 8 per cent in 2005, with our Scottish GP market share remaining stable at over 95 per cent.

One highlight of the year was the award of a contract to MDDUS to provide access to indemnity and medico-legal assistance for a cohort of doctors being employed as associates in training (AiTs) at NHS North Lancashire (North Lancashire Teaching Primary Care Trust). This will provide the PCT savings on indemnity and administrative costs and will bring MDDUS new medical members over the next four years with increased revenue to support this growth. An award of this kind of contract underlines the "national" role we play in medical and dental defence.

The year 2010 also proved a busy one for the MDDUS Professional Services Division. Our medical advisers dealt with a record 9,779 calls and other member contacts in 2010 – up more than 7 per cent on the year before. One possible reason for the increasing number of telephone calls, letters and emails to advisers is that doctors are becoming more risk aware and proactive in seeking advice at an early stage. Analysis reveals that the top five reasons for contacting MDDUS are: patient complaints, confidentiality, general claims advice, GMC/GDC issues and difficult patients. Calls from clinicians raising issues about problems with their colleagues also increased during the last year.



MDDUS membership for physicians assistants

MDDUS has introduced a new associate grade of membership for healthcare professionals who are working as physicians assistants.

This will provide indemnity for those physicians assistants working in non-indemnified posts. An alternative grade of membership for those working in indemnified posts is also available, providing advisory services and representation at local disciplinary proceedings.

The subscription rates are £55 for an indemnified physician assistant and £1,100 for a non-indemnified physician assistant.

For further details contact our Membership Department on 0845 270 2038 or email: membership@mddus.com

GPs doing cosmetic surgery

A PRIVATE GP subscription rate exists for MDDUS members who are involved in cosmetic surgery procedures, such as hair transplants or tattoo removal. It is essential that GPs ensure they are in the correct category of membership for all the work they perform.

Please contact the Membership Services Department on 0845 270 2038 for further information.



Expansion of Glasgow premises

MDDUS is pleased to announce that it will be expanding its Glasgow premises at Mackintosh House, having purchased the adjoining property at 167 Bath Street. The spacious B-listed Georgian townhouse will provide much needed additional office and meeting space with a dedicated training suite for MDDUS Training and Consultancy services.

MDDUS hopes to have the necessary access links and renovations completed early in 2012.



IN BRIEF

• **TEREMA DISCOUNT** MDDUS members are entitled to a discount on master classes run by the training firm Terema – a group of healthcare and aviation professionals with extensive experience in teaching Crew Resource Management (CRM) within the airlines. Terema have

adapted their methods to suit the NHS in particular and provide training in any environment where safety and efficiency are important. For more details go to www.tinyurl.com/3tdyub4

• **LONDON EMPLOYMENT LAW WORKSHOP** Join us at the MDDUS

offices in London for this interactive afternoon session. Topics include altering employment contracts, managing disciplinary matters and grievances and effectively dealing with short and long-term absence. You will be given best practice advice and also have the opportunity

to share experiences with other members through discussion and case studies. The workshop is being run by our own in-house employment law advisers. Target audience: GPs, dentists and practice managers. Date: 2 November 2011 (13:00 – 16:00). The price is £10 for

Contractual issues top among calls from practice managers

CONTRACTUAL issues are a hot topic for practice managers seeking employment law advice, according to new figures from MDDUS. Almost half of calls (46 per cent) to the Union's in-house employment law advisory team in the first six months of 2011 were contract related.



Sneaking a peek at patient records

In June of this year BMA Scotland reported that its staff had been involved in a number of disciplinary hearings representing members who allegedly accessed electronic medical records for inappropriate reasons.

The separate incidents involved doctors of all grades consulting either their own records or those of patients not under their treatment, including family members, colleagues and some high-profile individuals. MDDUS has also seen an increase in the number of such cases among its members.

Two obvious factors are behind the growing number of confidentiality breaches of this type: the greater ease of access due to the near universal digitisation of patient records and the ability to audit such access and spot irregularities. The guidance for all healthcare professionals on these matters is clear – access to patient records should be restricted to clinical purposes only. Inappropriate access can lead not only to disciplinary action from local health boards or PCTs and GMC/GDC sanctions but also potential prosecution against an employer under the Data Protection Act.

Not only should clinicians be diligent about their own practice it is essential that employed staff also understand that accessing medical records without just cause is a serious matter. The Data Protection Act says that: "Appropriate technical and organisational measures shall be taken against unauthorised or unlawful processing of personal data and against accidental loss or destruction of, or damage to, personal data." The Act requires that security measures are put in place to ensure that only authorised people can access personal data and that these people should "only act within the scope of their authority".

In its guidance on confidentiality the GMC is also clear on this point: "You must make sure that any personal information about patients that you hold or control is effectively protected at all times against improper disclosure."

It states further: "If you are responsible for the management of patient records or other patient information, you should make sure that they are held securely and that any staff you manage are trained and understand their responsibilities."

Practices and other healthcare providers should ensure that robust procedures and policies are in place to prevent inappropriate access to patient records – be it intentional or inadvertent. There should also be regular reminders and updates to staff on data protection policies to reinforce this message.

Just as the BMA has noted – defending such breaches can be very difficult given the clear rules on confidentiality and the incontrovertible evidence provided by electronic audit.



MDDUS employment law adviser Janice Sibbald said: "Practice managers have become more financially aware in the current economic climate. As a result, almost half of the calls we received asking for employment law advice have been contractual."

"Common contractual issues include the employment of new staff on revised terms and conditions or guidance on contract interpretation. We also receive a number of calls from our members on policy issues such as maternity or sick pay."

MDDUS is the only UK defence organisation to offer members access to an in-house HR and employment law advisory team. They provide members with the confidence that the advice given is compliant with the latest legislation.

The Union's call figures show that as well as 46 per cent contract-related calls, 13 per cent related to job performance, 11 per cent to staff absence and 10 per cent discipline.

Appeal for doctors to get flu jab

DOCTORS are being urged to get the seasonal flu vaccine by the Department of Health.

New figures from the DoH show that just over 38 per cent of GPs and 37 per cent of other doctors were vaccinated against flu last winter. The number of healthcare workers getting the vaccine increased from 26.4 per cent in winter 2009 to almost 35 per cent in 2010.

Despite the upward trend, the DoH is calling on more doctors to protect themselves against flu before this winter.

Chief Medical Officer Dame Sally Davies said: "NHS staff face increased pressure over winter, especially if there is a severe flu season. They keep the NHS running and it is vital that they protect themselves, their patients and families from the potentially serious effects of flu that they are exposed to over the winter period."

The DoH figures revealed hospital nurses and midwives were least likely to have the seasonal flu jab, with an uptake of just 30 per cent last winter. GP practice nurses had the highest uptake at 42.5 per cent.

members and £20 for non-members. To register interest or book the workshop phone MDDUS or email trainingandconsultancy@mddus.com
PITCHSIDE MEDICINE
 SportPromote has announced dates for its next RCSEd CPD-approved course focused on providing the

knowledge and skills required to manage the acutely injured or unwell athlete. The two-day course will be held at Hampden Park in Glasgow on 1 – 2 March 2012. Go to www.sportpromote.co.uk
CALLING ALL PRACTICE MANAGERS Bookings are now

rolling in for places at the next MDDUS Practice Managers' Conference being held at the Fairmont, St Andrews on 1 – 2 March 2012.



The programme has been finalised and can be found on our website at www.tinyurl.com/6g7yr4e. For further information or assistance contact Karen Walsh at kwalsh@mddus.com or on 0845 270 2034.



➔ Making oral health in children a priority

A NEW dental contract that aims to improve children's oral health is being piloted in England.

Dentists taking part in the trial will be paid for the number of patients they care for and the health results, rather than the number of courses of treatment performed. The old contract was criticised for encouraging clinicians to concentrate on activity with no specific rewards for high quality care.

The government hopes to introduce a new contract across the country that will improve the oral health of NHS patients – particularly children. The trials are taking place at 68 practices and will look at ways of increasing patient access and promoting preventative dental treatments like fluoride varnish.

Health secretary Andrew Lansley said: "The government believes dentists should get paid for the quality of treatment they provide rather than simply for the number of treatments. This is not only better for patients, but also a better use of NHS resources.

"The pilot sites will test different ways of putting this approach into practice. What we learn from this process will inform the new contract."

Professor Jimmy Steele, who is a member of the National Steering Group that developed the pilot proposals, said: "It is vital that any further changes to dental contracting are piloted prior to the introduction of a new dental contract. It is heartening to see the profession engaging

so positively in the pilot process.

"Oral health has improved but the risks of decay and gum disease are still high for many people. It is now time to focus attention on achieving healthy mouths as our outcome and not just volumes of treatment provided."

➔ Independent tribunal service for doctors

A NEW independent tribunal service will take over the running of doctors' fitness to practise hearings next year, the GMC has announced.

The Medical Practitioners Tribunal Service will be operationally separate from the GMC's investigation arm. It will be headed by a senior judicial figure who will be expected to report to parliament every year and to the GMC twice a year. The new service aims to make the hearings process quicker and less stressful for doctors and to increase confidence in the fitness to practise adjudication process, the GMC says.

In addition to making judgements in fitness to practise cases, the tribunal's chair will deal with procedural and administration issues before the hearing date. The GMC hopes this will improve efficiency and reduce the length of the hearing itself.

GMC chief executive Niall Dickson told the *BMJ*: "I think it's a very fundamental right of people who are going through a judicial process that they see a separation like this between the 'prosecution' process and the adjudication process. Increasing the separation makes the autonomy and the fairness of the system more explicit."

➔ Poor oral health generational

MOTHERS who suffer poor oral health are likely to have children with poor oral health in adulthood, according to results from a 27-year research project.

A study of over a thousand children born in New Zealand in 1972 and 1973 assessed oral health at age five and again at age 32 and compared those findings with the self-

rated oral health of their mothers measured in 1978. Analysis indicated that 45.1 per cent of the subjects whose mothers rated their oral health as 'very poor' also had severe tooth decay as adults.

The findings strengthen the notion from previous research that adult oral health is affected by a combination of genetic and environmental factors.

Children's oral health has been constantly improving, with just less than one in three (31 per cent) of five-year-old children showing obvious dental decay and two thirds (66.6 per cent) of children aged 12 found to be free of visible dental decay. The new research suggests that identifying at-risk children from their mother's self-rated oral health could present a means of further reducing decay levels.

Chief Executive of the British Dental Health Foundation, Dr Nigel Carter, said:

"If we can reach out to these people and encourage them to follow the Foundation's three key messages, of brushing twice a day with a fluoride toothpaste, cutting down how often you have sugary foods and drinks and visiting the dentist regularly there is no reason the oral health of the nation and future generations cannot improve even more."

➔ GMC proposes induction for all new registrants

A MANDATORY induction programme has been proposed for all new doctors



IN BRIEF

• ETHICS IN CLINICAL

GENETICS Ethical and medico-legal boundaries are being increasingly tested as genetic technologies lead to more and more clinical applications being employed within the NHS. New guidance published by the Royal College of Physicians

(RCP), Royal College of Pathologists and British Society for Human Genetics explores these issues and sets out guidelines for healthcare professionals. The report addresses the complex mix of legislation that applies to the use of genetic data and samples. Access at

www.tinyurl.com/6jhq5uk

• SHARED DECISION-MAKING

A new report from the King's Fund aims to flesh out Health Secretary Andrew Lansley's vision of an NHS that places patients' needs, wishes and preferences at the heart of clinical decision-making. *Making*

shared decision-making a reality: No decision about me, without me highlights the importance of communication skills and suggests that tools to help patients make decisions are just as important as guidelines for doctors. Access at www.tinyurl.com/3sfh8m8

VIEWPOINT



**By Dr Ivor Felstein,
Retired Consultant
Geriatrician**

Whatever happened to phlegmasia alba dolens?

ONE of my favourite Scottish medical consultant mentors had both a memorably cheerful voice and a penchant for traditional medical names. He could not just introduce us to a patient suffering from muscle tremor, rigidity and loss of facial expression and call it Parkinson's disease. Inevitably he would also have to refer to the older or more traditional term – paralysis agitans.

This was not a matter of showing us which era he hailed from or impressing us with his acute memory. Neither was it intended that we should necessarily follow his style ourselves when we passed from tyro doctors to the real thing. Rather it was to indicate that labels can alter with time or be modified to create clarity – or sometimes just to take the sting out of a potentially upsetting term for patient or relatives.

Paralysis agitans certainly does not sound particularly nice and early in the 17th and 18th centuries it was more commonly referred to as "the shaking palsy". Only when English family practitioner, James Parkinson, described the condition very specifically did other physicians use that name eponymously

and Parkinsonism became the accepted name up to the present day.

Certainly eponyms or common names can often be less fear laden than some descriptive terms – just consider necrotising fasciitis. Another prime example from my junior doctor days was the term pulmonary tuberculosis. Simply shortening this to TB fooled no one. Instead we would use a much older (if more difficult to pronounce) term, phthisis. The alternative was to call it 'consumption' but this was a misnomer in terms of the symptomatic wasting, poor appetite and clearly sick sufferers.

Another example of a disturbing and potentially dangerous illness was a post-childbirth form of thigh vein thrombosis. It was given the less devastating and more mellifluous cognomen, phlegmasia alba dolens. Likewise, some of the sharpness of epileptic fits (but not the potential dangers) was often blunted by their description as caducity or caduceus (possibly from the Latin word, cadere, to fall).

Not all alternate names help ease patient worries. Long before AIDS became the dominant disastrous STD, I recall treating patients in various stages of syphilis, which our caring if not quite accurate VD consultant translated into the "French pox". Do French physicians employ the term "English pox"?

But returning to the subject of eponyms – in my immediate post-graduate first year, I found myself working at an infectious diseases hospital. Here I had a referral with what must have been one of the last cases

of Hansen's disease (first described by a Norwegian physician of that name) in that part of the UK. For younger doctors this is the eponymous name for leprosy, once a nation-wide chronic bacterial problem that carried a stigma many century's old.

The use of eponyms is not without some drawbacks – especially when several different doctors emerge to apply their own name to the same illness. A good example of this is still seen with hyperthyroidism. The symptoms and signs of hyperthyroidism were brought to light by – among others - the Irish doctor, Robert Graves, in the 19th century. The illness was also described by the European gentleman doctor, Carl von Basedow, around the 1840s. So, eponymously perhaps, we should be describing this thyroid glandular complaint as Graves-Basedow or Basedow-Graves disease, not solely and separately as Graves or Basedow's disease.

I was once told that, to ensure your medical name is remembered by posterity, you should find a previously unknown complaint and then describe it to achieve an eponym. When I worked in the sexology field, I thought I had finally done so. I came across an unusual male sexual problem, related to a transport form of work and associated use of semi-porn magazines.

I had just completed two thirds of my to-be eponymous syndrome paper when my global research turned up an identical paper on this, already published as Kamin's syndrome! Alas, no Felstein syndrome is yet extant.

registering to practise in the UK.

This recommendation comes in a new report on the state of medical education and practice published by the GMC. Each year around 12,000 doctors from the UK, Europe and countries around the world start working in the UK for the first time.

The GMC report concludes that more needs to be done to ensure consistency of

induction for all doctors, and especially for those coming to work from outside the UK. This would ensure that they get an early understanding of the ethical and professional standards they will be expected to meet, and become familiar with how medicine is practised across England, Wales, Scotland and Northern Ireland.

The Chief Executive of the General Medical Council, Niall Dickson, said: "Developing an induction programme for all doctors new to our register will give them the support they need to practise safely and to conform to UK standards. This will provide greater assurance to patients that the doctor treating them is ready to start work on day one."

● **PATIENT GUIDE TO PRIMARY CARE** A step-by-step guide to help patients get the most from their GP practice has been launched by the Royal College of General Practitioners. *It's Your Practice: A patient guide to GP services* is a free resource that

contains information on topics including choosing and registering with a surgery, making appointments, accessing health records and getting involved in the running of a local surgery. Download the guide at www.tinyurl.com/3e3zf2s

● **HANDOVER TOOLKIT LAUNCHED** A toolkit designed to reduce errors during patient handovers has been launched by the Royal College of Physicians. The document defines the principles behind good handover practice, what the handover framework

should contain and how to avoid mistakes. The toolkit is the first of a series aimed at offering guidance on best quality care. It can be downloaded at www.tinyurl.com/63tlaq2





DR NIGEL CARTER – CHIEF EXECUTIVE OF THE BRITISH DENTAL HEALTH FOUNDATION

Joanne Curran

DR NIGEL CARTER has been Chief Executive of the British Dental Health Foundation since 1997 though he has been involved with the Foundation for the last 34 years, having joined the Midlands branch within a couple of years of qualification. He began his dental career in Birmingham in 1975 and has worked in both NHS and private practices, showing particular interest in dental implants, periodontology and the management of TMJ syndrome, having pioneered treatment in the UK.

Do you feel the work of the Foundation over the last 40 years has made a difference?

Absolutely. The Foundation was established by a group of far-sighted preventive dentists, supported by the dental trade, against a background of extremely poor dental health in the UK, with the expectation of total tooth loss and dentures by middle age being the norm. Our aim was to raise awareness that this tooth loss was not inevitable and that teeth could be for life.

The mission throughout has been to educate the public to improve dental health. During my time with the Foundation I have seen considerable improvements in levels of oral health. The development of water fluoridation, the advancement of technology and the accessibility of oral health information

are but a few of the things that have changed quite significantly. Patients are constantly seeking answers, and having that information a couple of clicks away is a necessity.

What achievements are you most proud of?

Our range of activities has grown hugely over the last 14 years. I inherited an enthusiastic team of five but we now have a team of 13. We have a website visited by one and a half million people a year and we distribute over a million patient education leaflets each year. Our Dental Helpline has answered over a quarter of a million enquiries from members of the public in the last decade.

Extending our National Smile campaign from a week to a month has been very successful in helping to raise awareness of the key messages around oral health, and the Mouth Cancer Action Month each November is helping to raise awareness of a condition that remains a major killer with the fastest growing incidence among cancers.

"Patients are constantly seeking answers - having information a click away is a necessity"

Should more emphasis be placed on prevention in dental practice?

It is an issue both I and fellow dental professionals feel passionately about. The message of prevention is one that often gets lost in translation when it should be the highest priority. The focus is too heavily weighted on cure, as most people attend the dentist purely to correct poor oral health. If the message of 'prevention better than cure' played a prominent role in dentistry today, we would not be faced with some of the problems we see on a daily basis.

The new dental contract being proposed for England, with for the first time an emphasis on prevention and health outcomes, offers a real chance of a quantum change from the previous regime of professionals only being rewarded for carrying out restorative work and not for achieving better dental

health for their populations. Much work is being done with children, particularly in areas of high experience of disease, to institute prevention at an early age. With time we can hopefully see future generations having an expectation of good oral health throughout their life.

If you were in charge of NHS dentistry in England, what would you change about the way it is run?

The fiasco of the introduction of an untried and tested new contract in 2006 is now well behind us and following the Steele review and the adoption by the new coalition government of its principles, the new contract pilots do seem to be a step in the right direction. We are fortunate in having an opportunity to change the way dentistry is delivered and rewarded in the future, to remove perverse treatment incentives and to look at improving the oral health of the nation. This opportunity must not be squandered and it is important to get the new contract right and for the profession to embrace the new quality outcome measures based on improvements in oral health not volumes of treatment.

Describe a typical working week.

One of the things I love most about life at the Foundation is its variety. As a charity promoting oral health we will never be able to raise funds by rattling a box in the street or accosting passers-by, so on the one hand I have to run a business that raises a million pounds a year and on the other hand then spend those funds to promote our aims of improving oral health.

A typical week can therefore involve meeting with some of our product accreditation clients, a key source of funding, developing new educational material for our leaflets or the web, developing the next major campaign and always looking for ways to promote the message of good oral health via the media. The Foundation issues some 150 press releases a year and these generate a huge amount of interest from journalists. Each week I will speak to a number of journalists about articles they are writing and also carry out radio interviews. Never a dull moment.

■ **Interview by Joanne Curran,**

AN ETHICAL ENDING

Deborah Bowman

LAST month, a television audience was invited to accompany two men on their final journeys to the Dignitas clinic in Switzerland. The documentary entitled *Choosing to Die* was presented by Sir Terry Pratchett, a well-known supporter of assisted dying. The programme prompted much discussion, some disquiet and approximately 900 complaints (the majority of which were made in advance of the broadcast).

The debate continues and the ethical territory is well-trodden. Along with abortion, end of life care is one topic where I rarely encounter neutrality. Indeed, it is telling that I am acutely aware that the language I choose in this column matters: the terms 'euthanasia', 'assisted dying' and 'assisted suicide' are laden with meaning and may be understood (or misunderstood) as representing a particular ethical position. Patients, professionals and students readily proffer their views in seminar rooms, lecture theatres and conference centres and do so with conviction, passion and intensity. Those contributions are welcome, but increasingly I feel that the debate is 'stuck' with people having views that are entrenched and deeply-held to the extent that the arguments are rehearsed but rarely reflected upon.

Whilst I am the first to advocate discussion, I do often wonder whether anyone is really listening. That may be understandable. When feelings run high and opinion is polarised, hearing a different perspective (or even pausing sufficiently long to enable another view to be expressed) can be difficult. People who are otherwise considered and considerate, thoughtful and thought-provoking, can become mired in emotional, heated and unproductive arguments in which an array of philosophical fallacies is commonplace. Some might suggest that the passion with which beliefs are expressed reflects the significance of the issue: the end of life is a serious business and doctors are in a unique position in supporting those who are sick and dying. It might be argued that clinicians have a duty to articulate their perspective on end of life care. Yet, the ethical questions are too important to be obscured by dogmatism.

Whilst many people already seem to hold strong views, it is rare that I hear opinions expressed with reference to meaningful moral analysis that directly engages with the counter arguments. Ethical concepts such as dignity, autonomy and harm are cited frequently, but loosely and sometimes meaninglessly. It is not sufficient merely to assert one's position using the language of ethics if one is unwilling (or unable) to understand, consider and respond to those who hold a different position or view. Regrettably, that is what seems increasingly to happen when end of life decisions are discussed whatever the setting.

The first step to a mature and constructive discussion is to listen. That is a simple proposition on paper but in practice it is more difficult than it seems, particularly when one has strongly-held opinions. To resist the natural tendency to infer and interpret whilst mentally constructing a reply when another person is speaking is a challenge we rarely articulate. To hear the words spoken, rather than the words imagined and to do so without pre-conceived perceptions of those with whom we disagree are essential but demanding requirements of ethical discussion.

Indeed, so often do conversations about end of life decision-making degenerate into competitive diatribe that there is a case for requiring all contributors to attend to the process and form for considering the issue. A starting point might be to reflect on one's own views about end of life decision-making with reference to some of the common fallacies that can detract from the quality of ethical analysis and decision-making. An American colleague, Maurice Bernstein, has used his blog (<http://bioethicsdiscussion.blogspot.com>) to explore the ways in which common fallacies hinder discussion and decisions in relation to medical ethics and clinical practice. Whatever one's opinion about end of life care and the attendant questions about the role of the clinician, it is vital to take the time to reflect on what underpins those views and to understand why others think differently. One of the best ways in which to do that is to step back, review one's perspective through a rigorous and analytical lens and then to hear from others who have done likewise.

It is not merely that discussions about end of life decision-making are ethical in content. The process of those discussions is also a matter of ethics. Many readers will know what they think about assisted dying, Terry Pratchett's documentary and the role of Dignitas in treating British patients. The limited words available to this column would be wasted in seeking to persuade or convince others about end of life decision-making and care, but it does seem both timely and worthwhile to encourage everyone to scrutinise their personal views, to engage respectfully and meaningfully with alternate perspectives and to attend as much to the process of the debate as to the content.

■ Deborah Bowman is Professor of Bioethics, Clinical Ethics and Medical Law at St George's, University of London



Author and assisted dying campaigner Sir Terry Pratchett

PHOTOGRAPH © PRESS ASSOCIATION



The last few years have seen some new providers emerging on the medical indemnity market. Here CEO Professor Gordon Dickson reaffirms some of the core values and strengths of the MDDUS mutual approach



Mutual aims,

THE 26 members who gathered in a building in Glasgow in May 1902 to form the MDDUS could hardly have imagined what lay ahead. With a total income in that first year of £231, eighteen shillings and three pence, they laid the foundation of a mutual organisation that was to grow and expand its operations until today we have an income of over £52m, with more than 30,000 members and assets exceeding £333m.

We are not, of course, alone in providing clinical indemnity and support to doctors and dentists. There are two other major medical defence organisations in the UK and together with them we count the vast majority of the country's doctors and dentists as members. In addition there has always been the need for other smaller providers who offer protection where the main defence bodies have been unable to do so for one reason or another. However in recent years we have seen some new entrants to the medical indemnity market, targeted at either so-called "low-risk" doctors or those in specific medical specialties such as ophthalmology or plastic surgery.

The business models of these new providers seem to be similar in that they all target established doctors with "good" records and provide indemnity by a policy of insurance. Acceptance, or underwriting of the risk, is done by an insurance vehicle rather than by medical peers and all operate under a commercial imperative with the ultimate risk carrier seeking to make a profit.

Competition and the choice it brings are good for the market, and clinicians are more than able to judge for themselves how best to secure their medical defence needs. At MDDUS we have seen little impact from these new entrants, with very few members electing to change provider. However, faced with choice it is best that it is one well informed by the facts and so I wanted to highlight a few important features that underline some of the core values the Union believe to be important in the provision of medical defence, values that have stood the test of time over these past 109 years.

Clinical claims

The first feature to emphasise is that these new providers offer "claims-made"

indemnity protection rather than the “occurrence-based” protection offered by MDDUS. Why is this important? The importance lies in the gap of time between when an event might have been caused and when it comes to light in the form of a claim being made. With many risks there is little or no gap between cause and effect. For example, if you have a house fire, the effect is obvious and immediate and a claim is made in order to get you re-housed.

In the world of clinical negligence, however, a significant period of time might elapse between cause and claim. Actuaries often work on an average of around 2.5 years between cause and claim but we know of many claims where a much longer period elapses. In one case the gap was well over 30 years. Clinical negligence is not unique in this respect and the same can apply to certain pharmaceutical risks, aerospace engineering and rail track

of claims-made protection ceases. Either there is no cover or a person has to purchase “run-off” cover for a set number of years. In the case of some of these new providers, run-off cover is mentioned and in the case of others it is not.

The “good” doctor

Another feature worth looking at is the tactic employed by these new providers in targeting “low-risk” groups. The most obvious flaw in this approach is the notion that it is possible to select those who will not have claims. The reality, as we certainly know at MDDUS, is that “good” doctors can still find themselves involved in extremely expensive claims. In *A Century of Care*, the history of the MDDUS, the first convener of the Council from 1902 to 1910 is quoted as having said: *“No member of the profession, however long he may have enjoyed immunity from attack and however confident he may be*

calls to attend a coroner’s inquest/fatal accident inquiry or referral to the GMC/GDC are all now essential elements of medical defence. An unhealthy focus on indemnity and claims of clinical negligence could easily lead someone to an organisation ill-equipped to provide the kind of rounded support that medical professionals so clearly need.

At MDDUS our members have access to a highly trained advisory service. All our advisers are medically or dentally qualified and available 24 hours a day to provide advice and assistance to members across the UK. They are backed by an experienced team of in-house lawyers who specialise in medico-legal matters. Our approach is to make our members aware of areas of potential risk and provide advice early on to try and prevent further escalation to regulators or the courts.

But perhaps the most important feature

mutual protection

maintenance. A drug is launched, the engine fitted to the plane or the track bolted together and everything may be fine for many years until the first adverse effect is detected, the plane malfunctions or the train leaves the track due to a faulty joint.

MDDUS has always believed that doctors are best served by occurrence-based protection because of this gap or “long tail” inherent in clinical negligence risk. Our occurrence-based indemnity provides protection for incidents that occur while a person is in membership, regardless of when the claim is made. This means that protection is afforded to a member even after they have stopped paying their membership, for example when they have retired or indeed died, provided that they were in membership when the circumstances giving rise to the claim occurred. In other words when the act, or acts, of negligence took place.

In contrast, claims-made indemnity only offers protection if the claim is made or reported during the period of membership and was caused during that same period or an earlier period of continuous membership. The real issue is what happens after a period

of the care with which he discharges his duties, can claim to be free from charges and claims against him. Such claims are made when they are least expected and deserved.”

How true we have found these words to be over the years. It might only be a matter of time before these new providers experience a large claim from a doctor they had selected as a “good” risk and then it will be interesting to see the impact. Will they not renew that person or will prices have to rise for everyone? If we could predict who will have claims, we could not only reduce cost but much more importantly we could stop patients being injured. If it could be done, I am sure that we and others would be doing it.

Sound advice

Indemnity is not the only factor to consider. Sound advice from qualified and experienced medical advisers, support and representation when there are complaints,

to mention is that MDDUS is a membership mutual. Our business is to serve the needs of all members rather than to generate a profit from them. MDDUS doesn’t have shareholders and does not pay dividends. That means all the income

generated by subscriptions is invested back into the organisation and member services, and in the maintenance of a healthy reserve to cover legal costs and claims.

This takes us right back to 1902 and those early pioneers who grouped together to help each other.

That concept of mutual

support is still at the heart of MDDUS and it is interesting to reflect over the past century that while new providers have appeared from time to time, none has stood the test of time. The need for mutual protection and the strength that comes from it has stood us in good stead and continues to do so.

■ **Professor Gordon Dickson is CEO of MDDUS**

Virtual training

Adam Campbell *explores a range of new developments in gaming and other simulation technologies being used to help train doctors and dentists*

SAY the words “computer game” and the image most people will conjure up is that of a spotty youth bathed in an electron glow of his TV screen shooting alien warships out of a virtual sky until the early hours.

But as the technology behind such games has advanced in leaps and bounds, developers and educators have begun to see advantages in what it can offer to the business of medical and dental training. In a climate of cuts, reduced availability of cadavers, increased litigiousness and a limitation in junior doctors’ training time, virtual simulation training is increasingly being seen as a safe and cost-effective solution in these testing times.

Right at the forefront of the developments in virtual reality (VR) training are the surgical simulators that allow trainees to learn and practise a host of laparoscopic skills, from tissue manipulation and suturing to cholecystectomy and angioplasty.

Haptic feedback

Professor Mike Larvin, director of education at the Royal College of Surgeons of England, which recently opened a state-of-the-art clinical skills unit with a simulated operating theatre, is a leading proponent of simulation as a training tool in general and believes it is just a matter of time before VR plays its part.

He says: “The great thing about simulation is you can make mistakes that would rarely happen in real life. You can set up a scenario where a mistake is likely to happen, just as a pilot might learn to fly with only one engine. It’s probably not going to happen often in the pilot’s career, but it means you can prepare for the rare and dangerous situation that you are unlikely to face as a trainee because you don’t have enough years under your belt.”

Virtual reality is still in the evaluative stage at the College as certain technological limitations are ironed out, in particular the question of ‘haptic feedback’. This is the simulator’s ability

to mimic, for example, the feel of probing, cutting or suturing tissue.

“We regard electronic haptic simulation as being very much still in its infancy. We’re only using it on a research basis. The trouble is, if you’re putting a stitch into an artery, your technique is governed by the feedback you get, the firmness of the tissue.

“That’s the reason it’s still in evaluation. And that’s also why we use fresh frozen cadavers. You just can’t beat that at the moment. It’s the next best thing to operating on a real human being.”

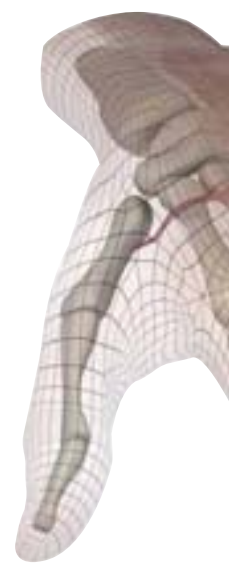
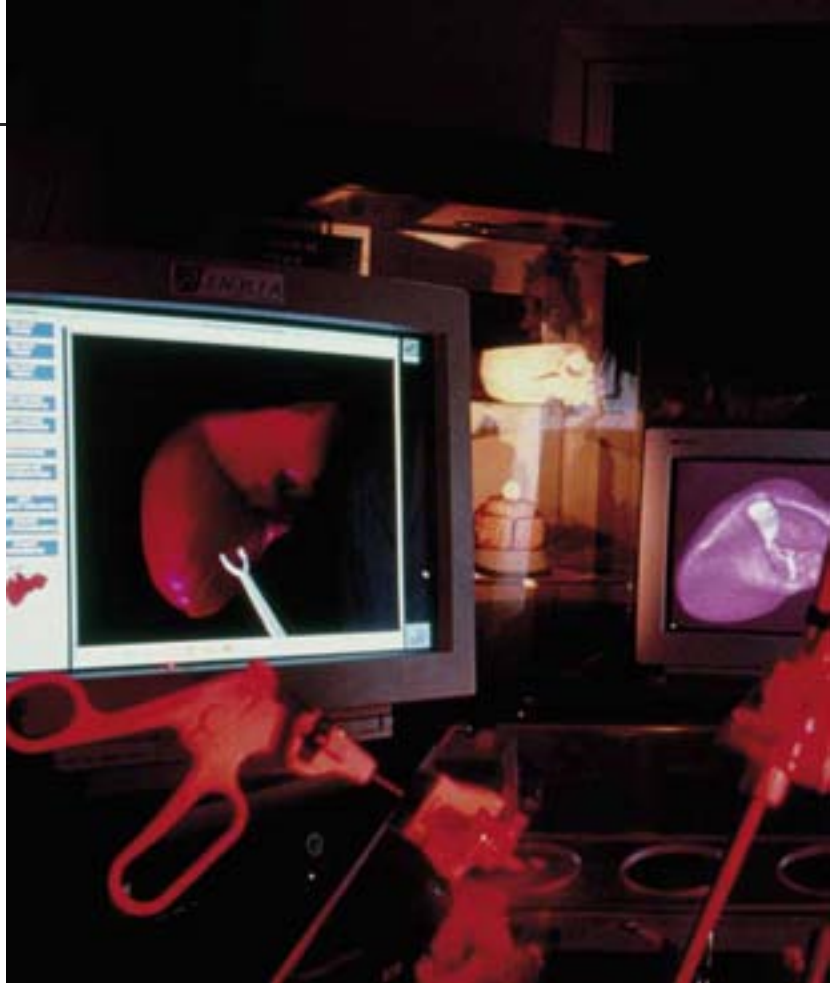
But there’s a limit to the number of human cadavers we get donated, he adds. “If we had really good VR with the proper haptic feedback, we could get trainees through far more exercises before they got on to a real patient. So when it comes it is going to contribute greatly to safety.”

Drill skills

If lack of haptic feedback is currently holding back VR simulator adoption in surgical training, the same is not true in the dental school at King’s College London. Here dentists, in collaboration with scientists from the University of Reading and Birmingham City University, have created a ‘hapTEL’ (haptic technology-enhanced learning) workstation that allows trainees wearing VR glasses to drill into an imaginary tooth, visualised on a computer screen. They can both see inside the virtual patient’s mouth and feel the difference, say, between drilling hard enamel and softer decayed tooth.

The system has won a number of major awards and the team behind it are currently in the process of negotiating its manufacture for commercial distribution. At a fifth the price of the traditional phantom head chair, one key advantage is cost. Another is the ability to record the students’ actions.

Project manager Dr Jonathan San Diego says: “The hapTEL



Main picture: VR simulation of liver surgery at INRIA at Sophia Antipolis in France. **Upper right:** hapTEL work station with VR dental drill. **Centre:** visual display of Virtual Veins.



PHOTOGRAPH: PH. PLATILYEUR/LOS/SCIENCE PHOTO LIBRARY



PHOTOGRAPH: UK HAPTICS

system records, through computer logs, each student's performance on preparing cavities, thereby providing feedback to the student and tutor on how much decayed material has been removed, how much healthy tooth has been retained, whether the student has 'drilled' through to the pulp and so on."

The developers envisage a time when workstations will be available to students in a university library, thus allowing them to hone their skills in their own time. There is also a clear potential for use in assessment as well as, for example, dentists returning to the profession after an absence.

Currently only drilling is on the virtual menu, but the team believes more advanced dental treatments such as filling a cavity, performing crown and bridge work and administering an injection are future possibilities.

In fact, the technology for administering virtual injections is already available. Virtual Veins, developed by UK Haptics, allows users to learn and practise the skills needed for venepuncture and other IV procedures in many different types of patients, complete with a realistic 'pop' feedback when the needle is correctly inserted in the vein.

The simulator, which is currently being trialled in the NHS Blood & Transplant unit, also provides metrics to allow performance to be measured and the firm's MD, Gary Todd, expects it to be on the market early next year.

Away from hands-on aspects of medical and dental practice, virtual reality is also starting to make its presence felt in the areas of diagnosis, patient management and team-working scenarios.

Medical avatars

At Imperial College London, the Faculty of Medicine has been developing a region in the online game Second Life where students can practise patient management in a virtual



PHOTOGRAPH: KING'S COLLEGE LONDON

ward. The game attempts to mimic all the realities of patient management – even to the point where doctors can't gain access to the patients if they haven't washed their hands.

The student's avatar can move around, locate a patient, see their notes, click for signs and symptoms, perhaps listen to breath sounds and order investigations. The results of these investigations, which might include real X-ray images and ECG tracings, then enable the student to make a final diagnosis. At each step, note cards will inform the student if they are right or wrong and offer additional feedback to support the learning.

Maria Toro-Troconis, who developed the game-based platform, has said that they are looking at the possibility of partnerships with other colleges across the country: "It would be great to have different people interacting and communicating in one online game and we have plans to do that with other medical schools."

In another game-based example, the games firm TruSim has developed Patient Rescue, in collaboration with County Durham and Darlington NHS Foundation Trust. The game aims to teach young doctors to recognise the signs of patient deterioration (in this case from hypovolaemia, hypoxia or sepsis), use set protocols to assess a patient's condition and intervene effectively.

The game automatically generates a new patient each time, with different signs and symptoms, and the player's task is to use the assessment tools to determine the correct intervention to stabilise the patient's condition and keep them from dying.

Mary Matthews, TruSim's business development director, says that what trainers particularly liked was that the game could be used for assessment as well as training. "Because the game tracks every move the trainee makes, you are able to see where they are going wrong and which units they need to redo. Also, if everybody is having problems with one particular unit then you may want to look at the teaching of that particular unit."

Despite the positive response to the game, says Matthews, TruSim is currently looking for investment to take it further, adding to the number of medical conditions. Hinting at perhaps another stumbling block beyond technological limitations, she suggests it is probably only when members of the Xbox generation reach the decision-making levels of the health services that games like these will be fully exploited.

Either way, it won't be long before the electron glow of VR simulation arrives at a healthcare training facility near you.

■ *Adam Campbell is a freelance journalist and regular contributor to MDDUS publications*

The human factor

Captain Andy Rooney, a pilot with the Helicopter Emergency Medical Services, describes a “day in the life” – and champions the value of team resource management (TRM) skills in medicine

LIKE most people associated with the emergency services I can never really anticipate what the day ahead has in store. All I can do is turn up in the morning and try to prepare myself as best as I can and hope that when I leave work in the evening the preparations have been up to the challenges I have faced during the shift.

And so it is one dull spring morning on our HEMS (Helicopter Emergency Medical Services) helicopter. Kit check complete, aircraft serviceable, crew qualifications in date and the weather checked. Oh yes the weather, not a great day with worse on the way. Well it is spring, after all.

It's mid-morning when the phone rings. We are tasked to a car-vs-van RTA (road traffic accident), some 40 miles to the northwest, with no other details. As soon as we lift we encounter the deteriorating weather conditions forecast earlier. The issue is the lowering cloud base. We are heading towards a mountainous area and so the direct route is not an option.

We soon encounter worse than expected weather and find ourselves struggling to find a route through the valleys. It looks unlikely we will be able to make it to the incident but our deliberations are interrupted by a radio call from ambulance control. Fully expecting to receive a stand-down the news is not good. Apparently there are two fatalities, a woman and a child and CPR is on-going on another child. The nearest road crew is still 15 minutes away.

Absolute limits

The nature of the casualty should never be a factor in how we operate the aircraft. However, it is hard not to feel pressured by the fact a young child clearly desperately needs medical intervention. We fly on the absolute limits of our rules while constantly updating what our escape plan would be. We finally clear the worst of the weather, in no small part due to the brilliant map reading and navigation skills of

the paramedic in the front of the aircraft, and it looks like we will now make it to the incident. We discuss several plans of action for when we arrive.

On arrival however, the first problem is finding a place to land. The incident is on a road running through a forest and landing on the road is the only option. However, traffic is blocking the road on both sides of the incident. Only by communicating through the police helicopter that had just arrived are we able to get the police on the ground to move the traffic and create a large enough space for us to land. As soon as the aircraft is on the ground both paramedics deplane and I remain rotors running. They soon return with a small child on a stretcher. On entering the aircraft and connecting to the intercom system the first thing I hear is “she’s not breathing” and the second is “we’re not strapping in, GO”.

The few minutes I had spent on the ground had been enough to tell me I did not have enough fuel to return the way I had come. The only option is to climb up into cloud and route to an airport near the hospital and carry out an instrument approach. Fuel is still going to be tight but the air traffic controllers clear all other traffic out of the way and give us priority. Having talked to ambulance control we are met by a medical team as we land at base. The decision is taken to carry out an RSI (rapid sequence intubation) in our hangar before onward transport to the nearby children’s hospital. At this point the prognosis does not look good. We carry out a hot debrief involving pilots, paramedics and police from both helicopters and doctors from the medical team. In the end we agree that given all of the circumstances on the day this child has just been given the very best of chances.

Managing the team

In fact a few days later we find out the child is making a remarkable recovery. What went right for us?



Clearly, the skill of the paramedics and doctors played a critical part. However, there is no doubt that the human factors training we all received had a huge impact on the outcome of this job. In aviation this training is called CRM (crew resource management) but in the medical world it is now generally referred to as TRM or team resource management.

But is TRM truly relevant in medicine? Well if you take the basic premise that by default, human beings are predisposed to making mistakes and that the principal of CRM/TRM is to understand human behaviour in order to reduce or mitigate the mistakes we make then, yes, TRM is very relevant.

The Department of Health report, *An organisation with a memory*, states that research-based estimates suggest that in NHS hospitals alone adverse events in which harm is caused to patients occur in around 10 per cent of admissions or at a rate of over 850,000 a year and cost the service an estimated £2 billion a year in additional hospital stays alone, not taking account of the wider human or economic costs. Many of these adverse events are caused by human error. Therefore, any programme that can potentially reduce these errors must be looked at seriously.

Lesson from aviation

One of the main issues medicine faces is how to effectively introduce TRM and here it is helpful to look at the aviation experience. Aviation has been held up as one of the gold standard industries with regard to the study of human factors and the implementation of an effective programme of teaching. CRM has indeed been very successful but how it has been implemented in aviation has contributed to its success. First of all CRM is mandatory in civil and military aviation. Crew members have to undertake induction courses and annual recurrent training. In addition, the CRM aspects of carrying out crew duties are now also assessed on an annual basis. This assessment of 'non-technical skills', as the CRM aspects are called, can lead to removal from duty if the appropriate

standard is not met.

Another crucial aspect of CRM training in aviation is that all CRM trainers have to have formal instructor qualifications. These qualifications are approved and audited by the Civil Aviation Authority. CRM instructors are required to instruct on at least three courses per year and every third year one of the courses they teach has to be assessed by an examiner. In this way instructor standards can be monitored and maintained.

It is important though that the aviation model is not followed blindly. The study of human factors consists of a wide and diverse range of subjects, and while an understanding of all the subjects is a requirement, some aspects of human factors are more relevant to some industries than others. What is required is for a training organisation to have an in depth look at the department or organisation that requires the training and tailor that training to their specific needs.

It should also be understood that it has taken since the mid-90s to get to the level of human factors understanding that we have in aviation now. Today all new entrants to aviation are exposed to human factors training at a very early stage of their careers. As well as introducing TRM into hospital departments today, I would advocate incorporating the study of TRM in medical undergraduate studies.

There is absolutely no doubt that an understanding of human factors and using procedures based on human factors error management will reduce the number of harmful errors made within an organisation. This can mean financial savings and reduced stress levels among well-intentioned workers. But most importantly, in the medical world, patient safety will improve and lives will be saved.

■ **Captain Andy Rooney** is a HEMS pilot with 16 years previous military experience. In addition, he is a director of DART Training Solutions, a company that provides TRM courses exclusively to medical clients. Contact: darttrm@gmail.com

"First thing I hear is 'she's not breathing'; the second is 'we're not strapping in, GO'"

Acute febrile illness in children

Childhood fever could not be more common – and therein lies the risk says GP and medico-legal expert Dr David Willox

FEW GPs will have not at some time experienced anxiety and diagnostic uncertainty when faced with an ill and feverish child. The vast majority of childhood fevers are self limiting, usually viral in origin, and do not require much intervention other than analgesia, fluids and parental support. But rarely there may be severe underlying illness such as septicaemia. Longer lasting, relapsing fever may also be associated with very rare conditions, such as Kawasaki disease.

The GP needs to see such patients promptly, make a safe diagnosis and take appropriate action to identify any more serious underlying disease. This can be a difficult task and calls for some degree of organisation in approach and calm assessment of the child and (often) their parents.

GPs may readily differentiate the clearly very ill, high-risk child from the relatively well, low-risk child. Of greater concern can be those children who are not sufficiently ill to require admission to hospital but nevertheless show signs which raise concerns as to their overall risk. The NICE guidance, *Feverish illness in children*:

Assessment and initial management of children younger than 5 years, provides some useful guidelines.

History and examination

Nothing beats a careful history. In young children this is almost always via the parent and means exploration of the course of the illness. Careful record keeping is essential. Vomiting which has lasted three days, six or eight times a day, is clearly different to a single episode five days ago, yet often such details are not recorded. Listening to the parent's account provides invaluable insight into the history as well as the parent's concerns and ability to cope.

When assessing a child with fever the doctor should measure and record:

- temperature
- heart rate
- respiratory rate
- capillary refill time.

Irrespective of history it would also be usual to examine the ENT, chest, abdomen and skin, recording that this had been done and relevant findings.

A raised heart rate and capillary refill

time of greater than three seconds in children with fever can be a sign of serious illness, particularly septic shock. In children younger than three months a temperature of over 38° Celsius should be considered high risk, and the same should be said of children with a temperature of 39° or higher between three to six months of age. Apart from this, body temperature alone should not be used to identify children with serious illness nor should the duration of fever.

It is also important that children who have fever should be assessed to eliminate the possibility of dehydration. Common signs include abnormal skin turgor, abnormal respirations, weakness or rapidity of the pulse, cool extremities and prolonged capillary refill time. In severe situations dry mucous membranes may be noted along with a history of reduced or absent micturition.

Assessment

NICE guidelines set out three categories which help to define high, intermediate or low risk for serious illness. These are summarised in the table opposite.

Management by the GP

It is important to identify any life-threatening features such as compromise of the airway, breathing or circulatory problems and decreased levels of consciousness (ABCD). Supportive action and admission to hospital as soon as possible is essential.

The presence of high-risk signs or a characteristic meningococcal non-blanching rash requires immediate attention with appropriate treatment such as benzylpenicillin and referral to hospital. Do not be falsely reassured by a rash that blanches on pressure, if there are intermediate or high-risk signs present. Children with high-risk signs not considered to be immediately life threatening should nevertheless be referred urgently for assessment by the local paediatric specialist.

Greater care is required in managing the child with intermediate risk and the outcome will often depend on assessment of the child, parents and their ability to cope or identify any subsequent worsening in the child.

The vast majority of children with some intermediate features will nevertheless settle but care should be taken to consider if they require admission to hospital. NICE guidelines state it is important to also consider:

- the social and family circumstances
- other illnesses the child or family members have
- parents' or carers' anxiety and instinct
- contact with people with serious infectious diseases
- parents' or carers' concern, causing them to seek help repeatedly
- recent travel abroad to tropical/subtropical areas, or any high-risk areas for endemic infectious diseases
- previous family experience of serious illness or death due to feverish illness which has increased their anxiety levels
- whether the child's fever has no obvious cause but is lasting longer than you would expect for a self-limiting illness.

Children with only low-risk features can be managed safely at home with appropriate advice for the parents.

ASSESSMENT

High risk

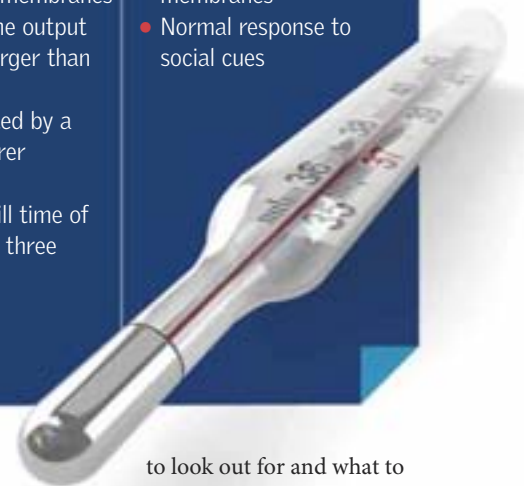
- Unable to rouse or if roused does not stay awake
- Weak high-pitched or continuous cry
- Skin or mucous membranes pale/mottled/blue or ashen
- Reduced skin turgor
- Bile-stained vomiting
- Moderate or severe chest in-drawing
- Respiratory rate > 60 breaths per minute
- Grunting
- Bulging fontanelle
- Appearing to be ill when assessed by the doctor

Intermediate risk

- Awakes only with prolonged stimulation
- Decreased activity
- Poor feeding in infants
- Not responding normally to social cues
- Not smiling
- Dry mucous membranes
- Reduced urine output
- New lump larger than 2 cm
- Pallor reported by a parent or carer
- Nasal flaring
- Capillary refill time of greater than three seconds

Low risk

- Strong cry or not crying
- Content/smiles
- Stays awake
- Normal colour of skin lips and tongue
- Normal skin and eyes
- Moist mucous membranes
- Normal response to social cues



Medico-legal issues

The possibility of making a clinical mistake is a daily hazard for GPs but legal risk is relatively low provided that you listen patiently, take a careful history, examine appropriately and seek to explain the condition to the parents while maintaining rapport. Clear and comprehensive notes are invaluable, both to the examining doctor and to anyone who subsequently sees the child. In the unlikely event of disaster, they also aid legal defence.

Part of the assessment of the child should also include an assessment of the parents, including their level of awareness, tiredness, prior knowledge of their general coping abilities and family support, and also their understanding and agreement with the GP's proposed action. When rapport seems very poor or the parent seems unduly anxious or unable to cope, it may be prudent to request a further opinion from a paediatric specialist or temporary admission to hospital. Doctors working in out-of-hours situations will almost certainly have no prior knowledge of the parents and should consider a lower threshold for onward referral (see Case study on page 20 of this issue).

In the majority of cases the GP will decide to manage the child out of hospital and here it is particularly important to safety net – give specific advice about what

to look out for and what to do if the child's condition should worsen. Here it is crucial to understand the ability of a parent or carer to cope and tailor advice accordingly. Particularly stoical parents may delay seeking further help if overly reassured and may need to be encouraged to return. Having a set phrase for advice may be useful but should not prevent the doctor engaging the brain before safety netting. NICE suggests:

- Provide the parent or carer with verbal and/or written information on warning symptoms and how further healthcare can be accessed.
- Arrange a follow-up appointment at a certain time and place.
- Liaise with other healthcare professionals, including out-of-hours providers, to ensure the parent/carer has direct access to a further assessment for their child.

While there is no generally accepted rule, it is prudent to recognise that if a child is presenting for the second or third time in a very short period then either they are unwell or their parents may be struggling to cope. Onward referral should be considered in such a situation.

■ *Dr David Willox is a GP and medico-legal expert in primary care*

How's your record keeping?

Dr Terry Simpson *champions a new audit tool for assessing the quality of dental records*

TIME and time again we are told of the importance of record keeping and perhaps it is best firstly to consider why we need good records. The British Dental Association in its advice sheet on record keeping views it as fulfilling the following purposes:

- patient safety
- monitoring
- accounts
- probity enquiries
- evaluation of treatment.

However, the General Dental Council in its *Standards for dental professionals* is more vague, stating only: "Make and keep accurate and complete patient records, including a medical history, at the time you treat them. Make sure that patients have easy access to their records."

Many dentists will admit to deficiencies when recording some of the information that is now generally accepted as comprising a good clinical record. Very often time is cited as the reason; sometimes dentists only see positive findings as requiring any detail. Whatever the reason, it is clear that it is our responsibility to maintain good contemporaneous and complete notes from clinical encounters.

The incompleteness of clinical records is very much supported in the evidence we have available from published audits. In 2001, an audit looking at the records from 47 general dental practitioners entering the quality assurance programme of a private capitation scheme (BUPA) in England and Wales found various deficiencies¹.

These records were examined by an independent assessor and measured against seven different domains for which a standard was identified, including medical history, examination of soft tissues, full tooth charting, periodontal screening,

at-risk periodontally and pocket depth chart, diagnosis and treatment planning. The results showed dentists only to have achieved more than 50 per cent of target frequency of recording in one domain – full tooth charting (70 per cent). Completed medical histories were only available in 45 per cent of clinical records and worst of all nearly 80 per cent of patients had no periodontal screening at all.

Another audit from 2009 showed an improving picture but still with some deficiencies². However, unlike the 2001 audit, the method employed in this study was self-assessment, which is largely dependent on how well calibrated and rigorous the assessors were in applying the criteria. If, indeed, the quality of clinical records is improving, we have the defence societies and professional bodies such as the Faculty of General Dental Practitioners to thank for continually preaching the importance and assisting us in achieving a better standard.

Lothian Record Keeping Audit

In two previous *Summons* articles a thoughtful case was presented for incorporating clinical audit and significant event analysis (SEA) into everyday practice (see 2010 Summer and Autumn issues at mddus.com). These sentiments have been similarly recognised by the Quality Improvement Team for Dentistry in Lothian (Lothian Committee for Quality in Dentistry – LCQD). In April 2009 the committee commissioned an audit on clinical documentation standards that could be used by all dental professionals. This audit was to use the planned updated standards issued by the Faculty of General Dental Practitioners (FGDP) as the basis for the audit. The following year the protocol and data-gathering tool were approved by LCQD for

"Many dentists will admit to deficiencies when recording some of the information that is now generally accepted as comprising a good clinical record"



Extract from patient data sheet

Audit results summary sheet (poor records falling below acceptable standards are highlighted in red). This results table shows with 87% compliance that a target level would have been met for round one but not round two.

distribution to all dentists in Lothian. The remit was to produce an audit that:

- was comprehensive, covering all aspects of record keeping
- set out the data sheet as a set of simple questions
- allowed the data gatherer to answer questions as “Yes”, “No” or “Not applicable”
- resulted in one overall figure for compliance.

Having looked at several audits and the data-gathering tools that accompanied them, several points became apparent. Record keeping audits had concentrated on certain domains such as periodontal treatment and medical histories. Whilst using a domain-focused audit can be very useful, it would appear to miss the important first step of analysing all areas of record keeping, some of which might be overlooked, e.g. quality of referral letters, details of surgical procedures, etc. This approach can also be messy as there are different results for different domains. Having a single compliance figure overcomes some of these problems.

In developing the Lothian audit data gathering tool it was decided to keep it simple with each “Yes”, “No” or “Not applicable” answer carrying the same weight and total compliance expressed as a percentage. It should be stressed at this juncture that before embarking on any audit an acceptable standard needs to be set by those involved in the project. This is up to the individual practitioner to decide but in the pilot studies the target for round one was set at 80 per cent and 90 per cent for round two. An example of the data gathered is shown in an extract from the data sheet above left.

This shows the information split into several multi-part questions requiring a simple “Yes”, “No”

or “Not Applicable” answer. Changing any of the answers will automatically change the totals at the bottom of each column which are then used to calculate the total compliance.

Totals for each patient record audited can then easily be transferred to a results summary sheet (above right). By completing the results electronically, calculation can be made for each data sheet based on a compliance figure (Yes/Yes + No x 100%). When all 25 patient records are complete, an overall compliance figure for all patients can be attained.

All audits suffer to some extent from not weighting the data by importance. For example, would having a dog-eared written record card equate in importance to not having a current medical history – probably not? However, further refinements of the audit in future might allow weighting to be applied to the results and this would be a relatively simple tweak to incorporate into the data collection tool. It would be possible to adapt the audit further and weight each answer according to a system of desirable or essential outcomes.

We hope the audit will continue to evolve and assist many dental practitioners for years to come!

■ **Dr Terry Simpson is a general dental practitioner and honorary research fellow at the University of Edinburgh. Terry would also gratefully like to acknowledge the contribution of the Clinical Governance Support Team at NHS Lothian and, in particular, Denise Needham in constructing and promoting this audit. He would also like to acknowledge NCAAG (National Clinical Audit Group in E & W) which piloted the initial spreadsheet design.**

OBTAIN A COPY

Copies of the audit comprising instructions, protocol, data collection sheets (one per patient) and results summary sheets can be obtained in electronic version only by contacting Denise Needham at NHS Lothian (Denise.Needham@luht.scot.nhs.uk). Printed sheets can be made from these if the data gatherer prefers but the data collection sheets fit best on A3 sheets or alternatively several landscape A4 sheets.

References

- 1 Morgan RG. Quality evaluation of clinical records of a group of general dental practitioners entering a quality assurance programme. *Br Dent J.* 2001;191:436-41
- 2 Cole A, McMichael A. Audit of Dental Practice Record-Keeping: A PCT-Coordinated Clinical Audit by Worcester-shire Dentists. *Primary Dental Care.* 2009;16:85-93

CASE studies

These studies are based on actual cases from MDDUS files and are published in *Summons* to highlight common pitfalls and encourage proactive risk management and best practice. Details have been changed to maintain confidentiality



DIAGNOSIS AND REFERRAL: A CALL REGARDING A SICK CHILD

BACKGROUND: Dr G is a locum GP working for an out-of-hours service. She takes a call in the early hours of the morning from a mother with a sick child. Mrs P's two-year-old daughter Sara has woken up vomiting and with a high temperature. Mrs P is worried because Sara is much less responsive than usual.

Dr G asks if Sara has any rashes or neck stiffness and when Mrs P says no the GP suggests that Sara is likely to be suffering from a tummy bug. She advises Mrs P to put her in a tepid bath to bring down her temperature and give her Calpol.

Dr G also discusses the possibility of meningitis with Mrs P and the significant symptoms to look for. She advises Mrs P to phone back if Sara's condition worsens or if she has any worries and that she should consider visiting her own GP in the morning if the symptoms have not improved. A record is made of the call and the advice given.

Next morning Sara is still sick and listless with a high temperature and Mrs P phones her local surgery for an emergency appointment. One is arranged for 11:00 am that morning. Not long after the phone call a neighbour drops by and looks in on Sara who is now pale and limp with a fixed gaze. She also notices a large purple mark on Sara's leg. The neighbour advises Mrs P to call an ambulance immediately.

Sara is transported to hospital and diagnosed with bacterial meningitis. She is admitted to ICU and kept in an induced coma for five days while being treated with antibiotics. She makes a full recovery though Mrs P is advised to take her for regular sight and hearing tests.

A few weeks later a letter of complaint from Mrs P is received by the out-of-hours service and copied to her local surgery.

ANALYSIS/OUTCOME: In the letter Mrs P states that she felt given Sara's poor condition a doctor should have made a home visit either in the early hours or later that morning. Had a doctor examined Sara her condition would have been diagnosed and treated sooner.

Dr G contacts MDDUS and forwards a copy of the letter, rightly concerned that the matter could escalate into a claim of negligence. She is convinced her actions in the case were reasonable and appropriate. MDDUS advises Dr G in her written reply to Mrs P.

In her letter Dr G first expresses her regret at the suffering Sara endured. She then explains that meningitis is a relatively rare and insidious illness and difficult to diagnosis, especially in the early stages when there may be no rash or other more distinctive features present. Vomiting, high temperature and listlessness are common



PHOTOGRAPH: SCIENCE PHOTO LIBRARY

symptoms and in most cases due to viral gastroenteritis.

Dr G further writes that had she any doubt at the time of the call that Sara's symptoms were indicative of meningitis she would have paid a home visit immediately – and that she was sorry if Mrs P perceived her manner as dismissive.

A subsequent meeting with Mrs P is arranged at which the issues are further discussed and the matter goes no further.

KEY POINTS

- Have a higher index of suspicion in phone consultations over a febrile child and arrange to see the child if in any doubt – especially if you are a locum dealing with an unfamiliar patient or family.
- Come up with a management plan which can be understood by the patient and ensure a 'safety net' is in place, i.e. the patient or carer should be clear what to do if a condition does not improve or deteriorates.
- Take comprehensive notes of what is discussed/advised.



PRACTICE MANAGEMENT: UNREASONABLE BEHAVIOUR

BACKGROUND: An 81-year-old man, Mr G, is deaf and has a history of heart disease and diabetes. His son Mr CG holds power of attorney for his father. When Mr G becomes unwell, suffering stomach pains and nausea, his GP Dr N agrees to make a home visit. An examination of his abdomen reveals no abnormality so Dr N prescribes medication to alleviate the symptoms and arranges for a follow-up examination at the practice.

A few days later Mr CG comes into the practice to speak to Dr N and they disagree about Mr G's condition and the recommended treatment plan. Mr CG becomes angry and raises his voice, insulting Dr N and threatening to make a complaint about her to the GMC. Dr N contacts Mr CG to speak to him about his behaviour but he is again verbally abusive. Dr N reports this to the practice's senior partner who decides to take steps to remove Mr G from the practice list due to his son's unacceptable behaviour.

The practice tells the PCT about the decision and Mr G is also informed in a letter from the senior partner that explains the decision and includes information on registering with an alternative practice. One week later, Dr N receives notice from the



GMC of a complaint made against her by Mr CG alleging Mr G was removed from the list without a valid reason.

ANALYSIS/OUTCOME: Dr N contacts MDDUS and a medico-legal adviser helps her draft a response to the GMC. She is advised to highlight the fact that Mr CG's complaint had already been appropriately handled by the senior partner. She is also advised to explain that the practice's decision to remove Mr G was in accordance with their policy regarding abusive and aggressive behaviour

from a patient or carer.

The adviser recommends the practice provides evidence of their compliance with the GMC's *Good Medical Practice* guidance by including a copy of the senior partner's letters to Mr G and the PCT. On the basis of this response, the GMC concludes that the practice was justified in removing Mr G and recommends the case is closed.

KEY POINTS

- Removal from a practice list is justified only in cases where the doctor/patient relationship has broken down – for example, if the patient has acted unreasonably or been violent to you or a colleague.
- Be prepared to justify a decision to remove a patient and inform the patient, in writing where practical. Removal without first informing the patient in writing should only be done where there is real, or a threat of, violence to doctors/staff.
- Always follow GMC guidance detailed in *Good Medical Practice* paragraphs 38-40. Refer to RCGP's 2004 guidance at www.tinyurl.com/3kkbmxv



CONSENT: PRESUME NOTHING

BACKGROUND: Mr H attends his dental surgery complaining of poor fitting partial dentures that cause him difficulty when eating. He also has a small number of remaining teeth that have been causing him some discomfort. His dentist, Mrs C, finds they are in poor condition and advises the removal of all four remaining teeth and the fitting of complete dentures.

Mr H agrees to have one tooth extracted but does not want to lose all of them. Mrs C proceeds to remove all four of Mr H's teeth. The existing partial denture, with the four teeth added, is then fitted. Following the treatment, Mr H suffers bleeding, pain and discomfort and is prescribed analgesics and antibiotics by another dentist. He is forced to take a week's sick leave from work.

Mrs C is the subject of a complaint to

the GDC regarding her treatment of Mr H and is found guilty of serious professional misconduct for not securing informed consent to remove his teeth and for failing to provide adequate post operative care.

Mr H then raises a claim against Mrs C alleging that she extracted four of his teeth without his consent and that Mrs C proceeded with the extractions against his wishes.

ANALYSIS/OUTCOME: Mrs C contacts MDDUS for assistance and it is decided that, in light of the GDC finding, it would not be possible to fully defend the claim. It is also noted that Mrs C failed to make a comprehensive record

of Mr H's treatment, making it difficult to know what was discussed and agreed with the patient. Based on the poor condition of the extracted teeth, MDDUS negotiates a modest settlement with Mr H's solicitors.

KEY POINTS

- Always fully explain treatment options and ensure the patient understands the relevant risks/benefits involved.
- Never proceed until you have confirmed with the patient exactly what treatment is to be carried out.

- Take comprehensive notes which specify treatment options discussed with the patient and details of consent given.





Object obscura: the ugly duchess

THIS oil painting by Quinten Massys, entitled *An Old Woman* (*The Ugly Duchess*), is generally thought to be a comment about old women who go to great lengths to recapture their youth. But the renaissance work, which dates from around 1513, may have been painted with a different meaning in mind. Closer inspection reveals the subject suffers from Paget's disease, according to Professor Michael Baum, cancer expert and keen art critic. The sunken eyes, deformed hands, the unusual distance between her upper lip and nose, the distorted nostrils and other features are all consistent with the rare bone condition. Rather than a satirical comment piece, this painting may simply be a representation of a woman suffering from a particular disease.

From the archives: the 'treacly pot'

NOTHING beats a good medical history when faced with diagnostic uncertainty. So proved the case on 20 July 1900 when a group of eight children presented at the Royal Hospital for Sick Children in Glasgow. All were suffering from a range of symptoms including jerky movements of the arms and legs, delirium and widely dilated pupils.

The doctor on call immediately suspected some form of poisoning and in questioning two of the children he found a common link. That day a gang of boys all age 10 and 11 along with some younger children had come across a pot near a stable that contained a sweet smelling liquid that resembled treacle. Thinking their luck was in all of them had a taste but found it wasn't quite as nice as it smelled.

Investigations later involving the owner of the stable and a local vet revealed the pot contained an 'Electuary for Sore Throat' used to treat horses. It did indeed incorporate treacle but the main active ingredient was extract of belladonna – hence the dilated pupils.

Thankfully the taste put the children off having more. One boy named William seemed the worst affected. His medical notes record: "The patient was wildly delirious & struggled badly when held. There were convulsive movements of the legs & arms. The face constantly twitched; and the eyes jerked from side to side. The patient shouted incoherently: no words could be distinguished.

"Both pupils were widely dilated ... The face had a bright red flush, and the skin over the whole body was of a scarlet colour."

William's stomach was washed out and he was given a chloral to quieten him but all the night and the next day he suffered hallucinations although he did not seem overly distressed. His doctor noted: "the delirium appeared to be of a pleasing character, for he frequently laughs".

All the children made a full recovery and were back playing in the streets within a week.

This tale is one of many that can be found on the website of the Historic Hospital Admission Registers Project (HHARP) which brings together various hospital archives in London and Glasgow. In the HHARP database historians can access nearly 120,000 individual admission records between 1852 and 1914. The website also features a collection of fascinating articles on the early history of the hospitals and their patients and staff. Go to <http://hharp.org/>



Crossword



ACROSS

1. Rare but serious bacterial infection, often contracted through food (8)
4. Establishes treatment guidelines for NHS in England (abbr.) (4)
7. Dropsy (6)
8. Part of stomach attached to oesophagus (6)
10. Endocrine gland (7)
11. Muscular pain (5)
13. Male gonads (8)
15. Involuntary contraction (5)
16. Infection maintained within a population (7)
19. Faeces (6)
20. Catalyzing protein (6)
21. Helicopter service (abbr.) (4)
22. Conveying towards a centre (8)

DOWN

1. Study of morality in medicine (9)
2. Toy bear (5)
3. Between heaven and hell (5)
5. Native Americans (colloq.) (7)
6. Call off (6)
9. Adores (7)
12. Fantasy author and euthanasia campaigner, Terry (9)
13. Refreshment area (3,4)
14. Specimen (6)
17. Move to music (5)
18. Perhaps (5)

See answers online at www.mddus.com.
Go to the Notice Board page under News and Events.

Vignette: malaria researcher, Sir Ronald Ross

(1857-1932)

THE first Nobel prize to be awarded to a British subject was given to Ronald Ross in 1902. He received the award for showing how the mosquito was the vector for the transmission of malaria. Years of careful observation of the phases of the parasite in mosquito and bird or man were rewarded with a clear account of a complex process. He was not without flaws; even his grandson HS Langstaff recognised how contentious and antagonistic he could be. An Italian team led by GB Grassi had also done similar work on malaria and Ross later regretted his jealous quarrel with him. This also caused a dispute with his mentor Patrick Manson.

Ronald's father came from a line of Indian army officers. In India Ronald became fluent in Hindi then, aged eight, he was sent to stay with relatives in southern England. He could easily have been a writer, musician or sportsman but his father wished him to become a doctor. Studies at St Bartholomew's Medical school gave no hint of a brilliant scientific future; instead his interest was in the rich cultural life in London. He obtained membership of the Royal College of Surgeons and so, when he failed his first attempt at the apothecaries examination, he went to sea as a ship's surgeon. This gave him time to write and in 1883 he published a verse drama, just the first of his literary output.

A second attempt at the LSA enabled him to enter the Indian Medical Service (IMS). Posts took him to Chennai (Madras), Vizianagaram, Moulmein, Burma and the Andaman Islands where he continued to enjoy a fairly leisurely life.

His medical career became more focussed in 1888 when he took the Diploma in Public Health and the following year studied bacteriology at Barts with EE Klein. In his first medical paper he challenged (wrongly) the observations of haematozoa by Charles Laveran in France. Fortunately Patrick Manson, whose work in China led him to suspect metazoanosis in malaria, brought his experience in a fatherly way to Ronald, who later reminisced: "Manson demonstrated other

forms of the organism to me in a patient lying at Charing Cross Hospital, and also took me, on several occasions, with great kindness, to the Seaman's Hospital".

Back in India, progress in his research halted as he was helpless to prevent the IMS posting him to parts of India where there was little opportunity to study malaria. During an epidemic of cholera he was sent to Bangalore to impose sanitary



conditions. His own health suffered; not only did he contract malaria, which he treated successfully with quinine, but also cholera. Nevertheless, he remained steadfast in his quest to solve the riddle of malaria. At last near Ootacamund, Ross bred brown and dappled-winged mosquitoes, let them take blood from malarial patients and observed black cells growing in the insect's stomach wall. This was the first significant success and his friend John Masefield, the poet laureate, celebrated it in verse.

As Ross' research in India progressed he corresponded with Manson in Britain who championed his protégée and stressed the importance of his work. As a result he was given a laboratory in Calcutta where, although he found no suitable human subjects to study, he was able to use birds. He located the parasite in the salivary glands of the insect. The vital, last step of

the cycle showed that the bite from the infected mosquito spread the disease to an uninfected bird. Ross had designed a portable microscope and by the time the malaria question was answered he wrote that "the screws of my microscope were rusted with sweat from my forehead and hands and its last remaining eyepiece was cracked". Manson relayed the triumph in a lecture on 'The mosquito and the malaria parasite' at a BMA meeting in Edinburgh in 1898.

In 1899 Ross left the Indian Medical Service and accepted a post as lecturer in the new Liverpool School of Tropical Medicine. The Royal Society honoured him with FRS in 1901 and the following year he was elected Nobel laureate.

The remainder of his career was spent writing, lecturing and advising at home and abroad.

A self-taught mathematician, he was able to apply statistics to epidemiology. He advised the Government on sanitary conditions in West Africa. He became editor of a new journal *Science Progress* in 1912. During the war he was Consultant in Malaria to the War Office. In 1918, KCMG was added to previous honours.

The Ross Institute had been founded in his life time; inadequately funded, it was incorporated into the London Hospital for Tropical Diseases, where he was professor. He died there in 1932 a year after the death of his wife, Rosa, whom he had married in 1889. His memoirs won the James Tait Memorial Prize of 1932.

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■ **Julia Merrick is a freelance writer and editor in Edinburgh**

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